Occupational Safety and Health Standards Board

Public and Business Meeting

Meeting Agenda

Prepared by the Department of Industrial Relations
Available on the DIR web page: Standards Board (OSHSB) 2026 Meeting Schedule

OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
(916) 274-5721
www.dir.ca.gov/oshsb

MISSION STATEMENT

The mission of the Occupational Safety and Health Standards Board is to promote, adopt, and maintain reasonable and enforceable standards that will ensure a safe and healthy workplace for California workers.

AGENDA

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD MEETING

PLEASE NOTE: In accordance with section 11123 of the Government Code, Board members as well as members of the public may elect to participate via videoconference.

April 16, 2026
10:00 a.m.

In-Person:

Department of General Services
Justice Joseph A. Rattigan Building
50 D Street, Room 410
Santa Rosa, CA 95404

Videoconference:

1. Go to https://tkoworks.zoom.us/j/87501250331
2. Enter Webinar ID: 875 0125 0331
3. Join the meeting through the Zoom application OR through your web browser
4. Videoconference will be opened to the public at 9:50 a.m.

Teleconference:

1. Dial 1 (669) 444-9171
2. Enter Webinar ID: 875 0125 0331 and follow the prompts
3. Teleconference will be opened to the public at 9:50 a.m.

Live video stream and audio stream (English and Spanish):

1. Go to https://videobookcase.com/california/oshsb/
2. Video stream and audio stream will launch as the meeting starts at 10:00 a.m.

Public Comment Queue:
If attending the Occupational Safety and Health Standards Board (Board) meeting in person, you will be added to the public comment queue upon completing a comment card on the day of the meeting.

If attending the meeting remotely and you wish to comment on agenda items, you may submit a request to be added to the public comment queue either in advance of or during the meeting through one of the following methods:

ONLINE: Provide your information through the online comment queue portal at https://videobookcase.org/oshsb/public-comment-queue-form/

PHONE: Call **(510) 868-2730** to access the automated comment queue voicemail and provide†: 1) your name as you would like it listed; 2) your affiliation or organization; and 3) the topic you would like to comment on.

† Information requested is voluntary and not required to address the Board.

I. CALL TO ORDER AND INTRODUCTIONS

A. Spanish translation instructions

II. REMARKS FROM THE CHAIR

III. PRESENTATIONS

A. Worker Presentation on Silica

Panel of Artificial Stone Workers

- Public Comment
- Board Member Comments and Questions

IV. BUSINESS MEETING

Note: The purpose of the Business Meeting is for the Board to conduct its monthly business. All matters on this agenda are subject to discussion and action as determined to be appropriate by the Board Chair.

For item C below, public comment will be limited to two minutes per speaker or four minutes for speakers requiring concurrent English translation.

A. PROPOSED VARIANCE DECISIONS FOR ADOPTION

- Consent Calendar
- Vote on consent calendar

B. REPORTS

- Executive Officer's Report
- Legislative Update
- Cal/OSHA Report
- State Response Subcommittee Report

C. PUBLIC COMMENT ON NON-AGENDA ITEMS OR TO PROPOSE NEW OR REVISED STANDARDS

This portion of the meeting is open to any interested person proposing new or revised standards to the Board or commenting on occupational safety and health issues (Labor Code section 142.2) not on the agenda. The Board is prohibited to act on items that are not noticed on the agenda but may refer items to staff for future consideration.

Public comment will be limited to two minutes per speaker or four minutes for speakers requiring concurrent English translation.

The Board encourages comments on occupational safety and health matters not included on the monthly agenda. If you have a comment and cannot attend during the non-agenda comment period, OSHSB staff will do their best to read emailed comments into the record. Please send your non-agenda comment to oshsb_nacomments@dir.ca.gov by 5:00 PM the day prior to the meeting. Your comment should be clear, concise and 500 words or less.

Any individual or group wanting to make a presentation during the Public Meeting should visit https://www.dir.ca.gov/oshsb/presentations-for-oshsb.html for further information.

D. COMMENTS BY BOARD MEMBERS

Any Board member may identify a topic of interest during the Board meeting. However, the Board may not substantially discuss or act on any matter raised during the meeting that is not included on this agenda, except to decide to place the matter on the agenda of a future meeting. (GC sections 11125 & 11125.7(a).).

E. CLOSED SESSION

- Public comment on Closed Session Agenda Items

Pending Decisions

- Permanent Variance No. 20-V-096 (Tutor Perini/O&G JV)
- Permanent Variance No. 23-V-580 (Dragados)
- Permanent Variance No. 20-V-300 (Pepsi Bottling Group, LLC)

Matters Pending Litigation

- Western States Petroleum Association (WSPA) v. California Occupational Safety and Health Standards Board (OSHSB), et al. United States District Court (Eastern District of California) Case No. 2:19-CV-01270
- WSPA v. OSHSB, et al., County of Sacramento, CA Superior Court Case No. 34-2019-00260210

Personnel

F. RETURN TO OPEN SESSION

- Report from closed session

G. ADJOURNMENT OF THE MEETING

Next Meeting: May 21, 2026
Ronald Reagan Building
Auditorium
300 S. Spring Street
Los Angeles, CA 90013
10:00 a.m.

CLOSED SESSION

- If necessary, consideration of personnel matters. (GC section 11126(a)(1)).
- If necessary, consideration of pending litigation pursuant to GC section 11126(e)(1).
- If necessary, to deliberate on a pending decision. (GC section 11126(c)(3)).

PUBLIC COMMENT

Public Hearing
During the Public Hearing, members of the public may provide comments regarding standards that have been noticed to the public for a 45-day comment period. An individual wishing to comment must complete a speaker comment card. Efforts will be made to accommodate everyone who signs up to speak. However, given time constraints, there is no guarantee that all who have signed up will be able to address the Board.

Each individual who submits a comment card will get up to two minutes to speak. The Board Chair may extend the speaking time allotted when practical. The total time for public comment is 120 minutes unless extended by the Board Chair.

Business Meeting Non-Agendized
During the Business Meeting Non-Agendized, members of the public can address the Board on items of interest that are within the Board's jurisdiction but are not on the noticed agenda. The Board is not permitted to take action on items that are not on the noticed agenda but may refer items to staff for future consideration. The Board reserves the right to limit the time for speakers.

DISABILITY ACCOMMODATION NOTICE

Under Government Code section 11123(a), all meetings of a state body are open and public, and all persons are permitted to attend any meeting of a state body, except as otherwise provided in the Bagley-Keene Open Meeting Act.

If disability-related modifications or accommodations are required to participate in the meeting, please contact the Diversity and Inclusion Office at DIO@DIR.CA.GOV. To ensure the availability of your requested accommodation, please submit your request at least 10 days in advance.

Please contact the California Relay Service by dialing 711 or (800) 735-2929 (TTY) or (800) 855-3000 (TTY-Spanish).

TRANSLATION

Requests for translation services should be made no later than five (5) days before the meeting. Request may be made to by email to oshsb@dir.ca.gov.

2026 Upcoming OSHSB Advisory Committee Meetings

1. Petition 589 – Construction Passenger Elevator – Article 14
   April 1-2, 2026
   9am-4pm
   Zoom Meeting

   TBD – June (added meeting to complete review of sections that committee wasn't able to consider during the April 1-2, 2026, meeting.)
   9am-4pm
   Zoom Meeting

2. Petition 607 – Site Specific Fall Protection Plans
   May 13, 2026
   Virtual Meeting

3. Petition 605 –Horizontal Sliding and Swinging Gates
   TBD – June
   9am-4pm
   In-Person

Occupational Safety and Health Standards Board

Public and Business Meeting

Meeting Notice

Prepared by the Department of Industrial Relations
Available on the DIR web page: Standards Board (OSHSB) 2026 Meeting Schedule

OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD
2520 Venture Oaks Way, Suite 350
Sacramento, CA 95833
(916) 274-5721
Website address www.dir.ca.gov/oshsb

NOTICE OF PUBLIC MEETING AND BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Pursuant to Government Code section 11346.4 and the provisions of Labor Code Sections 142.1, 142.2, 142.3, 142.4, and 144.6, the Occupational Safety and Health Standards Board ("Board") of the State of California has set the time and place for a Public Meeting and Business Meeting:

QR Code for Access:

On **April 16, 2026**, at 10:00 a.m.
Department of General Services
Justice Joseph A. Rattigan Building
50 D Street, 2nd Floor, Suite 220
Santa Rosa, California 95404

as well as via the following:

- Videoconference at https://tkoworks.zoom.us/j/87501250331
- Teleconference at (669) 444-9171 (Webinar ID 875 0125 0331)
- Live video stream and audio stream (English and Spanish) at: https://videobookcase.com/california/oshsb/

At the Public Meeting, the Board will make time available to receive comments or proposals from interested persons on any item concerning occupational safety and health.

At the Business Meeting, the Board will conduct its monthly business.

DISABILITY ACCOMMODATION NOTICE: Disability accommodation is available upon request. Any person with a disability requiring an accommodation, auxiliary aid or service, or a modification of policies or procedures to ensure effective communication and access to the public hearings/meetings of the Board should contact the Disability Accommodation Coordinator at (916) 274-5721 or the state-wide Disability Accommodation Coordinator at 1 (866) 326-1616 (toll free). The state-wide Coordinator can also be reached through the California Relay Service, by dialing 711 or 1 (800) 735-2929 (TTY) or 1 (800) 855-3000 (TTY-Spanish).

Accommodations can include modifications of policies or procedures or provision of auxiliary aids or services. Accommodations include, but are not limited to, an Assistive Listening System (ALS), a Computer-Aided Transcription System or Communication Access Realtime Translation (CART), a sign-language interpreter, documents in Braille, large print or on computer disk, and audio cassette recording. Accommodation requests should be made as soon as possible. Requests for an ALS or CART should be made no later than five (5) days before the hearing.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD

JOSEPH M. ALIOTO JR., Chairman

Occupational Safety and Health Standards Board

Business Meeting Proposed Variance Decisions

Prepared by the Department of Industrial Relations
Available on the DIR web page: Standards Board (OSHSB) 2026 Meeting Schedule

CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS
APRIL 16, 2026, MONTHLY BUSINESS MEETING
OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON MARCH 25, 2026

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 17-V-448M1	Douglas Living Trust	ELEVATOR	GRANT
2. 19-V-296M2	Gleiberman Properties, Inc.	ELEVATOR	GRANT
3. 19-V-426M1	285 Sobrante Way, LLC	ELEVATOR	GRANT
4. 23-V-268M1	City of San Jose	ELEVATOR	GRANT
5. 24-V-197M1	SI 78 LLC	ELEVATOR	GRANT
6. 24-V-333M1	San Mateo County Historical Association	ELEVATOR	GRANT
7. 24-V-375M1	TMP II Apts LLC	ELEVATOR	GRANT
8. 24-V-541M1	1600 Commonwealth, LP	ELEVATOR	GRANT
9. 25-V-069	Herndon Pinnacle LLC	ELEVATOR	GRANT
10. 25-V-070	Kern Community College District	ELEVATOR	GRANT
11. 25-V-071	Admiral Court Property SB LLC	ELEVATOR	GRANT
12. 25-V-072	Old Town Roseville Properties, LLC	ELEVATOR	GRANT
13. 25-V-074	Khadsupa LLC	ELEVATOR	GRANT
14. 25-V-113	St. Paul's Episcopal Home, Inc.	ELEVATOR	GRANT
15. 25-V-114	737-753 Orange Ave LLC	ELEVATOR	GRANT
16. 25-V-115	Big Wave Group Inc.	ELEVATOR	GRANT
17. 25-V-116	Gold Country Hospitality, Inc.	ELEVATOR	GRANT
18. 25-V-119	Sutter Valley Medical Foundation	ELEVATOR	GRANT
19. 25-V-324	16 LPB LLC	ELEVATOR	GRANT
20. 26-V-014	Boys & Girls Clubs of the Peninsula	ELEVATOR	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
21. 26-V-029	Nielsen Peterson & Nielsen	ELEVATOR	GRANT
22. 26-V-031	Alveare Parkview Housing Partners, L.P.	ELEVATOR	GRANT
23. 26-V-050	OC OET Owner, LLC, a Delaware Limited Liability Company	ELEVATOR	GRANT
24. 26-V-052	Axis Homeowners Association	ELEVATOR	GRANT
25. 26-V-054	Lawrence Berkeley National Laboratory	ELEVATOR	GRANT
26. 26-V-058	Dicks Sporting Goods	ELEVATOR	GRANT
27. 26-V-059	10229 -10233 Eton LLC	ELEVATOR	GRANT
28. 26-V-060	North Park Living LP	ELEVATOR	GRANT
29. 26-V-062	A Street Cedar Property Owner, LLC	ELEVATOR	GRANT
30. 26-V-063	Jefferson Fountain Valley, LLC	ELEVATOR	GRANT
31. 26-V-064	Google LLC	ELEVATOR	GRANT
32. 26-V-065	277 BB Way Development LLC	ELEVATOR	GRANT
33. 26-V-066	437 5th St. LLC	ELEVATOR	GRANT
34. 26-V-067	Capalina SMA, LLC	ELEVATOR	GRANT
35. 26-V-069	Vermont NH Property LLC	ELEVATOR	GRANT
36. 26-V-070	LINC HILL STREET, L.P.	ELEVATOR	GRANT
37. 26-V-071	LINC HILL STREET, L.P.	ELEVATOR	GRANT
38. 26-V-072	Sacramento County, Department of Airports	ELEVATOR	GRANT
39. 26-V-073	Sacramento County, Department of Airports	ELEVATOR	GRANT
40. 26-V-074	Sacramento County, Department of Airports	ELEVATOR	GRANT
41. 26-V-075	1721 Colby L.P.	ELEVATOR	GRANT
42. 26-V-076	AH 1408 Jefferson LLC	ELEVATOR	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
43. 26-V-081	Orange County Department of Education	ELEVATOR	GRANT
44. 26-V-082	California State University Northridge	ELEVATOR	GRANT
45. 26-V-083	BC Boulevard, LLC	ELEVATOR	GRANT
46. 26-V-084	Algarve Apartments Development, LP	ELEVATOR	GRANT
47. 26-V-085	Addison Labs Foundation	ELEVATOR	GRANT
48. 26-V-086	Kooser Apartments, LP	ELEVATOR	GRANT
49. 26-V-091	Avalon Mission Valley, LP	ELEVATOR	GRANT
50. 26-V-096	Donner Field Senior L.P.	ELEVATOR	GRANT
51. 26-V-097	Southwestern Community College District	ELEVATOR	GRANT
52. 26-V-098	Etiwanda School District	ELEVATOR	GRANT
53. 26-V-099	HIGHROSE EL PORTO LLC	ELEVATOR	GRANT
54. 26-V-101	East Bay Asian Local Development Corporation	ELEVATOR	GRANT
55. 26-V-102	US 216 Pico Owner LLC	ELEVATOR	GRANT
56. 26-V-103	Aztec Shops, Ltd.	ELEVATOR	GRANT
57. 26-V-104	733 S. Burlington, LLC	ELEVATOR	GRANT
58. 26-V-105	Studios on Fig LLC	ELEVATOR	GRANT
59. 26-V-106	Yehowa Medical Services	ELEVATOR	GRANT
60. 26-V-107	Alcott-Beverly Properties LLC	ELEVATOR	GRANT
61. 26-V-108	1452 K St., LLC	ELEVATOR	GRANT
62. 26-V-109	Sunnyvale Partners, LTD.	ELEVATOR	GRANT
63. 26-V-110	Wakeland Alma LP	ELEVATOR	GRANT
64. 26-V-111	Robert Bosch Semiconductor LLC	ELEVATOR	GRANT
65. 26-V-112	159 Fell Street, LP	ELEVATOR	GRANT
66. 26-V-113	AvalonBay Communities, Inc	ELEVATOR	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
67. 26-V-114	Cancer Support Community, San Francisco Bay Area	ELEVATOR	GRANT
68. 26-V-115	Chung Soonkyo, LLC	ELEVATOR	GRANT
69. 26-V-116	3303 Sunset, LLC	ELEVATOR	GRANT
70. 26-V-117	Claremont McKenna College	ELEVATOR	GRANT
71. 26-V-118	Everwin Hi Point LLC	ELEVATOR	GRANT
72. 26-V-119	Petaluma Corona Station, LP	ELEVATOR	GRANT

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON FEBRUARY 13, 2026

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
73. 20-V-300	Pepsi Bottling Group, LLC	Sections 454(a) and (c), 462(a), 463, and 466(c)	GRANT or DENY

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

Douglas Living Trust

Permanent Variance No: 17-V-448M1

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Preexisting Variance Holder of Record
17-V-448	KJ-Park LLC

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Lee Poland, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the variance holder specified within Board records for each conveyance the subject of previously granted Permanent Variance No. 17-V-448.
2. The modification application submitted by applicant, declared to be wholly truthful under penalty of perjury by the signatory, states that Douglas Living Trust became the owner of the conveyance(s) subject to the existing variance.
3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 17-V-448M1, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 17-V-448.
4. The Board finds the declaratory statements of the Applicant signatory to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which, in substantial part, grant of preexisting Permanent Variance No. 17-V-448.
5. The Board finds the current person or entity having custody of each conveyance the subject of Permanent Variance No. 17-V-448M1, to be:

Douglas Living Trust

D. Decision and Order

1. Variance application 17-V-448M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 17-V-448 shall be:

Douglas Living Trust

2. Permanent Variance No(s). 17-V-448, only being modified as specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 17-V-448M1.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

Gleiberman Properties, Inc., fbo Eleanor Apartments

Permanent Variance No: 19-V-296M2
PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Preexisting Variance Holder of Record
19-V-296M1	Summerhill Apartment Communities

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Pete Cuellar, with SCHINDLER ELEVATOR CORPORATION, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the variance holder specified within Board records for each conveyance the subject of previously granted Permanent Variance Nos. 19-V-296 and 19-V-296M1.
2. The modification application submitted by applicant, declared to be wholly truthful under penalty of perjury by the signatory, states that Gleiberman Properties, Inc., fbo Eleanor Apartments became the owner of the conveyance(s) subject to the existing variance.
3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 19-V-296M1, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance Nos 19-V-296 and 19-V-296M1.
4. The Board finds the declaratory statements of the Applicant signatory to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which, in substantial part, grant of preexisting Permanent Variance Nos. 19-V-296 and 19-V-296M was based.
5. The Board finds the current person or entity having custody of each conveyance the subject of Permanent Variance No. 19-V-296M2, to be:

Gleiberman Properties, Inc., fbo Eleanor Apartments

D. Decision and Order

1. Variance application 19-V-296M2 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance Nos. 19-V-296 and 19-V-296M1 shall be:

Gleiberman Properties, Inc., fbo Eleanor Apartments

2. Permanent Variance Nos. 19-V-296 and 19-V-296M1, only being modified as specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 19-V-296M2.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

285 Sobrante Way, LLC

Permanent Variance No: 19-V-426M1

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Preexisting Variance Holder of Record
19-V-426	Sobrante Venture, LLC

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Gracie Lopez appeared as the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the variance holder specified within Board records for each conveyance the subject of previously granted Permanent Variance No. 19-V-426.
2. The modification application submitted by applicant, declared to be wholly truthful under penalty of perjury by the signatory, states that 285 Sobrante Way, LLC became the owner of the conveyance(s) subject to the existing variance.
3. Cal/OSHA has evaluated the request for modification of person or entity of record holding Permanent Variance No. 19-V-426M1, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 19-V-426.
4. The Board finds the declaratory statements of the Applicant signatory to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which, in substantial part, grant of preexisting Permanent Variance No. 19-V-426.
5. The Board finds the current person or entity having custody of each conveyance the subject of Permanent Variance No. 19-V-426M1, to be:

285 Sobrante Way, LLC

D. Decision and Order

1. Variance application 19-V-426M1 is conditionally GRANTED, as specified below, such that, within Board records, the person or entity holding Permanent Variance No. 19-V-426 shall be:

285 Sobrante Way, LLC

2. Permanent Variance No(s). 19-V-426, only being modified as specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 19-V-426M1.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Pepsi Bottling Group, LLC

OSHSB Variance No.: See Section A.1 table below

PROPOSED DECISION

Hearing Date: February 13, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
20-V-300	Pepsi Bottling Group, LLC	1150 E North Ave. Fresno, CA	N/A

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Jurisdictional and Procedural Matters

1. On July 31, 2020, Thomas E. Motley, Division Engineering Manager, on behalf of Pepsi Bottling Group, LLC (Applicant) applied for a permanent variance from the California Code of Regulations, title 8[1]. Subsequent revisions of the application have been filed by Applicant, with the most recent revision being received by the Occupational Safety and Health Standards Board (Board) on March 9, 2025.

2. The Labor Code at sections 143(a) and (b) provides:

[1] Unless otherwise noted, all references are to California Code of Regulations, title 8.

> (a) Any employer may apply to the board for a permanent variance from an occupational safety and health standard, order, special order, or portion thereof, upon a showing of an alternate program, method, practice, means, device, or process which will provide equal or superior safety for employees.
>
> (b) The board shall issue such variance if it determines on the record, after opportunity for an investigation where appropriate and a hearing, that the proponent of the variance has demonstrated by a preponderance of the evidence that the conditions, practices, means, methods, operations, or processes used or proposed to be used by an employer will provide employment and places of employment to his employees which are as safe and healthful as those which would prevail if he complied with the standard. The variance so issued shall prescribe the conditions the employer must maintain, and the practices, means, methods, operations, and processes which he must adopt and utilize to the extent they differ from the standard in question.

3. The variance application requests installation of an air tank at a Pepsi facility located at 1150 E. North Avenue, Fresno, CA 93723.

4. The application requests variance from title 8 safety regulations, including sections 454(a) and (c), 462(a), 463, and 466(c).

5. This proceeding is conducted in accordance with Labor Code section 143, and section 401, et seq. of the Board's rules of practice and procedure.

6. The hearing was held on February 13, 2026, October 22, 2024 and July 8, 2021, in Sacramento, California and by video conference, by delegation of the Board. Dave Harrison, Board Member, served as hearing panelist; the Hearing Officer was Autumn Gonzalez. This proposed decision is presented to the Board for its consideration, in accordance with section 426.

7. Appearing for the Applicant were Or Yorgev, CEO of Augwind Ltd., and Andy Wright, Director of Sustainability for PepsiCo.

8. Maryrose Chan, Senior Safety Engineer, appeared in a technical advisory role apart from the Board. Mike Osterfoss, Fredrick Sanchez, and Tom Zhao appeared as technical advisors on behalf of the Board, with Worley Limited. Carl Paganelli, Deputy Chief for Consultation, PSM, and Engineering, and Micah Davidian, Principal Safety Engineer for the Pressure Vessel Unit, appeared for the Division of Occupational Safety and Health (Cal/OSHA).

9. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence: the Hearing Notice as Exhibit PD-1, Applications, revised applications and supplemental submittals from the applicant as PD-2, Cal/OSHA reviews of applications as PD-3, Board staff reviews of applications as PD-4. Official notice was taken of the Board's rulemaking records, and variance decisions concerning the safety order requirements from which variance is requested.

10. The hearing ended and the record closed on February 13, 2026.

C. Findings of Fact

Based upon the record of this proceeding, the Board finds the following:

1. Applicant requests a permanent variance from sections 454(a) and (c), 462(a), 463, and 466(c).

2. Applicant was provided the opportunity to amend and resubmit its application for variance. A revised application was received by the Board on December 30, 2024. A second revised application was next submitted on January 20, 2025, and on March 9, 2025 the Applicant submitted its final revised application.

3. Board staff submitted a third evaluation of the Applicant's final revised application on August 19, 2025. The memorandum discusses a number of issues with the Applicant's submission, including missing documents, lack of design detail in documents, significant discrepancies and inconsistencies between submitted drawings versus submitted calculations, lack of clarity regarding the required inspection test plan pursuant to section 462, and other defects.

4. Cal/OSHA's staff testified to holding the same concerns as those raised by the Board staff's report. Cal/OSHA found that equivalent safety had not been

demonstrated by Applicant, and that Applicant's proposal contains numerous errors and inaccuracies.

5. Applicant failed to rebut the findings of the Board staff's evaluation or the testimony of Board staff and Cal/OSHA. Rather, Applicant conceded that its March 9, 2025 application submission contains several errors, including inconsistencies between drawings and calculations, missing details, and other discrepancies with details. (See, Ex. PD-2, "Reply to memorandum August 19, 2025".)

D. Applicable Regulations

1. As stated above, the Applicant requests permanent variance from sections 454(a) and (c), 462(a), 463, and 466(c).

2. Section 454, subdivisions (a) and (c) state:

> (a) Except as permitted in Section 454(b) all air tanks for new installations shall be constructed, inspected and stamped in compliance with the ASME Code (unless the design, material, and construction of the air tank are accepted by the Division as equivalent to the ASME Code) and, except for "UM" vessels, registered with the National Board of Boiler and Pressure Vessel Inspectors. The stamping on all new air tanks or on nameplates attached thereto shall show the head and shell thickness in addition to the stamping required by the ASME Code.
>
> ****
>
> (c) The allowable working pressure of any existing air tank shall be determined by the provisions of the ASME Code effective when the tank was manufactured and upon its condition; provided, however, that tanks constructed to other than ASME Code standards for air pressure service shall be calculated with a factor of safety of not less than 5.

3. Section 462 reads as follows:

> (a) All air tanks requiring a permit to operate shall be inspected internally and externally at least once every 3 years

for portable tanks and once every 5 years for all other tanks by a qualified inspector.

This subsection shall not be applicable for air tanks which fulfill the requirements for an indefinite permit as provided in Section 461(h).

EXCEPTION: The internal inspection of tanks less than 2 years old may be waived at the discretion of the inspector, provided all other requirements of Section 462(c) are met.

(1) Ultrasonic thickness determination shall be permitted in lieu of, or in conjunction with, internal inspection for air tanks of 36" diameter or less. Thickness determinations shall be made in at least eight areas: two on each head and two on both the top (upper) and bottom (lower) portions of the shell.

Thickness determinations indicating significant reduction in the material thickness over a general area (National Board Inspection Code Par. U-107 may be used as a guide) shall be shown on the inspection report as well as the calculations for the reduction in the allowable working pressure.

The qualified inspector's employer shall be responsible for the inspector's or ultrasonic examiner's competency in the use of the ultrasonic thickness gage, and the examiner's signed report shall be attached to the qualified inspector's inspection report.

4. Section 463 states:

Inspectors shall be certified in accordance with Section 779 of the Boiler and Fired Pressure Vessel Safety Orders.

Section 779 provides:

779. Certification of Inspectors.

(a) Upon the written request of his employer, a certificate of competency may be issued to a person who is employed as provided in subsection (c) following and who obtains a passing grade in the examination prescribed by the division. The prescribed examination may be that of the National Board and shall determine the fitness and competency of any

candidate for this certificate. An average of at least seventy percent (70%) shall be required for a passing grade.

(b) An applicant for a certificate of competency shall be at least three (3) years experience in boiler or unfired pressure vessel construction or repair or as an operating engineer in charge of high-pressure boilers or as inspector of steam boilers or unfired pressure vessels.

(1) bachelor of science degree in engineering from an accredited school plus one year experience in design, construction, operation or inspection of high pressure boilers and pressure vessels.

(2) An associate degree in mechanical technology plus two years experience in design, construction, operation or inspection of high pressure boiler and pressure vessels.

(3) A high school education or the equivalent plus three years experience:

(A) in high pressure boiler and high pressure vessel construction or repair, or

(B) in charge of high pressure boiler and pressure vessel operations, or

(C) in the inspection of high pressure boilers and pressure vessels.

(c) A certificate of competency may be issued only to a person employed as an inspector of steam boilers or pressure vessels by any county, city, insurance company, or by the division, or to an inspector continuously employed by a corporation or company to inspect only boilers and pressure vessels to be used by such company and not for resale. The certificate of competency shall be automatically revoked after a period of eighteen (18) months if the inspector does not make any boiler or pressure vessel inspections as evidenced by reports submitted to the division; provided, however, that this provision does not apply to supervising engineers whose regular duties include the supervision and review of the work of qualified inspectors. A written examination is required to revalidate such certificate. The

> employer shall notify the division when the employment of a certified inspector is terminated.
>
> (d) Any applicant, who has previously obtained and continues to hold a commission as a boiler inspector issued by the National Board of Boiler and Pressure Vessel Inspectors, may be exempted from the written portion of the prescribed examination provided such applicant appears for an interview to determine his physical fitness and to prove his knowledge of the applicable Safety Orders of the Division. He shall have been actively engaged as a boiler inspector within eighteen (18) months prior to his application for the California certificate of competency.
>
> (e) As near as practicable, the examination for certificate of competency shall be conducted on the first Wednesday in March, June, September, and December of each year.
>
> (f) The Division reserves the right to decline to examine any candidate who has not had at least ninety (90) days' practical field boiler inspection experience under the supervision of a qualified inspector.
>
> (g) Upon good cause being shown therefor, and after notice and an opportunity to be heard, the Division may revoke any certificate of competency.

5. The relevant provision of section 466 reads:

> (c) Any areas that are deteriorated by internal or external corrosion or by mechanical abrasion that affects the safety of the tank shall be properly re-aired or the allowable working pressure shall be reduced proportionately. The building up by welding of such area is prohibited, except isolated pits shall be permitted to be properly prepared and welded at the discretion of the qualified inspector.

E. Conclusive Findings

Based upon the record in this proceeding, the Board finds the following:

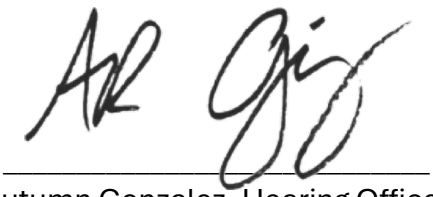
1. Applicant requests the Board approve the variance contingent on addressing issues raised by the Board staff through Worley, or in the alternative, provide applicant with a detailed list of specific requirements that would ultimately lead to acceptance of the permanent variance. This request is not within the Board's power; the Labor Code requires demonstration by a preponderance of the evidence of equivalent or superior safety for the Board to grant a variance to a title 8 safety order.[2]

2. Applicant has not demonstrated by a preponderance of the evidence that the proposed practices, means, methods, operations or processes will provide equivalent safety to current title 8 regulations, as required by the Labor Code.

F. Decision and Order

The Application for Permanent Variance of PepsiCo., OSHSB No. 20-V-300, is DENIED.

DATED: March 30, 2026



Autumn Gonzalez, Hearing Officer

[2] Board staff and Cal/OSHA also raise concerns regarding provisions of the Labor Code, including section 7622, that they believe would conflict with a grant of variance. These arguments ultimately need not be addressed here, as the threshold requirement of demonstrating equivalent or superior safety was not reached.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

City of San Jose

Permanent Variance No: 23-V-268M1

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
23-V-268	City of San Jose	4328 Zanker Rd. San Jose, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, James Day, with TK Elevator Corporation, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each conveyance the subject of previously granted Permanent Variance No. 23-V-268.
2. The Application declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance No. 23-V-268M1 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
3. Cal/OSHA has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 23-V-268.
4. The Board finds the above subpart C.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 23-V-268.
5. The Board finds the correct address by which to designate the location of each conveyance the subject of Permanent Variance No. 23-V-268, to be:

4238 Zanker Rd.
San Jose, CA

D. Decision and Order

1. Permanent Variance Application No. 23-V-268M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each conveyance being the subject of Permanent Variance No. 23-V-268 shall have the following address designation:

4238 Zanker Rd.
San Jose, CA

2. Permanent Variance No. 23-V-268, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 23-V-268M1.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by

the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

SI 78 LLC

Permanent Variance No: 24-V-197M1

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
24-V-197	SI 78 LLC	1401 Broadway Redwood City, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each conveyance the subject of previously granted Permanent Variance No. 24-V-197.
2. The Application declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance No. 24-V-197M1 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
3. Cal/OSHA has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 24-V-197.
4. The Board finds the above subpart C.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 24-V-197.
5. The Board finds the correct address by which to designate the location of each conveyance the subject of Permanent Variance No. 24-V-197, to be:

900 Chestnut
Redwood City, CA

D. Decision and Order

1. Permanent Variance Application No. 24-V-197M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each conveyance being the subject of Permanent Variance No. 24-V-197 shall have the following address designation:

900 Chestnut
Redwood City, CA

2. Permanent Variance No. 24-V-197, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 24-V-197M1.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by

the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

San Mateo County Historical Association

Permanent Variance No: 24-V-333M1

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
24-V-333	San Mateo County Historical Association	Taube Family Carriage Gallery 2200 Broadway St. Redwood City, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each conveyance the subject of previously granted Permanent Variance No. 24-V-333.
2. The Application declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance No. 24-V-333M1 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
3. Cal/OSHA has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 24-V-333.
4. The Board finds the above subpart C.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 24-V-333.
5. The Board finds the correct address by which to designate the location of each conveyance the subject of Permanent Variance No. 24-V-333, to be:

550 Marshall St.,
Redwood City, CA

D. Decision and Order

1. Permanent Variance Application No. 24-V-333M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each conveyance being the subject of Permanent Variance No. 24-V-333 shall have the following address designation:

550 Marshall St.,
Redwood City, CA

2. Permanent Variance No. 24-V-333, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 24-V-333M1.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.

4. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by:

TMP II Apts LLC

Permanent Variance No: 24-V-375M1

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from a provision of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
24-V-375	TMP II Apts LLC	1000 Bryan Ave. Irvine, CA

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference, by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of the Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application for Modification of Permanent Variance
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the safety regulation requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. The Applicant requests modification of the address of the unchanging variance location specified within Board records for each conveyance the subject of previously granted Permanent Variance No. 24-V-375.
2. The Application declared to be wholly truthful under penalty of perjury by Application signatory, states facts upon which reasonably may be based a finding that the address, specified in the records of the Board, at which Permanent Variance No. 24-V-375M1 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.1.
3. Cal/OSHA has evaluated the request for modification of variance location address, finds no issue with it, and recommends that the application for modification be granted subject to the same conditions of the Decision and Order in Permanent Variance No. 24-V-375.
4. The Board finds the above subpart C.2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 24-V-375.
5. The Board finds the correct address by which to designate the location of each conveyance the subject of Permanent Variance No. 24-V-375, to be:

1100 Bryan Ave.,
Irvine, CA

D. Decision and Order

1. Permanent Variance Application No. 24-V-375M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each conveyance being the subject of Permanent Variance No. 24-V-375 shall have the following address designation:

1100 Bryan Ave.,
Irvine, CA

2. Permanent Variance No. 24-V-375, being only modified as to the subject location address specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 24-V-375M1.
3. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
4. This Decision and Order shall remain in effect unless modified or revoked upon application by

the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application to Modify Permanent Variance by: Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions	Permanent Variance No.: 24-V-541M1 **[REVIEW DRAFT 1]** **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. **Subject Matter**

1. The following person or entity ("Applicant") has applied for a modification of permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Preexisting Permanent Variance No.	Applicant Name	Variance Location	Preexisting Variance Elevator Type Granted	Number of Elevators
24-V-541	1600 Commonwealth, LP	1650 W. Commonwealth Ave. Fullerton, CA	Otis Medical Emergency Elevator Car Dimensions (Group IV)	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et. seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. **Procedural**

1. This hearing was held on March 25, 2026, via videoconference, by the Board, with Hearing Officer, Kelly Chau, both presiding and hearing the matter on its merit, in accordance with section 426.

2. At the hearing Dan Leacox of Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application for modification of Permanent Variance
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On April 23, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. **Findings of Fact**

1. The Applicant requests modification of the elevator type to add variances necessary for Otis elevators branded Gen2S, Gen3 Edge, and Gen3 CORE.

2. The Applicant seeks to modify the permanent variance to include the provisions of the section 3141 [ASME A17.1-2004, Sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, 2.14.1.7.1, 8.4.10.1.1(a)(2)(b), 2.26.1.4.4(a), 2.18.4.2.5(a), 2.18.7.4, 2.18.5.1], and section 3141.7(b) [Ref. 3041(e)(1)(C)] of the Elevator Safety Orders, with respect to the suspension ropes and connections, car top railings and seismic reset switch relocation, inspection transfer switch relocation, speed reducing switch relocation, governor sheave diameter, reduced diameter governor rope, and the minimum car interior platform size for medical emergency elevators.

3. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested modification of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. **Decision and Order**

Permanent Variance Application No. 24-V-541M1 is conditionally GRANTED, thereby modifying Board records, such that each elevator being the subject of Permanent Variance Nos. 24-V-541 and 24-V-541M1, shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);

- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);

- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);

- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);

- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;

- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and

- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).

- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:

    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.

    b. Steel coated belts that have been installed and used on another installation shall not be reused.

    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.

d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.

e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

   a. The width and thickness in millimeters or inches;

   b. The manufacturer's rated breaking strength in (kN) or (lbf);

   c. The name of the person or organization that installed the flat coated steel belts;

   d. The month and year the flat coated steel belts were installed;

   e. The month and year the flat coated steel belts were first shortened;

   f. The name or trademark of the manufacturer of the flat coated steel belts; and

   g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If

service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

    CAUTION
    DO NOT STAND ON OR CLIMB OVER RAILING

    f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

11. The governor speed-reducing switch function shall comply with the following:

    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.

    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.

    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.

    d. It shall be used in conjunction with approved car-mounted speed governors only.

    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.

    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    > *The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position."*

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Permanent Variance No. 24-V-541, being only modified as to the additional variances sought specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into this Decision and Order of Permanent Variance No. 24-V-541M1.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Dated: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: TK Elevator EOX MRL (Group IV)	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
25-V-069	Herndon Pinnacle LLC	690 W. Herndon Ave., Clovis, CA	1
25-V-070	Kern Community College District	Bakersfield College Agricultural Bldg. 1801 Panorama Dr. Bakersfield, CA	2
25-V-071	Admiral Court Property SB LLC	1010 Admiral Court San Bruno, CA	1
25-V-072	Old Town Roseville Properties, LLC	330 Vernon St. Roseville, CA	2
25-V-074	Khadsupa LLC	1126 Del Monte St. Redding, CA	2

25-V-113	St. Paul's Episcopal Home, Inc	111 Elm St. San Diego, CA	1
25-V-114	737-753 Orange Ave LLC	747 Orange Ave. Coronado, CA	1
25-V-115	Big Wave Group Inc.	380 Airport St. Princeton By The Sea, CA	1
25-V-116	Gold Country Hospitality, Inc.	961 Plaza Drive Grass Valley, CA	1
25-V-119	Sutter Valley Medical Foundation	8210 Laguna Blvd. Elk Grove, CA	2

2. These proceedings are conducted in accordance with Labor Code section 143, and section 401, et seq. of the Occupation Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference by the Board with Hearing Officer, Kelly Chau, presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, James Day with TK Elevator, appeared on behalf of the Applicant. Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	**Description of Exhibit**
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Relevant Safety Orders

Variance Request No. 1 (ASME A17.1-2004, section 2.14.1.7.1)

2.14.1.7.1 A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

Variance Request No. 2A (ASME A17.1-2004, section 2.20.1)

2.20.1 Suspension Means

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused.

Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process or their equivalent.

Variance Request No. 2B (ASME A17.1-2004, section 2.20.2[.1])

2.20.2.1 On Crosshead Data Plate.

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(a) the number of ropes

(b) the diameter in millimeters (mm) or inches (in.)

(c) the manufacturer's rated breaking strength per rope in kilo Newton (kN) or pounds (lb)

Variance Request No. 2C (ASME A17.1-2004, section 2.20.2.2)

2.20.2.2 On Rope Data Tag.

A metal data tag shall be securely attached to one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[…]

(f) whether the ropes were nonpreformed or preformed

[…]

Variance Request No. 2D. (ASME A17.1-2004, section 2.20.3)

2.20.3 Factor of Safety

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

Where

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Variance Request No. 2E (ASME A17.1-2004, section 2.20.4)

2.20.4 Minimum Number and Diameter of Suspension Ropes

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term" diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Variance Request No. 2F (ASME A17.1-2004, section 2.20.9[.1])

2.20.9 Suspension-Rope Fastening

2.20.9.1 Type of Rope Fastenings. The car and counterweight ends of suspension wire ropes, or the stationary hitch-ends where multiple roping is used, shall be fastened in such a manner that all portions of the rope, except the portion inside the rope sockets, shall be readily visible.

Fastening shall be

(a) by individual tapered rope sockets (see 2.20.9.4) or other types of rope fastenings that have undergone adequate tensile engineering tests, provided that

(1) such fastenings conform to 2.20.9.2 and 2.20.9.3;

(2) the rope socketing is such as to develop at least 80% of the ultimate breaking strength of the strongest rope to be used in such fastenings; or

(b) by individual wedge rope sockets (see 2.20.9.5); and

(c) U-bolt-type rope clamps or similar devices shall not be used for suspension rope fastenings.

Variance Request No. 3 (ASME A17.1-2004, section 2.26.9.4)

2.26.9.4 Redundant devices used to satisfy 2.26.9.3 in the determination of the occurrence of a single ground, or the failure of any single magnetically operated switch, contactor or relay, or of any single solid state device, or any single device that limits the leveling or truck zone, or a software system failure, shall be checked prior to each start of the elevator from a landing, when on automatic operation. When a single ground or failure, as specified in 2.26.9.3, occurs, the car shall not be permitted to restart. Implementation of redundancy by a software system is permitted, provided that the removal of power from the driving-machine motor and brake shall not be solely dependent on software-controlled means.

Variance Request No. 4 (ASME A17.1-2004, section 2.26.9.6.1)

2.26.9.6.1 Two separate means shall be provided to independently inhibit the flow of alternating-current through the solid state devices that connect the direct-current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Variance Request No. 5 (ASME A17.1-2004, section 2.26.1.4.4 (a))

2.26.1.4.4 Machine Room Inspection Operation

(a) When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be located in the machine room.

Variance Request No. 6 (ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b))

8.4.10.1.1 Earthquake Equipment (See Also Fig. 8.4.10.1.1)

(a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:

(1) seismic zone 3 or greater: a minimum of one seismic switch per building

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

(b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room [see 8.4.10.1.3(i)]

D. Findings of Fact

1. This application for a newly introduced elevator product with features similar to

the TK Elevator EVO model.

2. The Applicant proposes to in-set the car top railings to provide greater hand clearance to objects and surfaces in the hoistway. ESO requires that these railings be located at the outside perimeter of the car top. The in-setting of the car top railings from the outside perimeter of the car top does not comply with the ESO.

3. TK Elevator model EOX machine room-less (MRL) elevators are not suspended by circular steel wire ropes as required by the ESO. They utilize non-circular elastomeric-coated steel belts (ECSB) and specialized suspension fastenings that do not comply with the ESO. This belt-type suspension is similar to that found on other elevator model products (e.g. TK EVO, Otis Gen2 and Schindler 3300).

4. Similar to the TK EVO, the TK EOX features a control system that includes software systems and circuits having a Safety Integrity Level (SIL) rating to monitor, process, and execute specific elevator safety functions. The use of these SIL-rated software systems and circuits to perform these safety functions does not comply with the ESO.

5. The TK EOX MRL elevator design prevents the inspection transfer and seismic reset switches from being located in a "machine room". To provide access to the inspection transfer switch the Applicant proposes relocating them to the room containing the elevator controls (control room). The Applicant's proposed location does not comply with the ESO.

6. Cal/OSHA believes the application and its amendments seek a permanent variance from CCR, Title 8, Section 3141, [ASME A17.1-2004, sections]:

   • 2.14.1.7.1; to permit the use of the car top railing system where the railing system is located in-set from the elevator car top perimeter.

   • 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, and 2.20.9.1; to permit the use of the Elastomeric Coated Steel Belts in lieu of circular steel suspension ropes.

   • 2.26.9.4; to permit the use of a software reliant means to remove power from the driving motor.

   • 2.26.9.6.1; to permit the use of SIL-rated circuitry in place of an electromechanical relay to inhibit current flow to the drive machine motor.

   • 2.26.1.4.4(a); to permit the inspection transfer switch to reside at a location other than a machine room.

   • 8.4.10.1.1(a)(2)(b); to permit the seismic reset switch to reside at a location other than a machine room.

E. Decision and Order

Applicant is hereby conditionally GRANTED Permanent Variance as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, with respect to the section A specified number of TKE EOX MRL elevator(s), at the specified location, each shall conditionally hold permanent variance from the following subparts of ASME A17.1-2004, currently incorporated by reference into section 3141 of the Elevator Safety Orders:

- Car-Top Railing: 2.14.1.7.1 (Limited to the extent necessary to permit the use of an inset car-top railing)
- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, and 2.20.9.1 (Limited to the extent necessary to permit the use of the elastomeric-coated steel belts in lieu of circular steel suspension ropes)
- Inspection transfer switch: 2.26.1.4.4(a) (Limited to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room)
- Software Reliant Means to Remove Power: 2.26.9.4 (Limited to the extent necessary to permit the exclusive use of SIL-rated software systems as a means to remove power from the driving machine motor and brake)
- SIL-Rated Circuitry to Inhibit Current Flow: 2.26.9.6.1 (Limited to the extent necessary to permit the use of SIL-rated circuitry in place of an electromechanical relay to inhibit current flow to the drive motor)
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Limited to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room)

Recommended Conditions:

1. If there is an inset car top railing:

a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand or climb over the car top railing.

b. The distance that the railing can be inset shall be limited to not more than 6 inches.

c. All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4-inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

CAUTION

STAY INSIDE RAILING

NO LEANING BEYOND RAILING

NO STEPPING ON, OR BEYOND, RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).

2. The elevator suspension system shall comply to the following:

a. The elastomeric coated steel belts (ECSBs) and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2019, sections:

2.20.4.3 – Minimum Number of Suspension Members

2.20.3 – Factor of Safety

2.20.9 – Suspension Member Fastening

b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the ECSBs and fastenings and related monitoring and detection systems and criteria for ECSB replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Elevator Mechanic (CCCM) at the location of the elevator, and to the Cal/OSHA upon request.

ECSB mandatory replacement criteria shall include:

1. Any exposed wire, strand or cord;

2. Any wire, strand, or cord breaks through the elastomeric coating;

3. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;

4. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;

c. Traction drive sheaves must have a minimum diameter of 112 mm. The maximum speed of ECSBs running on 112 mm drive sheaves shall be no greater than 6.1 m/s.

d. If any one ECSB needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed ECSB having been placed into service, it is permissible to replace the individual damaged suspension member. ECSBs that have been installed on another installation shall not be re-used.

e. A traction loss detection means shall be provided that conforms to the requirements of

ASME A17.1-2019, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2019, section 8.6.4.19.12.

f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2019, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2019, section 8.6.4.19.13(a).

g. An elevator controller integrated bend cycle monitoring system shall monitor actual ECSB bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the ECSB makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single ECSB drops below 60 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 2b above.

h. The elevator shall be equipped with a device to monitor the remaining residual strength of each ECSB. The device shall conform to the requirements of Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.

i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2019, Section 2.20.2.1.

j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2019, Section 2.20.2.2.

k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 2b, shall be conducted and documented every six months by a CCCM.

l. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, "Suspension Means Replacement Reporting Condition," Incorporated herein by this reference.

m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, Sections 8.6.1.2 and 8.6.1.4, respectively.

3. The SIL-rated software system and related circuits used to provide device/circuit redundancy and to inhibit electrical current flow in accordance with ASME A17.1-2004 – 2.26.9.4 and 2.26.9.6.1 shall comply with the following:

a. The driving-machine motor control system shall consist of a TKE, model HVI-22 or HVI-44 Inverter containing a Safe Torque Off printed circuit board assembly (STO). The STO shall be labeled or marked with a SIL rating (not less than SIL 3), the name or mark of the certifying organization and the SIL certification number FS/71/220, followed by the applicable revision number (as in FS/71/220/23/1060).

b. The software system and related circuits shall be certified for compliance with the

applicable requirements of ASME A17.1-2019 Section 2.26.9.3.2(b), 2.26.4.3.2, 2.26.9.6.1(b) and 2.26.9.4.

c. The access door or cover of the enclosures containing the SIL-rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL-rated devices.

Refer to Maintenance Control Program and wiring diagrams prior to performing work.

d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL-rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL-rated component, with notations identifying parts and locations.

e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.

f. A successful test of the SIL-rated software system and its related circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL-rated devices, safety functions, and related circuits operate as intended.

g. Any alterations to the SIL-rated software system and its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL-rated devices, the alterations shall be made in conformance with ASME A17.1-2019, Section 8.7.1.9.

h. Any replacement of the SIL-rated software system or its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL-rated devices, the replacement shall be made in conformance with ASME A17-1-2019, section 8.6.3.14.

i. Any repairs to the SIL-rated software system and its related circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL-rated devices, the repairs shall be made in conformance with ASME A17.1-2019, section 8.6.2.6.

j. Any space containing SIL-rated software or circuits shall be maintained within the temperature and humidity range specified by TK Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL-rated software or circuits.

k. Field software changes to the SIL-rated system are not permitted. Any changes to the SIL-rated system's software or circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.

4. If the inspection transfer switch required by ASME A17.1-2004, Rule 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times

when not in use.

5. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment, in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

6. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.

7. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, sections 411.2, and 411.3.

8. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Date: March 30, 2026

Kelly Chau, Hearing Officer

EXHIBIT 1

CIRCULAR LETTER E-10-04, October 6, 2010

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQ

EXHIBIT 2

SUSPENSION MEANS REPLACEMENT REPORTING REQUIREMENTS

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

(1) A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, Attn: Engineering section, 2 MacArthur Place Suite 700, Santa Ana, CA 92707.

(2) Each such report shall contain, but not necessarily be limited to, the following information:

(a) The State-issued conveyance number, complete address, and Permanent Variance file number that identifies the permanent variance.

(b) The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).

(c) The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.

(d) The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, and certification expiration date of each CCCM performing the replacement work.

(e) The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.

(f) A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

(g) A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.

(h) All information provided on the crosshead data plate per ASME A17.1-2004, section

2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

(i) For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

(j) For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

(k) Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

(3) In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2(a) above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: TK Elevator Evolution (Group IV)	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
25-V-324	16 LPB LLC	1600 Broadway Sacramento, CA	1

2. These proceedings are conducted in accordance with Labor Code section 143, and section 401, et seq. of the Occupation Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026, via videoconference by the Board with Hearing Officer, Kelly Chau, presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, James Day with TK Elevator, appeared on behalf of the Applicant. Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On February 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Relevant Safety Orders

Variance Request No. 1 (ASME A17.1-2004, section 2.14.1.7.1)

2.14.1.7.1 A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

Variance Request No. 2A (ASME A17.1-2004, section 2.20.1)

2.20.1 Suspension Means

Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused.

Only iron (low-carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open-hearth or electric furnace process or their equivalent.

Variance Request No. 2B (ASME A17.1-2004, section 2.20.2[.1])

2.20.2.1 On Crosshead Data Plate.

The crosshead data plate required by 2.16.3 shall bear the following wire-rope data:

(a) the number of ropes

(b) the diameter in millimeters (mm) or inches (in.)

(c) the manufacturer's rated breaking strength per rope in kilo Newton (kN) or

pounds (lb)

Variance Request No. 2C (ASME A17.1-2004, section 2.20.2.2)

2.20.2.2 On Rope Data Tag.

A metal data tag shall be securely attached to one of the wire-rope fastenings. This data tag shall bear the following wire-rope data:

(a) the diameter in millimeters (mm) or inches (in.)

[…]

(f) whether the ropes were nonpreformed or preformed

[…]

Variance Request No. 2D. (ASME A17.1-2004, section 2.20.3)

2.20.3 Factor of Safety

The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.

The factor of safety shall be calculated by the following formula:

$$f = \frac{S \times N}{W}$$

where

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

Variance Request No. 2E (ASME A17.1-2004, section 2.20.4)

2.20.4 Minimum Number and Diameter of Suspension Ropes

The minimum number of hoisting ropes used shall be three for traction elevators and two for drum-type elevators.

Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.

The term" diameter," where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.

The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

Variance Request No. 2F (ASME A17.1-2004, section 2.20.9[.1])

2.20.9 Suspension-Rope Fastening

2.20.9.1 Type of Rope Fastenings. The car and counterweight ends of suspension wire ropes, or the stationary hitch-ends where multiple roping is used, shall be fastened in such a manner that all portions of the rope, except the portion inside the rope sockets, shall be readily visible.

Fastening shall be

(a) by individual tapered rope sockets (see 2.20.9.4) or other types of rope fastenings that have undergone adequate tensile engineering tests, provided that

(1) such fastenings conform to 2.20.9.2 and 2.20.9.3;

(2) the rope socketing is such as to develop at least 80% of the ultimate breaking strength of the strongest rope to be used in such fastenings; or

(b) by individual wedge rope sockets (see 2.20.9.5); and

(c) U-bolt-type rope clamps or similar devices shall not be used for suspension rope fastenings.

Variance Request No. 3 (ASME A17.1-2004, section 2.26.9.4)

2.26.9.4 Redundant devices used to satisfy 2.26.9.3 in the determination of the occurrence of a single ground, or the failure of any single magnetically operated switch, contactor or relay, or of any single solid state device, or any single device that limits the leveling or truck zone, or a software system failure, shall be checked prior to each start of the elevator from a landing, when on automatic operation. When a single ground or failure, as specified in 2.26.9.3, occurs, the car shall not be permitted to restart. Implementation of redundancy by a software system is permitted, provided that the removal of power from the driving-machine motor and brake shall not be solely dependent on software-controlled means.

Variance Request No. 4 (ASME A17.1-2004, section 2.26.9.6.1)

2.26.9.6.1 Two separate means shall be provided to independently inhibit the flow of alternating-current through the solid state devices that connect the direct-current power source to the alternating-current driving motor. At least one of the means shall be an electromechanical relay.

Variance Request No. 5 (ASME A17.1-2004, section 2.26.1.4.4 (a))

2.26.1.4.4 Machine Room Inspection Operation

(a) When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be located in the machine room.

Variance Request No. 6 (ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b))

8.4.10.1.1 Earthquake Equipment (See Also Fig. 8.4.10.1.1)

(a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:

(1) seismic zone 3 or greater: a minimum of one seismic switch per building

(2) seismic zone 2 or greater:

(a) a displacement switch for each elevator

(b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room [see 8.4.10.1.3(i)]

D. Findings of Fact

1. Applicant proposes to utilize inset car top railings and guards in compliance with

ASME 17.1-2013, section 2.14.1.7.1 and the *Vivante Westside, LLC* File No. 18-V-364 (Nov. 20, 2020) decision (*Vivante*). Applicant further claims that the request is consistent with the *Vivante*, the *Mack Urban, LLC*, Permanent Variance No. 15-V-349 (Nov. 17, 2016), and the *Patton Equities, LLC* Permanent Variance No. 20-V-128 (Nov. 12, 2020) decisions (*Patton Equities*).

2. Applicant proposes to utilize noncircular elastomeric-coated steel belts ("ECSBs") rather than steel ropes in a machine room-less ("MRL") elevator installation, with updated data plates, data tags, and wedge sockets designed for use with ECSBs, as well as the appropriate factor of safety criteria conforming to ASME 17.1-2013, with a continuous residual strength detection device ("RSDD") compliant with the *San Francisco Public Works (Permanent Variance No. 21-V-061, et al.)* decisions.

3. The installation shall utilize the TK Elevator Model 104DP001 RSDD, accepted by Cal/OSHA on May 4, 2021.

4. Applicant proposes to comply with ASME A17.1-2013 sections 2.26.9.3, "Protection Against Failures", rather than the requirements of 2.26.9.3 and 2.26.9.4 in the ASME 2004 code.

5. Applicant proposes to use TKE's control systems, using the TKE TAC32T Controller with SIL3 rated elements, to provide equivalent safety to ASME A17.1-2004, section 2.26.9.4 as a means to inhibit flow of Alternating Current to the Driving Motor in compliance with ASME A17.1-2013, section 2.26.9.6.

6. Applicant proposes to locate the Inspection Transfer Switch within the machinery/control room/space in the MRL installation, in compliance with ASME 17.1-2013, section 2.26.1.4.

7. Applicant proposes to locate the Seismic-Operation Reset Switch in the machinery/control room/space in the MRL installation.

E. Decision and Order

Applicant is hereby conditionally GRANTED Permanent Variance as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, with respect to the section A specified number of TKE EVO 200 elevator(s), at the specified location, each shall conditionally hold permanent variance from the following subparts of ASME A17.1-2004, currently incorporated by reference into section 3141 of the Elevator Safety Orders:

- Car-Top Railing: 2.14.1.7.1 (Limited to the extent necessary to permit the use of an inset car-top railing)

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, and 2.20.9.1 (Limited to the extent necessary to permit the use of the

elastomeric-coated steel belts in lieu of circular steel suspension ropes)

- Inspection transfer switch: 2.26.1.4.4(a) (Limited to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room)

- Software Reliant Means to Remove Power: 2.26.9.4 (Limited to the extent necessary to permit the exclusive use of SIL-rated software systems as a means to remove power from the driving machine motor and brake)

- SIL-Rated Circuitry to Inhibit Current Flow: 2.26.9.6.1 (Limited to the extent necessary to permit the use of SIL-rated circuitry in place of an electromechanical relay to inhibit current flow to the drive motor)

- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Limited to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room)

Inset Car Top Railing (Variance Request No. 1):

1.0 Any and all inset car top railings shall comply with the following:

1.1 Serviceable equipment shall be positioned so that mechanics and inspectors do not have to stand on or climb over the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit trained elevator mechanics or elevator service personnel to stand or climb over the car top railing.

1.2 The distance that the railing can be inset shall be limited to not more than six inches (6”).

1.3 All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds two inches (2”), shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

1.4 The top surface of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4” diagonal red and white stripes.

1.5 The Applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING

1.6 The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).

Suspension Means (Variance Request No. 2):

2.0 The elevator suspension system shall comply with the following:

2.1 The elastomeric coated steel belts (ECSBs) and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:

2.20.4.3 – Minimum Number of Suspension Members
2.20.3 – Factor of Safety
2.20.9 – Suspension Member Fastening

2.2 Additionally, ECSBs shall meet or exceed all requirements of ASME A17.6 2010, Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3 Noncircular Elastomeric Coated Steel Suspension Members for Elevators.

2.3 The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the ECSBs and fastenings and related monitoring and detection systems and criteria for ECSB replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to Cal/OSHA upon request.

2.4 ECSB mandatory replacement criteria shall include:

2.4.1. Any exposed wire, strand or cord;

2.4.2. Any wire, strand or cord breaks through the elastomeric coating;

2.4.3. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;

2.4.4. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.

2.5 Traction drive sheaves must have a minimum diameter of 112 mm. The maximum speed of ECSBs running on 112 mm drive sheaves shall be no greater than 6.1 m/s.

2.6 If any one (1) ECSB needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed ECSB having been placed into service, it is permissible to replace the individual damaged suspension member. ECSBs that have been installed on another installation shall not be re used.

2.7 A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.

2.8 A broken suspension member detection means shall be provided that conforms to

the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

2.9 An elevator controller integrated bend cycle monitoring system shall monitor actual ECSB bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the ECSB makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single ECSB member drops below (60%) sixty percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 2 (Cal/OSHA Circular Letter), the bend cycle monitoring system shall be tested semiannually in accordance with the procedures required per above Conditions 2.3 and 2.4.

2.10 The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.

2.11 A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.

2.12 Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 2.3 and 2.4 specified criteria, shall be conducted and documented every six (6) months by a CCCM.

2.13 The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 1, “Suspension Means Replacement Reporting Condition.”

2.14 Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2, and 8.6.1.4, respectively.

2.15 The subject elevators(s) shall be equipped with a TK Elevator Model 104DP001 Residual Strength Detection Device accepted by Cal/OSHA on May 4, 2021 or Cal/OSHA accepted equivalent device.

Control and Operating Circuits
Combined Software Redundant Devices with Software Removal of Power from Driving Motor and Brake (Variance Request No. 3)
Removal of Power from Driving Motor Without Electro-mechanical Switches (Variance Request No. 4)

3.0 The SIL rated circuitry used to provide device/circuit redundancy and to inhibit electrical current flow in accordance with ASME A17.1-2004, sections 2.26.9.4 and 2.26.9.6.1 shall comply with the following:

3.1 The SIL rated systems and related circuits shall consist of:

3.1.1. ELGO LIMAX33 RED, (aka LIMAX3R-03-050-0500-CNXTG-RJU), Safe Magnetic Absolute Shaft Information System, labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/A 163), followed by the applicable revision number (as in 968/A 163.07/19).

3.1.2 Printed circuit board assembly SSOA (6300 AHE001), labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1347), followed by the applicable revision number (as in 968/FSP 1347.00/16).

3.1.3 Two circuit board components (Serializer S3I and S3O), each labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization and the SIL certification number (968/A 162), followed by the applicable revision number (as in 968/A 162.04/18)

3.2 The software system and related circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.

3.3 The access door or cover of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL rated devices.
Refer to maintenance Control Program and wiring diagrams
prior to performing work.

3.4 Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL rated component, with notations identifying parts and locations.

3.5 Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.

3.6 A successful test of the SIL rated circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL rated devices, safety functions, and related circuits operate as intended.

3.7 Any alterations to the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.

3.8 Any replacement of the SIL rated circuits shall be made in compliance with the

Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.

3.9 Any repairs to the SIL rated circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.

3.10 Any space containing SIL rated circuits shall be maintained within the temperature and humidity range specified by TKE. The temperature and humidity range shall be posted on each enclosure containing SIL rated software or circuits.

3.11 Field software changes to the SIL rated system are not permitted. Any changes to the SIL rated system's circuitry will require recertification and all necessary updates to the documentation and diagrams required by Conditions 3.4 and 3.5 above.

Inspection Transfer Switch and Seismic Reset Switch (Variance Request Nos. 5 and 6):

4.0 Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:

4.1 If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4, does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

4.2 If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

5.0 The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the TKE EVO 200 elevator system in accordance with written procedures and criteria, including as required per above Conditions 2.3, and 2.4.

6.0 Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in full service prior to the Permit to Operate being issued by Cal/OSHA.

7.0 The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and

authorized representatives are to be notified of docketed permanent variance applications pursuant to California Code of Regulations, sections 411.2, and 411.3.

8.0 This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

Date: March 30, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

SUSPENSION MEANS REPLACEMENT REPORTING REQUIREMENTS

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

(1) A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, Attn: Engineering section, 2 MacArthur Place Suite 700, Santa Ana, CA 92707.

(2) Each such report shall contain, but not necessarily be limited to, the following information:

(a) The State-issued conveyance number, complete address, and Permanent Variance file number that identifies the permanent variance.

(b) The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).

(c) The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.

(d) The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, and certification expiration date of each CCCM performing the replacement work.

(e) The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.

(f) A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.

(g) A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.

(h) All information provided on the crosshead data plate per ASME A17.1-2004, section

2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

(i) For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

(j) For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

(k) Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2(a) above.

ADDENDUM 2

CIRCULAR LETTER E-10-04, October 6, 2010

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device's functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQ

ADDENDUM 3

(A) A Residual Strength Detection Device (RSDD) shall continuously monitor all Elastomeric Coated Steel Belt suspension members (ECSB), automatically stopping the car if the residual strength of any belt drops below 60%. The RSDD shall prevent the elevator from restarting after a normal stop at a landing. The RSDD shall device shall apply a form of electrical current and/or signal through the entire length of the steel tension elements of the ECSB and measure the current and/or signal on its return. The values measured shall be continuously compared to values that have been correlated to the remaining residual strength of the ECSB through testing. The required RSDD shall not rely upon giant magnetoresistance technology, or other magnetic measurement means, for residual strength detection or monitoring.

The RSDD must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room or controller location. The removed RSDD must be replaced or returned to proper service within 30 days. If upon routine inspection, the RSDD device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room or controller location.

If upon inspection by Cal/OSHA, the RSDD is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service. If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

(B) On or before November 21 2021, and thereafter, the above specified and documented RSDD shall be installed and operational on the subject elevator.

(C) A successful functionality test of each RSDD shall be conducted once a year, and a copy of completed testing documentation conspicuously located in the machine room or within proximity of the controller.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 300 Elevators & Medical Emergency Elevator Car Dimensions (Group IV)	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-014	Boys & Girls Clubs of the Peninsula	201 W. Orange Ave., South San Francisco	2
26-V-064	Google LLC	Google Java TI 555 Java Dr. Sunnyvale, CA	1
26-V-065	277 BB Way Development LLC	277 Brooklyn Basin Wy Oakland, CA	2
26-V-067	Capalina SMA, LLC	1580 Capalina Rd. San Marcos, CA	1
26-V-106	Yehowa Medical Services	2950 Columbia St., Torrance, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer, Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Fuei Saetern, with KONE INC., appeared on behalf of each Applicant; and Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each respective Applicant intends to utilize the KONE, Inc. Monospace 300 type elevator, in the quantity, at the location, specified per the above section A.1 table.
2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, section 2.20.4.
4. In relevant part, ASME A17.1-2004, section 2.20.4 states:

   2.20.4 Minimum Number and Diameter of Suspension Ropes

   …The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

5. An intent of ASME A17.1-2004, section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.
6. KONE has represented to Cal/OSHA, having established an engineering practice for purposes of Monospace 300 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010 - under which, given that factor of safety, supplemental broken suspension member protection is not required.
7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject Cal/OSHA approval).
8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance

from Title 8, section 3141, incorporated ASME A17.1-2004, section 2.18.5.1.

9. ASME A17.1-2004, section 2.18.5.1, specifies, in relevant part:

   2.18.5.1 Material and Factor of Safety.

   … [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5…

10. The Board takes notice of section 3141.7, subpart (a)(10):

    A reduced diameter governor rope of equivalent construction and material to that required by ASME A17.1-2004, is permissible if the factor of safety as related to the strength necessary to activate the safety is 5 or greater;

11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with section 3141.7(a)(10), the specific parameters of which, being expressly set out within the Elevator Safety Orders (ESO), take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current requirements, and therefore not be subject to issuance of permanent variance.

12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).

13. As noted by the Board in permanent Variance Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.

14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Cal/OSHA's safety engineer has scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and concluded it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).

15. The applicant supplies tabulated data regarding the "Maximum Static Load on All Suspension Ropes." To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, section 2.20.3:

$$W = \frac{(S \times N)}{f}$$

where:

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher This is a higher minimum factor of safety than that proposed by Applicant but a minimum recommended by Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope

17. Cal/OSHA is in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

18. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:

    (1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:

    ...

    (C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

    The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

    This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, "Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e)."

19. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:

    The medical emergency service elevator shall accommodate the loading and transport of two

emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

20. Cal/OSHA, by way of written submission to the record (Exhibit PD3), and stated position at hearing, is of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each Application being the subject of this proceeding, per above section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from section 3141 incorporated ASME A17.1-2004, section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 300 elevators identified in each respective Application, subject to the following conditions:

1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with "KONE, Inc. Inspector's Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE Elevators" (per Application Exhibit B, or as thereafter amended by KONE subject to Cal/OSHA approval).
5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection,

maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the elevator is placed in service.
12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
13. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.
14. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
15. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
16. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau

Kelly Chau, Hearing Officer

APPENDIX 1

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
26-V-014	1 2	7 7	150 150	12,247 12,247
26-V-064	1	7	150	12,247
26-V-065	1 2	7 7	150 150	12,247 12,247
26-V-067	1	7	150	12,247
26-V-106	1	7	150	12,247

APPENDIX 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: Arrow Lift Symmetry VPL/VLC SL/SLH-168 Vertical Platform Lift	Permanent Variance No.: 26-V-029 **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicant") below have applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-029	Nielsen Peterson & Nielsen	5700 Moon Dr., Ventura, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standard Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer, Kelly Chau, both presiding and hearing the matter on its merit as the basis of a proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Patrick Austin with Arrow Lift of California, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	**Description of Exhibit**
PD-1	Permanent Variance Applications

Exhibit Number	Description of Exhibit
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

4. Official notice taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On December 3, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Applicant intends to utilize the vertical platform (wheelchair) lift(s) in the quantity, at the location, specified per the above section A.1 table.

5700 Moon Dr.
Ventura, CA

2. The subject vertical lift is proposed to be a Symmetry Model VPL/VPC SL/SLH-168, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12 foot maximum vertical rise allowed by ASME A18.1-2003, section 2.7.1—the State of California standard in force at the time of this Decision.

3. The Cal/OSHA evaluation in this matter, states that the more recent consensus code ASME A18.1-2005 allows for vertical platform lifts to have a travel not exceeding 14 feet (168 in.).

4. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, absent subsequent harm attributable to such variance being reported by Cal/OSHA. (e.g. Permanent Variance Nos. 13-V-260, 15-V-097, 17-V-270, 18-V-278, 19-V-256).

5. With respect to the equivalence or superior of safety, conditions and limitations of the Decision and Order are in material conformity with findings and conditions of prior Board permanent variance decisions, including the above cited.

6. Per its written Review of Application for Permanent Variance, Exhibit PD-3, it is the informed opinion of Cal/OSHA that equivalent safety (at minimum) will be achieved upon grant of presently requested permanent variance, subject to conditions and limitations incorporated into the below Decision and Order.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041(a) and 3142.1, incorporated ASME A18.1-2003, section 2.7.1, inasmuch as it restricts the vertical rise of a wheelchair lift to a maximum of 12 feet and subject to the following further conditions and limitations:

1. This lift may travel up to 168 inches, unless the manufacturer's instructions provide for a lesser vertical travel limit, or lesser total elevation change, in which case, travel shall be limited to the lesser limit or elevation change.

2. The wheelchair lift shall be installed and operated in accordance with the manufacturer's instructions, unless the provisions of this variance or applicable provisions of the law provide otherwise.

3. Durable signs with lettering not less than 5/16 inch on a contrasting background shall be permanently and conspicuously posted inside the car and at all landings indicating that the lift is for the exclusive use of persons with physical impairments and that the lift is not to be used to transport material or equipment. The use of the lift shall be limited in accordance with these signs.

4. A maintenance contract shall be executed between the owner/operator and a Certified Qualified Conveyance Company (CQCC). The contract shall stipulate that the routine preventive maintenance required by section 3094.5(a)(1) shall be performed at least quarterly and shall include but not be limited to:

    a. Platform driving means examination;

    b. Platform examination;

    c. Suspension means examination;

    d. Platform alignment;

    e. Vibration examination;

    f. Door/gate electrical; and

    g. Mechanical lock examination.

5. The lift shall be tested annually for proper operation under rated load conditions. The Cal/OSHA Elevator Unit District Office shall be provided written notification in advance of the test, and the test shall include a check of car or platform safety device.

6. The lift shall be shut down immediately if the lift experiences unusual noise and vibration, and the Applicant shall notify the CQCC immediately. The lift shall only be restarted by the CQCC.

7. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.

8. Service logs including, but not limited to, the device shutdown(s) shall be kept in the maintenance office and shall be available to Cal/OSHA. The shutdown information shall contain the date of the shutdown, cause of the shutdown, and the action taken to correct the shutdown.

9. The Applicant shall provide training on the safe operation of the lift in accordance with section 3203. Such training shall be conducted annually for all employees using or who will be assisting others in using the lift. The Applicant shall notify Cal/OSHA in writing that training has been conducted. A copy of the training manual (used for the subject training), and documentation identifying the trainer and attendees shall be maintained for at least 1 year and provided to Cal/OSHA upon request.

10. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.

11. Cal/OSHA shall be notified when the lift is ready for inspection, and the lift shall be inspected by Cal/OSHA and a Permit to Operate shall be issued before the lift is put into service.

12. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.

13. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-031	Alveare Parkview Housing Partners, L.P.	140 W. 14th St. Los Angeles, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2O and/or Gen3 Peak

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-050	OC OET Owner, LLC, a Delaware Limited Liability Company	Orange Executive Tower 1100 Town & Country Orange, CA	6

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and David Morris appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulations

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

    a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);

    b. Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);

    c. Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);

    d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);

    e. Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

D. Findings of Fact

1. The Board incorporates by reference the findings stated in:

    a. Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" section of the Proposed Decision adopted by the Board on February 19, 2009, in Permanent Variance No. 08-V-247;

    b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in Permanent Variance No. 09-V-042;

    c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in Permanent Variance No. 10-V-029;

    d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in Permanent Variance No. 12-V-146; and

    e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in Permanent Variance No. 14-V-170.

    f. Item B of the Proposed Decision adopted by the Board on September 15, 2022, for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions.

2. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").

3. Cal/OSHA safety engineers, by way of written submissions to the record (Exhibit PD-3), and positions stated at hearing, is of the well-informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room);
- Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (Only to the extent necessary to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

The variance shall be subject to, and limited by, the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.

2. The suspension system shall comply with the following:

a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.

b. Steel-coated belts that have been installed and used on another installation shall not be reused.

c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.

d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.

e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.

3. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.

5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

a. The width and thickness in millimeters or inches;

b. The manufacturer's rated breaking strength in (kN) or (lbf);

c. The name of the person who, or organization that, installed the flat coated steel belts;

d. The month and year the flat coated steel belts were installed;

e. The month and year the flat coated steel belts were first shortened;

f. The name or trademark of the manufacturer of the flat coated steel belts;

g. Lubrication information.

6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

a. The number of belts,

b. The belt width and thickness in millimeters or inches, and

c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

11. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.

    c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or the car top outside the railing shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.

    e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

    f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).

12. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.

13. All medical emergency service elevators shall comply with the following:

a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5 inch (127 mm) radius corners] in the horizontal, open position.

b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
15. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before each elevator is placed in service.
16. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per sections 411.2 and 411.3.
18. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: Otis Gen3 MOD Plus (Group IV)	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	Preexisting Variance No.	No. of Conveyances
26-V-052	Axis Homeowners Association	38 N. Alamaden Blvd. San Jose, CA	06-V-194	3

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulations

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

    a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);

    b. Cartop Railing: 2.14.1.7.1 to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);

    c. Inspection transfer switch: 2.26.1.4.4(a) (to permit the inspection transfer switch to reside at a location other than the machine room);

    d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (to permit the seismic reset switch to reside at a location other than the machine room).

D. Findings of Fact

1. The Otis Gen3 MOD Plus product is an equipment package that modernizes an existing elevator with modern components. The Otis Gen3 MOD Plus utilizes equipment that is similar in design to that provided in the Otis Gen3 Peak product.

2. This permanent variance application pertains to existing elevator(s) that are currently subject to a permanent variance under the Group III ESO, Permanent Variance No. 06-V-194. The Applicant proposes to perform extensive alteration work to modernize the elevator(s). According to the Applicant's representative, the proposed modernization will bring the elevator(s) into full compliance with the Group IV ESO, except for the specific variance items requested in this application.

3. The Applicant indicates that the elevators at this address were previously installed with a permanent variance (Permanent Variance No. (06-V-194) granted relative to Group III ESO. The Applicant requests that this previous permanent variance be "eliminated" when the existing elevators are decommissioned to perform the intended alteration work.

4. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").

5. Cal/OSHA's safety engineers, by way of written submission to the record (Exhibit PD-3), and positions stated at hearing, are of the well-informed opinion that grant of requested permanent

variance, as limited and conditioned per the below Decision and Order, will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (To permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (To permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (To permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (To permit the seismic reset switch to reside at a location other than the machine room);

The variance shall be subject to, and limited by, the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
2. The suspension system shall comply with the following:
    a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
    b. Steel-coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a

landing.

d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.

e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.

3. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.

5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

a. The width and thickness in millimeters or inches;

b. The manufacturer's rated breaking strength in (kN) or (lbf);

c. The name of the person who, or organization that, installed the flat coated steel belts;

d. The month and year the flat coated steel belts were installed;

e. The month and year the flat coated steel belts were first shortened;

f. The name or trademark of the manufacturer of the flat coated steel belts;

g. Lubrication information.

6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

a. The number of belts,

b. The belt width and thickness in millimeters or inches, and

c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the

control space (outside the hoistway) used by the motion controller.

9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

11. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.

    c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.

    e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

    f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).

12. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Mod Plus – Gen3 Peak elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

14. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before each elevator is placed in service.

15. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.

16. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per sections 411.2 and 411.3.

17. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed by the Board's regulations.

18. The existing variances for the existing elevators being replaced by elevators subject to the new variances shall be revoked effective when the existing elevators are decommissioned to perform the intended alteration work.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 7, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: Otis Gen3 MOD Plus (Group IV)	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	Preexisting Variance No.	No. of Conveyances
26-V-054	Lawrence Berkeley National Laboratory	One Lawrence Road, Building 67 Berkeley, CA	05-V-060	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulations

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

    a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);

    b. Cartop Railing: 2.14.1.7.1 to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);

    c. Inspection transfer switch: 2.26.1.4.4(a) (to permit the inspection transfer switch to reside at a location other than the machine room);

    d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (to permit the seismic reset switch to reside at a location other than the machine room).

D. Findings of Fact

1. The Otis Gen3 MOD Plus product is an equipment package that modernizes an existing elevator with modern components. The Otis Gen3 MOD Plus utilizes equipment that is similar in design to that provided in the Otis Gen3 Peak product.

2. This permanent variance application pertains to existing elevator(s) that are currently subject to a permanent variance under the Group III ESO, Permanent Variance No. 05-V-060. The Applicant proposes to perform extensive alteration work to modernize the elevator(s). According to the Applicant's representative, the proposed modernization will bring the elevator(s) into full compliance with the Group IV ESO, except for the specific variance items requested in this application.

3. The Applicant indicates that the elevators at this address were previously installed with a permanent variance (Permanent Variance No. 05-V-060) granted relative to Group III ESO. The Applicant requests that this previous permanent variance be "eliminated" when the existing elevators are decommissioned to perform the intended alteration work.

4. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").

5. Cal/OSHA's safety engineers, by way of written submission to the record (Exhibit PD-3), and positions stated at hearing, are of the well-informed opinion that grant of requested permanent

variance, as limited and conditioned per the below Decision and Order, will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (To permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (To permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (To permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (To permit the seismic reset switch to reside at a location other than the machine room);

The variance shall be subject to, and limited by, the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
2. The suspension system shall comply with the following:
    a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
    b. Steel-coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a

landing.

d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.

e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.

3. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.

4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.

5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

a. The width and thickness in millimeters or inches;

b. The manufacturer's rated breaking strength in (kN) or (lbf);

c. The name of the person who, or organization that, installed the flat coated steel belts;

d. The month and year the flat coated steel belts were installed;

e. The month and year the flat coated steel belts were first shortened;

f. The name or trademark of the manufacturer of the flat coated steel belts;

g. Lubrication information.

6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

a. The number of belts,

b. The belt width and thickness in millimeters or inches, and

c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.

8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the

control space (outside the hoistway) used by the motion controller.

9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.

10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

11. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.

    c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.

    e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION

DO NOT STAND ON OR CLIMB OVER RAILING

    f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).

12. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 MOD Plus – Gen3Peak elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

13. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

14. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before each elevator is placed in service.

15. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.

16. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per sections 411.2 and 411.3.

17. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed by the Board's regulations.

18. The existing variances for the existing elevators being replaced by elevators subject to the new variances shall be revoked effective when the existing elevators are decommissioned to perform the intended alteration work.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 7, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 5500 Elevator (Group IV)

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-058	Dicks Sporting Goods	Arden Fair Mall 1601 Arden Way Sacramento, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Pete Cuellar, with SCHINDLER ELEVATOR CORPORATION, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

Requested Suspension Means Related Variance:

1. As each pertains to the non-circular elastomeric coated suspension members characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Safety Code for Elevators and Escalators (ASME Code) A17.1-2004 sections and subsections:
    - Section 2.20.1 - Wire rope suspension means;
    - Section 2.20.2.1 - Crosshead data plate;
    - Subsection 2.20.2.2(a) - Wire rope data tag;
    - Subsection 2.20.2.2(f) - ID of steel wire rope as preformed or nonpreformed;
    - Section 2.20.3 - Wire rope safety factor;
    - Section 2.20.4 - Number and diameter of wire ropes;
    - Section 2.20.9.3.4 - Wire rope end connections;
    - Section 2.20.9.5 - Wire rope sockets;

Requested Car Top Railing Inset Variance:

2. As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 section:

    Section 2.14.1.7.1 - Top of Car Perimeter Railing Placement

Requested Seismic Reset Switch Placement Variance:

3. As it pertains to installation of the requisite seismic reset switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code subsection:

    Subsection 8.4.10.1.1(a)(2)(b)--Seismic Reset Switch Placement in Machine Room

Requested Transfer Switch Placement Variance:

4. As it pertains to installation of the requisite transfer switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 subsection:

   Subsection 2.26.1.4.4(a)--Transfer Switch Placement in Machine Room

Official Notice and Incorporation by Reference - Permanent Variance No. 15-V-349:

5. Per hereby entered stipulation offered at hearing by Applicant, and Cal/OSHA, concerning preexisting Board records, including decisions in matters of permanent variance from Elevator Safety Order requirements, the Board takes Official Notice and expressly incorporates herein by reference, Permanent Variance No. 15-V-349, Decision and Order adopted November 17, 2016, section D.1 - D.75 findings, and therein entered record upon which it was based.

Positions of Cal/OSHA:

6. Having fully reviewed Applicant's request for variance from the above identified Elevator Safety Order requirements, it is the opinion of Cal/OSHA, that conditionally limited grant to Applicant of permanent variance as specified per the below Decision and Order, will provide for elevator safety, and occupational safety and health, equivalent or superior to that of the Elevator Safety Order requirements from which variance is being sought. The present opinion of Cal/OSHA, to any extent it may vary from those previously held with respect to the previously heard matter in Permanent Variance No. 15-V-349, reflects further scrutiny of the subject matter, consultation between Cal/OSHA, Applicant representatives, and refinement of recommended conditions and limitations.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Applicant is hereby conditionally GRANTED Permanent Variance as stated below, to the limited extent that each enumerated conveyance at the given location shall be subject to conditionally limited permanent variance from the below specified ASME A17.1-2004, requirements incorporated by reference into section 3141.

Suspension Members: Applicant shall conditionally hold permanent variance from the following section 3141 incorporated sections and subsections of ASME A17.1-2004, to the limited extent variance is necessary to provide for use of noncircular elastomeric- coated steel suspension members and concomitant components, and configurations - section 2.20.1; section 2.20.2.1; subsection 2.20.2.2(a); subsection 2.20.2.2(f); section 2.20.3; section 2.20.4: section 2.20.9.3.4; and

section 2.20.9.5.4.

Inspection Transfer Switch: Applicant shall conditionally hold permanent variance from certain requirements of the following section 3141 incorporated section of ASME A17.1-2004, to the extent variance is necessary to having the requisite inspection transfer switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: section 2.26.1.4.4(a).

Seismic Safety Switch Placement: Applicant shall conditionally hold permanent variance from certain requirements of the following section 3141 incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to having the requisite seismic reset switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: section 8.4.10.1.1(a)(2)(b).

Car Top Railing: Applicant shall conditionally hold permanent variance from certain requirements of the following section 3141 incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to provide for the below specified insetting of the subject elevator's top of car railing: section 2.14.1.7.1.

Further Conditions and Limitations:

1. The elevator suspension system shall comply with the following:

    1.1. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:

    - Section 2.20.4.3 - Minimum Number of Suspension Members
    - Section 2.20.3 - Factor of Safety
    - Section 2.20.9 - Suspension Member Fastening

    1.2. Additionally, STMs shall meet or exceed all requirements of ASME A17.6-2010 Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3, Noncircular Elastomeric Coated Steel Suspension Members for Elevators.

    1.3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to Cal/OSHA upon request.

    1.4. STM member mandatory replacement criteria shall include:

        1.4.1 Any exposed wire, strand or cord;

        1.4.2 Any wire, strand or cord breaks through the elastomeric coating;

1.4.3 Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;

1.4.4 Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.

1.5. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

1.6. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.

1.7. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1.The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.

1.8. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

1.9. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 1 (Cal/OSHA Circular Letter), the bend cycle monitoring system shall be tested semi-annually in accordance with the procedures required per above Conditions 1.2, and 1.3.

1.10. Each elevator shall be provided with a device that electronically detects a reduction in residual strength of each STM member. The device shall be in compliance with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1, and incorporated herein by reference.

1.11. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.

1.12. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.

1.13. Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 1.2 and 1.3 specified criteria, shall be conducted and documented every six months by a CCCM.

1.14. The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 2, "Suspension Means Replacement Reporting Condition."

1.15. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.

2. Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:

2.1. If the inspection transfer switch required by ASME A17.1-2004, Rule 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

2.2. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

3. Any and all inset car top railing shall comply with the following:

3.1. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to stand on or climb over the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car top railing.

3.2. The distance that the railing can be inset shall be limited to not more than 12 inches.

3.3. All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

3.4. The top surface of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

3.5. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING

3.6. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required

bevel).

4. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the Schindler Model 5500 elevator system in accordance with written procedures and criteria, including as required per above Conditions 1.2, and 1.3.
5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
6. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 3300 Elevators, w/variant Gov. Ropes and Sheaves (Group IV)

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-059	10229-10233 Eton LLC	10229 Eton Ave. Chatsworth, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Pete Cuellar, with SCHINDLER ELEVATOR CORPORATION, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(b), 2.14.1.7.1, 2.18.7.4, and 2.26.9.6.1] of the Elevator Safety Orders, with respect to the suspension ropes and connections, inspection transfer switch relocation, seismic reset switch relocation, the location and construction of car-top railings, governor-sheave diameter, and means of removing power from the driving machine motor for one (1) Schindler model 3300 MRL elevator.

The relevant language of those sections are below.

1. Suspension Means
    - Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:
        - Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open hearth or electric furnace process, or their equivalent.
    - Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:
        - The crosshead data plate required by 2.16.3 shall bear the following wire rope data:
            - (b) the diameter in millimeters (mm) or inches (in.)
    - Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:
        - A metal data tag shall be securely attached to one of the wire rope fastenings. This data tag shall bear the following wire rope data:
        - (a) the diameter in millimeters (mm) or inches (in.)
        - […]
        - (f) whether the ropes were non preformed or preformed
    - Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:

- The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.
- The factor of safety shall be calculated by the following formula:

$$f = \frac{(S \times N)}{W}$$

- where:
  - N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.
  - S = manufacturer's rated breaking strength of one rope
  - W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway
- Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:
  - The minimum number of hoisting ropes used shall be three for traction elevators and two for drum type elevators.
  - Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.
  - The term “diameter,” where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.
  - The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.
- Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:
  - Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30 for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they have an elongation of not less than 20% in a length of 50 mm (2 in.).
- Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:
  - When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire rope retaining clips shall be provided to attach the termination side to the load carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the

socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

2. Requested Transfer Switch Placement Variance

- As it pertains to installation of the requisite transfer switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:
    - Subsection 2.26.1.4.4(a)--Transfer Switch Placement in Machine Room
- Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:
- When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be
- (a) located in the machine room[.]

3. Requested Seismic Reset Switch Placement Variance

- As it pertains to installation of the requisite seismic reset switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code subsection:
    - Subsection 8.4.10.1.1(a)(2)(b)--Seismic Reset Switch Placement in Machine Room
- Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:
    - (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
    - (1) seismic zone 3 or greater: a minimum of one seismic switch per building
    - (2) seismic zone 2 or greater:
        - (a) a displacement switch for each elevator
        - (b) an identified momentary reset button or switch for each elevator, located in the control panel in the elevator machine room

4. Requested Car Top Railing Inset Variance

- As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 3300 elevator, the

Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, section:

- Section 2.14.1.7.1—Top of Car Perimeter Railing Placement

- Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:
  - A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

5. Pitch Diameter of Governor Sheaves

- Section 3141 [ASME A17.1-2004, Section 2.18.7.4] states:
  - "The pitch diameter of governor sheaves and governor tension sheaves shall be not less than the product of the diameter of the rope and the applicable multiplier listed in Table 2.18.7.4, based on the rated speed and the number of strands in the rope."

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter
[from ASME A17.1-2004]

Rated Speed m/s (ft./min)	**Number of Strands**	**Multiplier**
1.00 or less (200 or less)	6	42
1.00 or less (200 or less)	8	30
Over 1.0 (over 200)	6	46
Over 1.0 (over 200)	8	32

6. SIL Rated System to Inhibit Current Flow to AC Drive Motor

- Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:
  - Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating current driving motor. At least one of the means shall be an electromechanical relay.

D. Findings of Fact

1. Each respective Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations specified in Jurisdictional and Procedural Matters, section 1.
2. The installation contract for these elevators was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders. They utilize non circular elastomeric coated steel belts and specialized suspension means fastenings.
4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.
5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
6. Due to the use of a 6 mm (0.25 in.) governor rope with 6-strand construction, the provided governor sheave pitch diameter is less than that required by the Elevator Safety Orders.
7. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
8. Applicant proposes to insert the car top railings at the perimeter of the car top.
9. Applicant intends to use an elevator control system, model CO NX100NA or CO NX300NA, with a standalone, solid state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Order from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above table in Jurisdictional and Procedural Matters shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);
- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);

- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);
- Car Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Governor Rope and Sheave: The Applicant shall conditionally hold permanent variance from certain requirements of section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to allow for the below specified governor rope and governor sheave parameters: section 2.18.7.4.
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

1. The elevator suspension system shall comply to the following:
    a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
        - 2.20.4.3 - Minimum Number of Suspension Members
        - 2.20.3 - Factor of Safety
        - 2.20.9 - Suspension Member Fastening

    b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members, fastenings, related monitoring and detection systems, and criteria for STM replacement. The Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Cal/OSHA upon request.
        - STM member mandatory replacement criteria shall include:
            i. Any exposed wire, strand or cord;
            ii. Any wire, strand or cord breaks through the elastomeric coating;
            iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
            iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;

    c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

    d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during

installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re used.

e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.

f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.

h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.

i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1 2013, section 2.20.2.1.

j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1 2013, section 2.20.2.2.

k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.

l. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, “Suspension Means Replacement Reporting Condition,” Incorporated herein by this reference.

m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1 2004, sections 8.6.1.2 and 8.6.1.4, respectively.

2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

4. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car top railing.

   b. The distance that the railing can be inset shall be limited to not more than 6 inches.

   c. All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

   d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

   e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING

   f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).

5. The speed governor rope and sheaves shall comply with the following:

   a. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6 strand, regular lay construction.

   b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

   c. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).

6. The SIL rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:

   a. The SIL-rated devices and circuits shall consist of a Variodyn SIL3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013, VAF023, or VAF043 labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).

   b. The devices and circuits shall be certified for compliance with the applicable requirements of ASME A17.1-2013, section 2.26.4.3.2.

   c. The access door or cover of the enclosures containing the SIL rated components shall be

clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL rated devices.
Refer to Maintenance Control Program and
wiring diagrams prior to performing work.

d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL rated component, with notations identifying parts and locations.

e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.

f. A successful test of the SIL rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL rated devices, safety functions, and related circuits operate as intended.

g. Any alterations to the SIL rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.

h. Any replacement of the SIL rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.

i. Any repairs to the SIL rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.

j. Any space containing SIL rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL rated devices and circuits.

k. Field changes to the SIL rated system are not permitted. Any changes to the SIL rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.

7. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.

8. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per sections 411.2 and 411.3.

9. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA Elevator Unit HQS

EXHIBIT 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): CAL/OSHA Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance file number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME Al7.l-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 500 Elevators & Medical Emergency Elevator Car Dimensions (Group IV)	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-060	North Park Living LP	4321 Illinois St. San Diego, CA	2
26-V-062	A Street Cedar Property Owner, LLC	2935 A. St. San Diego, CA	2
26-V-063	Jefferson Fountain Valley, LLC	10201 Slater Avenue Fountain Valley, CA	2
26-V-066	437 E. 5th St. LLC	437 E. 5th St. Long Beach, CA	1
26-V-075	1721 Colby L.P.	1721 Colby Ave. Los Angeles, CA	2
26-V-076	AH 1408 Jefferson LLC	1408 W. Jefferson Blvd., Los Angeles, CA	1
26-V-099	HIGHROSE EL PORTO LLC	401 Rosecrans Ave., Manhattan Beach, CA	2
26-V-104	733 S Burlington, LLC	733 S Burlington Ave., Los Angeles, CA	1
26-V-107	Alcott-Beverly Properties LLC	1432 S. Beverly Dr., Los Angeles, CA	1
26-V-108	1452 K St., LLC	1452 K. St., San Diego, CA	2
26-V-109	Sunnyvale Partners, LTD.	1254 Lakeside Dr., Sunnyvale, CA	3
26-V-112	159 Fell Street, LP	159 Fell St. San Francisco, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer, Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Fuei Saetern, with KONE INC., appeared on behalf of each Applicant; and Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On February 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each respective Applicant intends to utilize the KONE, Inc. Monospace 500 type elevator, in the quantity, at the location, specified per the above section A.1 table.

2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.

3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, section 2.20.4.

4. In relevant part, ASME A17.1-2004, section 2.20.4 states:

   2.20.4 Minimum Number and Diameter of Suspension Ropes

   …The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

5. An intent of ASME A17.1-2004, section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.

6. KONE has represented to Cal/OSHA, having established an engineering practice for purposes

of Monospace 500 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010 - under which, given that factor of safety, supplemental broken suspension member protection is not required.

7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject Cal/OSHA approval).

8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from Title 8, section 3141, incorporated ASME A17.1-2004, section 2.18.5.1.

9. ASME A17.1-2004, section 2.18.5.1, specifies, in relevant part:

   2.18.5.1 Material and Factor of Safety.

   … [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5…

10. The Board takes notice of section 3141.7, subpart (a)(10):

    A reduced diameter governor rope of equivalent construction and material to that required by ASME A17.1-2004, is permissible if the factor of safety as related to the strength necessary to activate the safety is 5 or greater;

11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with section 3141.7(a)(10), the specific parameters of which, being expressly set out within the Elevator Safety Orders (ESO), take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current requirements, and therefore not be subject to issuance of permanent variance.

12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).

13. As noted by the Board in permanent Variance Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.

14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Cal/OSHA's safety engineer has scrutinized the material

and structural specifications, and performance testing data, of this particular proposed rope, and concluded it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).

15. The applicant supplies tabulated data regarding the “Maximum Static Load on All Suspension Ropes.” To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1-2004, section 2.20.3:

$$W = \frac{(S \times N)}{f}$$ *where:*

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher This is a higher minimum factor of safety than that proposed by Applicant but a minimum recommended by Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope

17. Cal/OSHA is in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector’s Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.

18. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:

(1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:

...

(C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, “Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e).”

19. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

    The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

20. Cal/OSHA, by way of written submission to the record (Exhibit PD3), and stated position at hearing, is of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants’ proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each Application being the subject of this proceeding, per above section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from section 3141 incorporated ASME A17.1-2004, section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 500 elevators identified in each respective Application, subject to the following conditions:

1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with “KONE, Inc. Inspector’s Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE

Elevators" (per Application Exhibit B, or as thereafter amended by KONE subject to Cal/OSHA approval).

5. A rope inspection log shall be maintained and available in the elevator controller room/space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order Appendix 1 Table.
7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the elevator is placed in service.
12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
13. All medical emergency service elevator(s) shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC) section 3002.4.1a:

       The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
14. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
15. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau, Hearing Officer

APPENDIX 1

Variance Number	Elevator ID	Minimum Quanity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
26-V-060	1 2	8 8	350 350	11,706 11,706
26-V-062	1 2	8 8	350 350	11,706 11,706
26-V-063	1 – Apartment 2 - Garage	8 7	200 200	13,207 11,556
26-V-066	1	7	150	12,247
26-V-075	1 2	7 7	200 200	11,556 11,556
26-V-076	1	8	200	13,207
26-V-099	1 2	7 7	150 150	12,247 12,247
26-V-104	1	7	200	11,556
26-V-107	1	7	150	12,247
26-V-108	A B	7 7	200 200	11,556 11.556
26-V-109	A B C	8 8 8	200 200 200	13,207 13,207 13,207
26-V-112	1	7	200	11,556

APPENDIX 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 3300 Elevators, w/variant Gov. Ropes and Sheaves (Group IV)

Permanent Variance No: See section A.1 table below
PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-069	Vermont NH Property LLC	1141 N Vermont Ave. Los Angeles, CA	3
26-V-070	LINC-HILL STREET, L.P.	884 El Camino Real Blvd, Belmont, CA	1
26-V-071	LINC-HILL STREET, L.P.	900 El Camino Real Blvd., Belmont, CA	1
26-V-116	3303 Sunset, LLC	3313 Sunset Blvd., Los Angeles, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Pete Cuellar, with SCHINDLER ELEVATOR CORPORATION, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Relevant Safety Order Provisions

Applicant seeks a permanent variance from section 3141 [ASME A17.1-2004, sections 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(b), 2.14.1.7.1, 2.18.7.4, and 2.26.9.6.1] of the Elevator Safety Orders, with respect to the suspension ropes and connections, inspection transfer switch relocation, seismic reset switch relocation, the location and construction of car-top railings, governor-sheave diameter, and means of removing power from the driving machine motor for one (1) Schindler model 3300 MRL elevator.

The relevant language of those sections are below.

1. Suspension Means
    - Section 3141 [ASME A17.1-2004, section 2.20.1, Suspension Means] states in part:
        - Elevator cars shall be suspended by steel wire ropes attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1. Ropes that have previously been installed and used on another installation shall not be reused. Only iron (low carbon steel) or steel wire ropes, having the commercial classification "Elevator Wire Rope," or wire rope specifically constructed for elevator use, shall be used for the suspension of elevator cars and for the suspension of counterweights. The wire material for ropes shall be manufactured by the open hearth or electric furnace process, or their equivalent.

    - Section 3141 [ASME A17.1-2004, section 2.20.2.1(b), On Crosshead Data Plate] states in part:
        - The crosshead data plate required by 2.16.3 shall bear the following wire rope data:
            - (b) the diameter in millimeters (mm) or inches (in.)

    - Section 3141 [ASME A17.1-2004, section 2.20.2.2(a) and (f) On Rope Data Tag] states in part:

- A metal data tag shall be securely attached to one of the wire rope fastenings. This data tag shall bear the following wire rope data:
- (a) the diameter in millimeters (mm) or inches (in.)
- […]
- (f) whether the ropes were non preformed or preformed

- Section 3141 [ASME A17.1-2004, section 2.20.3, Factor of Safety] states:
  - The factor of safety of the suspension wire ropes shall be not less than shown in Table 2.20.3. Figure 8.2.7 gives the minimum factor of safety for intermediate rope speeds. The factor of safety shall be based on the actual rope speed corresponding to the rated speed of the car.
  - The factor of safety shall be calculated by the following formula:

$$f = \frac{(S \times N)}{W}$$

- where:
  - N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.
  - S = manufacturer's rated breaking strength of one rope
  - W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

- Section 3141 [ASME A17.1-2004, section 2.20.4, Minimum Number and Diameter of Suspension Ropes] states:
  - The minimum number of hoisting ropes used shall be three for traction elevators and two for drum type elevators.
  - Where a car counterweight is used, the number of counterweight ropes used shall be not less than two.
  - The term “diameter,” where used in reference to ropes, shall refer to the nominal diameter as given by the rope manufacturer.
  - The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.

- Section 3141 [ASME A17.1-2004, section 2.20.9.3.4] states:
  - Cast or forged steel rope sockets, shackle rods, and their connections shall be made of unwelded steel, having an elongation of not less than 20% in a gauge length of 50 mm (2 in.), when measured in accordance with ASTM E 8, and conforming to ASTM A 668, Class B for forged steel, and ASTM A 27, Grade 60/30 for cast steel, and shall be stress relieved. Steels of greater strength shall be permitted, provided they

have an elongation of not less than 20% in a length of 50 mm (2 in.).

- Section 3141 [ASME A17.1-2004, section 2.20.9.5.4] states:
  - When the rope has been seated in the wedge socket by the load on the rope, the wedge shall be visible, and at least two wire rope retaining clips shall be provided to attach the termination side to the load carrying side of the rope (see Fig. 2.20.9.5). The first clip shall be placed a maximum of 4 times the rope diameter above the socket, and the second clip shall be located within 8 times the rope diameter above the first clip. The purpose of the two clips is to retain the wedge and prevent the rope from slipping in the socket should the load on the rope be removed for any reason. The clips shall be designed and installed so that they do not distort or damage the rope in any manner.

2. Requested Transfer Switch Placement Variance

- As it pertains to installation of the requisite transfer switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, subsection:
  - Subsection 2.26.1.4.4(a)--Transfer Switch Placement in Machine Room

- Section 3141[ASME A17.1-2004, section 2.26.1.4.4(a), Machine Room Inspection Operation] states:
- When machine room inspection operation is provided, it shall conform to 2.26.1.4.1, and the transfer switch shall be
- (a) located in the machine room[.]

3. Requested Seismic Reset Switch Placement Variance

- As it pertains to installation of the requisite seismic reset switch within a “machine room” location incompatible with machine-room-less design of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code subsection:
  - Subsection 8.4.10.1.1(a)(2)(b)--Seismic Reset Switch Placement in Machine Room

- Section 3141[ASME A17.1-2004, section 8.4.10.1.1(a)(2)(b), Earthquake Equipment] states:
  - (a) All traction elevators operating at a rated speed of 0.75 m/s (150 ft/min) or more and having counterweights located in the same hoistway shall be provided with the following:
  - (1) seismic zone 3 or greater: a minimum of one seismic switch per building
  - (2) seismic zone 2 or greater:
    - (a) a displacement switch for each elevator
    - (b) an identified momentary reset button or switch for each elevator, located in

the control panel in the elevator machine room

4. Requested Car Top Railing Inset Variance

- As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 3300 elevator, the Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Code A17.1-2004, section:
  - Section 2.14.1.7.1—Top of Car Perimeter Railing Placement

- Section 3141[ASME A17.1-2004, section 2.14.1.7.1] states:
  - A standard railing conforming to 2.10.2 shall be provided on the outside perimeter of the car top on all sides where the perpendicular distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.

5. Pitch Diameter of Governor Sheaves

- Section 3141 [ASME A17.1-2004, Section 2.18.7.4] states:
  - "The pitch diameter of governor sheaves and governor tension sheaves shall be not less than the product of the diameter of the rope and the applicable multiplier listed in Table 2.18.7.4, based on the rated speed and the number of strands in the rope."

Table 2.18.7.4 Multiplier for Determining Governor Sheave Pitch Diameter
[from ASME A17.1-2004]

Rated Speed m/s (ft./min)	**Number of Strands**	**Multiplier**
1.00 or less (200 or less)	6	42
1.00 or less (200 or less)	8	30
Over 1.0 (over 200)	6	46
Over 1.0 (over 200)	8	32

6. SIL Rated System to Inhibit Current Flow to AC Drive Motor

- Section 3141[ASME A17.1-2004, section 2.26.9.6.1] states:
  - Two separate means shall be provided to independently inhibit the flow of alternating current through the solid state devices that connect the direct current power source to the alternating current driving motor. At least one of the means shall be an

electromechanical relay.

D. Findings of Fact

1. Each respective Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations specified in Jurisdictional and Procedural Matters, section 1.
2. The installation contract for these elevators was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders. They utilize non circular elastomeric coated steel belts and specialized suspension means fastenings.
4. No machine room is provided, preventing the inspection transfer switch from being located in the elevator machine room. The lack of machine room also prevents the seismic reset switch from being located in the elevator machine room.
5. Applicant proposes to relocate the inspection transfer switch and seismic reset switch in an alternative enclosure.
6. Due to the use of a 6 mm (0.25 in.) governor rope with 6-strand construction, the provided governor sheave pitch diameter is less than that required by the Elevator Safety Orders.
7. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
8. Applicant proposes to insert the car top railings at the perimeter of the car top.
9. Applicant intends to use an elevator control system, model CO NX100NA or CO NX300NA, with a standalone, solid state motor control drive system that includes devices and circuits having a Safety Integrity Level (SIL) rating to execute specific elevator safety functions.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Order from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above table in Jurisdictional and Procedural Matters shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

Elevator Safety Orders:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and

2.20.9.5.4 (Only to the extent necessary to permit the use of the Elastomeric coated Steel Belts proposed by the Applicant, in lieu of circular steel suspension ropes.);

- Inspection transfer switch: 2.26.1.4.4(a) (Only to the extent necessary to permit the inspection transfer switch to reside at a location other than the machine room);
- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (Only to the extent necessary to permit the seismic reset switch to reside at a location other than the machine room. room);
- Car Top Railing: 2.14.1.7.1 (Only to the extent necessary to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Governor Rope and Sheave: The Applicant shall conditionally hold permanent variance from certain requirements of section 3141, incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to allow for the below specified governor rope and governor sheave parameters: section 2.18.7.4.
- Means of Removing Power: 2.26.9.6.1 (Only to the extent necessary to permit the use of SIL rated devices and circuits as a means to remove power from the AC driving motor, where the redundant monitoring of electrical protective devices is required by the Elevator Safety Orders).

Conditions:

1. The elevator suspension system shall comply to the following:
    a. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:
        - 2.20.4.3 - Minimum Number of Suspension Members
        - 2.20.3 - Factor of Safety
        - 2.20.9 - Suspension Member Fastening

    b. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members, fastenings, related monitoring and detection systems, and criteria for STM replacement. The Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to the Cal/OSHA upon request.
        - STM member mandatory replacement criteria shall include:
            i. Any exposed wire, strand or cord;
            ii. Any wire, strand or cord breaks through the elastomeric coating;
            iii. Any evidence of rouging (steel tension element corrosion) on any part of the elastomeric coated steel suspension member;
            iv. Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends;

    c. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater

than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

d. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: if a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re used.

e. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.

f. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

g. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. The bend cycle monitoring system shall be tested annually in accordance with the procedures required by condition 1b above.

h. The elevator shall be provided with a device to monitor the remaining residual strength of each STM member. The device shall conform to the requirements of Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Exhibit 1 and incorporated herein by reference.

i. The elevator crosshead data plate shall comply with the requirements of ASME A17.1 2013, section 2.20.2.1.

j. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1 2013, section 2.20.2.2.

k. Comprehensive visual inspections of the entire length of each and all installed suspension members, to the criteria developed in condition 1b, shall be conducted and documented every six months by a CCCM.

l. The Applicant shall be subject to the requirements set out in Exhibit 2 of this Decision and Order, “Suspension Means Replacement Reporting Condition,” Incorporated herein by this reference.

m. Records of all tests and inspections shall be maintenance records subject to ASME A17.1 2004, sections 8.6.1.2 and 8.6.1.4, respectively.

2. If the inspection transfer switch required by ASME A17.1-2004, section 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

3. If the seismic reset switch does not reside in the machine room, that switch shall not reside in

the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

4. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car top railing.

    b. The distance that the railing can be inset shall be limited to not more than 6 inches.

    c. All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

    d. The top of the beveled area and/or car top outside the railing shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing. Each sign shall state:

CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING

    f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required bevel).

5. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a steel 6 mm (0.25 in.) diameter governor rope with 6 strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 200 mm (7.87 in.).

6. The SIL rated devices and circuits used to inhibit electrical current flow in accordance with ASME A17.1-2004, section 2.26.9.6.1 shall comply with the following:

    a. The SIL-rated devices and circuits shall consist of a Variodyn SIL3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013, VAF023, or VAF043 labeled or marked with the SIL rating (not less than SIL 3), the name or mark of the certifying organization, and the SIL certification number (968/FSP 1556.00), and followed by the applicable revision number (as in 968/FSP 1556.00/19).

    b. The devices and circuits shall be certified for compliance with the applicable requirements

of ASME A17.1-2013, section 2.26.4.3.2.

c. The access door or cover of the enclosures containing the SIL rated components shall be clearly labeled or tagged on their exterior with the statement:

Assembly contains SIL rated devices.
Refer to Maintenance Control Program and
wiring diagrams prior to performing work.

d. Unique maintenance procedures or methods required for the inspection, testing, or replacement of the SIL rated circuits shall be developed and a copy maintained in the elevator machine/control room/space. The procedures or methods shall include clear color photographs of each SIL rated component, with notations identifying parts and locations.

e. Wiring diagrams that include part identification, SIL, and certification information shall be maintained in the elevator machine/control room/space.

f. A successful test of the SIL rated devices and circuits shall be conducted initially and not less than annually in accordance with the testing procedure. The test shall demonstrate that SIL rated devices, safety functions, and related circuits operate as intended.

g. Any alterations to the SIL rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the alteration of SIL rated devices, the alterations shall be made in conformance with ASME A17.1-2013, section 8.7.1.9.

h. Any replacement of the SIL rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the replacement of SIL rated devices, the replacement shall be made in conformance with ASME A17.1-2013, section 8.6.3.14.

i. Any repairs to the SIL rated devices and circuits shall be made in compliance with the Elevator Safety Orders. If the Elevator Safety Orders do not contain specific provisions for the repair of SIL rated devices, the repairs shall be made in conformance with ASME A17.1-2013, section 8.6.2.6.

j. Any space containing SIL rated devices and circuits shall be maintained within the temperature and humidity range specified by Schindler Elevator Corporation. The temperature and humidity range shall be posted on each enclosure containing SIL rated devices and circuits.

k. Field changes to the SIL rated system are not permitted. Any changes to the SIL rated system's devices and circuitry will require recertification and all necessary updates to the documentation and diagrams required by conditions d. and e. above.

7. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.

8. The Applicant shall notify its employees or their authorized representative(s), or both, of this

order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per sections 411.2 and 411.3.

9. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

EXHIBIT 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA Elevator Unit HQS

EXHIBIT 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings. Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): CAL/OSHA Elevator Unit, 2 MacArthur Pl., Suite 700, Santa Ana, CA 92707, Attn: Engineering Section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance file number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME Al7.l-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 5500 Elevator (Group IV)

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-072	Sacramento County, Department of Airports	6900 Airport Blvd., Sacramento, CA	3

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Pete Cuellar, with SCHINDLER ELEVATOR CORPORATION, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

Requested Suspension Means Related Variance:

1. As each pertains to the non-circular elastomeric coated suspension members characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following Elevator Safety Order incorporated ASME Safety Code for Elevators and Escalators (ASME Code) A17.1-2004 sections and subsections:
    - Section 2.20.1 - Wire rope suspension means;
    - Section 2.20.2.1 - Crosshead data plate;
    - Subsection 2.20.2.2(a) - Wire rope data tag;
    - Subsection 2.20.2.2(f) - ID of steel wire rope as preformed or nonpreformed;
    - Section 2.20.3 - Wire rope safety factor;
    - Section 2.20.4 - Number and diameter of wire ropes;
    - Section 2.20.9.3.4 - Wire rope end connections;
    - Section 2.20.9.5 - Wire rope sockets;

Requested Car Top Railing Inset Variance:

2. As it pertains to top of car railing placement requiring space occupied by upper hoistway mounted elevator machinery characteristic of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 section:

    Section 2.14.1.7.1 - Top of Car Perimeter Railing Placement

Requested Seismic Reset Switch Placement Variance:

3. As it pertains to installation of the requisite seismic reset switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code subsection:

    Subsection 8.4.10.1.1(a)(2)(b)--Seismic Reset Switch Placement in Machine Room

Requested Transfer Switch Placement Variance:

4. As it pertains to installation of the requisite transfer switch within a "machine room" location incompatible with machine-room-less design of the Schindler Model 5500 elevator, Applicant presently seeks permanent variance from the following title 8, Elevator Safety Order incorporated ASME Code A17.1-2004 subsection:

   Subsection 2.26.1.4.4(a)--Transfer Switch Placement in Machine Room

Official Notice and Incorporation by Reference - Permanent Variance No. 15-V-349:

5. Per hereby entered stipulation offered at hearing by Applicant, and Cal/OSHA, concerning preexisting Board records, including decisions in matters of permanent variance from Elevator Safety Order requirements, the Board takes Official Notice and expressly incorporates herein by reference, Permanent Variance No. 15-V-349, Decision and Order adopted November 17, 2016, section D.1 - D.75 findings, and therein entered record upon which it was based.

Positions of Cal/OSHA:

6. Having fully reviewed Applicant's request for variance from the above identified Elevator Safety Order requirements, it is the opinion of Cal/OSHA, that conditionally limited grant to Applicant of permanent variance as specified per the below Decision and Order, will provide for elevator safety, and occupational safety and health, equivalent or superior to that of the Elevator Safety Order requirements from which variance is being sought. The present opinion of Cal/OSHA, to any extent it may vary from those previously held with respect to the previously heard matter in Permanent Variance No. 15-V-349, reflects further scrutiny of the subject matter, consultation between Cal/OSHA, Applicant representatives, and refinement of recommended conditions and limitations.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Applicant is hereby conditionally GRANTED Permanent Variance as stated below, to the limited extent that each enumerated conveyance at the given location shall be subject to conditionally limited permanent variance from the below specified ASME A17.1-2004, requirements incorporated by reference into section 3141.

Suspension Members: Applicant shall conditionally hold permanent variance from the following section 3141 incorporated sections and subsections of ASME A17.1-2004, to the limited extent variance is necessary to provide for use of noncircular elastomeric- coated steel suspension members and concomitant components, and configurations - section 2.20.1; section 2.20.2.1; subsection 2.20.2.2(a); subsection 2.20.2.2(f); section 2.20.3; section 2.20.4: section 2.20.9.3.4; and section 2.20.9.5.4.

Inspection Transfer Switch: Applicant shall conditionally hold permanent variance from certain requirements of the following section 3141 incorporated section of ASME A17.1-2004, to the extent variance is necessary to having the requisite inspection transfer switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: section 2.26.1.4.4(a).

Seismic Safety Switch Placement: Applicant shall conditionally hold permanent variance from certain requirements of the following section 3141 incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to having the requisite seismic reset switch located elsewhere than a machine room, within a Security Group I enclosure built into an upper floor landing door jam, or within other readily accessible and secure space shared with the motion controller outside the hoistway: section 8.4.10.1.1(a)(2)(b).

Car Top Railing: Applicant shall conditionally hold permanent variance from certain requirements of the following section 3141 incorporated section of ASME A17.1-2004, to the limited extent variance is necessary to provide for the below specified insetting of the subject elevator's top of car railing: section 2.14.1.7.1.

Further Conditions and Limitations:

1. The elevator suspension system shall comply with the following:

    1.1. The suspension traction media (STM) members and their associated fastenings shall conform to the applicable requirements of ASME A17.1-2013, sections:

    - Section 2.20.4.3 - Minimum Number of Suspension Members
    - Section 2.20.3 - Factor of Safety
    - Section 2.20.9 - Suspension Member Fastening

    1.2. Additionally, STMs shall meet or exceed all requirements of ASME A17.6-2010 Standard for Elevator Suspension, Compensation, and Governor Systems, Part 3, Noncircular Elastomeric Coated Steel Suspension Members for Elevators.

    1.3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection and testing of the STM members and fastenings and related monitoring and detection systems and criteria for STM replacement, and the Applicant shall make those procedures and criteria available to the Certified Competent Conveyance Mechanic (CCCM) at the location of the elevator, and to Cal/OSHA upon request.

    1.4. STM member mandatory replacement criteria shall include:

        1.4.1 Any exposed wire, strand or cord;

        1.4.2 Any wire, strand or cord breaks through the elastomeric coating;

        1.4.3 Any evidence of rouging (steel tension element corrosion) on any part of the

elastomeric coated steel suspension member;

1.4.4 Any deformation in the elastomeric suspension member such as, but not limited to, kinks or bends.

1.5. Traction drive sheaves must have a minimum diameter of 72 mm. The maximum speed of STM members running on 72 mm, 87 mm and 125 mm drive sheaves shall be no greater than 2.5 m/s, 6.0 m/s and 8.0 m/s respectively.

1.6. If any one STM member needs replacement, the complete set of suspension members on the elevator shall be replaced. Exception: If a new suspension member is damaged during installation, and prior to any contemporaneously installed STM having been placed into service, it is permissible to replace the individual damaged suspension member. STM members that have been installed on another installation shall not be re-used.

1.7. A traction loss detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.1.The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.12.

1.8. A broken suspension member detection means shall be provided that conforms to the requirements of ASME A17.1-2013, section 2.20.8.2. The means shall be tested for correct function annually in accordance with ASME A17.1-2013, section 8.6.4.19.13(a).

1.9. An elevator controller integrated bend cycle monitoring system shall monitor actual STM bend cycles, by means of continuously counting, and storing in nonvolatile memory, the number of trips that the STM makes traveling, and thereby being bent, over the elevator sheaves. The bend cycle limit monitoring means shall automatically stop the car normally at the next available landing before the bend cycle correlated residual strength of any single STM member drops below 80 percent of full rated strength. The monitoring means shall prevent the car from restarting. Notwithstanding any less frequent periodic testing requirement per Addendum 1 (Cal/OSHA Circular Letter), the bend cycle monitoring system shall be tested semi-annually in accordance with the procedures required per above Conditions 1.2, and 1.3.

1.10. Each elevator shall be provided with a device that electronically detects a reduction in residual strength of each STM member. The device shall be in compliance with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1, and incorporated herein by reference.

1.11. The elevator crosshead data plate shall comply with the requirements of ASME A17.1-2013, section 2.20.2.1.

1.12. A suspension means data tag shall be provided that complies with the requirements of ASME A17.1-2013, section 2.20.2.2.

1.13. Comprehensive visual inspections of the entire length of each and all installed suspension members, in conformity with above Conditions 1.2 and 1.3 specified criteria, shall be conducted and documented every six months by a CCCM.

1.14. The Applicant shall be subject to the requirements per hereto attached, and inhere incorporated, Addendum 2, "Suspension Means Replacement Reporting Condition."

1.15. Records of all tests and inspections shall be maintenance records subject to ASME A17.1-2004, sections 8.6.1.2 and 8.6.1.4, respectively.

2. Inspection Transfer switch and Seismic Reset switch placement and enclosure shall comply with the following:

2.1. If the inspection transfer switch required by ASME A17.1-2004, Rule 2.26.1.4.4 does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

2.2. If the seismic reset switch does not reside in the machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the control/machinery room/space containing the elevator's control equipment in an enclosure secured by a lock openable by a Group 1 security key. The enclosure is to remain locked at all times when not in use.

3. Any and all inset car top railing shall comply with the following:

3.1. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to stand on or climb over the railings to perform adjustments, maintenance, repairs or inspections. The Applicant shall not permit anyone to stand or climb over the car top railing.

3.2. The distance that the railing can be inset shall be limited to not more than 12 inches.

3.3. All exposed areas of the car top outside the car top railing where the distance from the railing to the edge of the car top exceeds 2 inches, shall be beveled with metal, at an angle of not less than 75 degrees with the horizontal, from the mid or top rail to the outside of the car top, such that no person or object can stand, sit, kneel, rest, or be placed in the exposed areas.

3.4. The top surface of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

3.5. The applicant shall provide durable signs with lettering not less than 1/2 inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
STAY INSIDE RAILING
NO LEANING BEYOND RAILING
NO STEPPING ON, OR BEYOND, RAILING

3.6. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing will be measured from the car top and not from the required

bevel).

4. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by CCCM having been trained, and competent, to perform those tasks on the Schindler Model 5500 elevator system in accordance with written procedures and criteria, including as required per above Conditions 1.2, and 1.3.
5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
6. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Schindler Sleep Mode Escalator

Permanent Variance No: See section A.1 table below
PROPOSED DECISION

Hearing Date: March 25, 2026

Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-073	Sacramento County, Department of Airports	6900 Airport Blvd., Sacramento, CA	4

2. These proceedings are conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

3. The safety orders at issue are section 3141.11, incorporated ASME A17.1-2004, sections 6.1.4.1., and 6.1.6.4.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.

2. At the hearing, Pete Cuellar, with SCHINDLER ELEVATOR CORPORATION, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Applicant proposes to install new escalators that include a "sleep mode" capability that will cause the escalator to run at a reduced speed when not in use to conserve energy. This arrangement does not comply with the Elevator Safety Orders that prohibit the intentional variation of an escalator's speed after start-up, and thus variance is requested from California Code of Regulations, title 8, Elevator Safety Orders, Group IV, section 3141.11, incorporated ASME A17.1-2004, sections 6.1.4.1regarding limits of escalator speed, and A17.1-2004, section 6.1.6.4, regarding handrail speed. The Division has identified another closely related section 3141.11incorporated ASME requirement from which variance would be needed, in order to for the escalator system to operate as proposed—ASME A17-1-2004, section 6.1.4.1,regarding escalator speed after start-up.

2. ASME A17.1-2004, section 6.1.4.1, states:

> *"6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel. The speed attained by an escalator after start-up shall not be intentionally varied."*

3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 25-V-374). In this previous variance decision it was concluded by the Board, that a variance also be granted from section 3141.11 [ASME A17.1-2004, section 6.1.6.4] regarding handrail speed monitoring. ASME A17.1-2004, section 6.1.4.1, states:

   - 6.1.4.1 Limits of Speed. The rated speed shall be not more than 0.5 m/s (100 ft/min), measured along the centerline of the steps in the direction of travel. The speed attained by an escalator after start-up shall not be intentionally varied.
   - The purpose of this regulation is to ensure that the speed of the escalator during normal operation is kept constant to prevent passengers from losing their balance.

4. The Applicant contends that equivalent safety is achieved through the use of a controller that is capable of varying the escalator drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. When the sensors indicate a lack of traffic approaching the escalator, for a specified amount of time not less than three times the amount of time to transfer a passenger between landings, the control system will initiate the "sleep mode" function, decelerating the escalator to a "crawling speed", no less than

0.05 m/s (10 ft./min). If passenger traffic is detected while the escalator is in “Sleep Mode,” a signal will be sent to the controller to “wake up” resulting in the escalator accelerating to normal operating speed within 1.5 seconds at a rate no greater than 1 ft/sec^2.

5. Per Applicant, the sensors used to detect passenger traffic would provide coverage able to detect passengers at a distance greater than a walking person could travel in 2 seconds, which will ensure the escalator is running at normal speed prior to passenger boarding.

6. Applicant proposes that if passenger traffic is detected approaching the escalator opposite the motion of the escalator steps while in “sleep mode”, an alarm will sound and the escalator will exit “sleep mode” and accelerate until it reaches normal operating speed at a rate no greater than 1 ft/sec2. This arrangement is intended to discourage passengers from entering the escalator opposite the motion of the steps while at reduced speed.

7. As proposed, the sensors used to detect passenger traffic are to be installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the escalator providing the same coverage field. This arrangement is intended to allow for passenger traffic detection in the case of any single sensor failure and provide for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, “sleep mode” would be disabled and the escalator would remain at normal operating speed until all sensors have resumed normal function. In addition, the passenger traffic sensors are to be wired to the escalator controller in a fail-safe manner that prevents “sleep mode” activation if the wiring is cut or disconnected.

8. The Applicant indicates that additional to the radar sensors, photocell infrared sensors (also referred to as Skirt Light Barriers) are provided at the upper and lower comb plates for extra monitoring and faster detection of radar sensor failures. The Applicant asserts “these photocell sensors are not used for passenger detection and do not trigger escalator acceleration from crawl speed to full speed.”

9. Cal/OHSA notes in its Review of Application (Exhibit PD-4) that the Applicant proposed “sleep mode” function meets the requirements of ASME A17.1-2010, section 6.1.4.1.2 regarding the varying the speed of an escalator after start-up. For this reason among others identified within the its Review of Application, Cal/OSHA advises that equivalent or superior safety will be provided by grant of permanent variance in this matter, as conditionally limited per the below Decision and Order.

10. ASME A17.1-2010, section 6.1.4.1.2, states:

    - Variation of the escalator speed after start-up shall be permitted provided the escalator installation conforms to all of the following:

        a. The acceleration and deceleration rates shall not exceed 0.3 m/s^2 (1.0 ft/sec^2).

        b. The rated speed is not exceeded.

        c. The minimum speed shall be not less than 0.05 m/s (10 ft/min).

        d. The speed shall not automatically vary during inspection operation.

        e. Passenger detection means shall be provided at both landings of the escalator such that

            1. detection of any approaching passenger shall cause the escalator to accelerate to or maintain the full escalator speed conforming to 6.1.4.1.2(a)

through (d)

2. detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the escalator to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate

3. passenger detection means shall remain active at the egress landing to detect any passenger approaching against the direction of escalator travel and shall cause the escalator to accelerate to full rated speed and sound the alarm (see 6.1.6.3.1) at the approaching landing before the passenger reaches the combplate

f. Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.

g. Means shall be provided to detect failure of the passenger detection means and shall cause the escalator to operate at full rated speed only."

11. Cal/OSHA states correctly in its Review of Application, that Applicant's proposed "sleep mode" function is materially similar to other installations for which a permanent variance has been granted (Permanent Variance No. 14-V-129). In these previous variance decisions it was concluded that a variance was required from ASME A17.1 2004, section 6.1.6.4 regarding handrail speed monitoring, and the concluding conditional grant of variance provided for the disabling of the handrail-speed monitoring device while the escalator is operating in slow speed "sleep mode."

12. ASME A17.1-2004, section 6.1.6.4, states:

    - Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.1.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the step speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type.

    - The intent of this regulation is to prevent the destabilization of passengers by maintaining the potential relationship of the moving elements with which passengers interaction while riding.

13. The Applicant intends to disable the handrail speed monitoring during sleep mode operation.

14. Cal/OSHA advises that the proposed "sleep mode" system incorporating the proposed hand rail speed control specifications, subject to all conditions and limitations of the below Decision and Order will provide for safety equivalence.

15. The proposed "sleep mode" system functions and devices are materially comparable to other installations for which permanent variance previously has been granted by the Board (e.g. Permanent Variance No. 13-V-153, 14-V-129, 15-V-236, 16-V-069), absent, to Cal/OSHA's reported knowledge, adverse effect upon passenger or workplace safety or health.

16. Cal/OSHA recommends that conditionally limited grant of permanent variance in this matter, per the below Decision and Order, will provide for passenger safety and occupational safety and health equivalent or superior to that would otherwise prevail per the subject Elevator Safety Order requirements.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicant's proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

The application is conditionally GRANTED as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, the respective section A table specified quantity of Schindler escalators, at the specified location and per the Appendix A designations, shall have permanent variance from the following subparts of ASME A17.1-2004 sections 6.1.4.1 and 6.1.6.4, subject to each and all of the following requirements and limitations:

1. The Applicant may intentionally vary the escalator speed and install proximity sensors for traffic detection subject to the following:
    a. The rate of acceleration and deceleration shall not exceed 0.3 m/s^2 (1 ft/sec^2) when transitioning between speeds.
    b. Failure of a single proximity sensor including its associated circuitry, shall cause the escalator to revert to its normal operating speed at an acceleration of not more than 0.3 m/s2 (1 ft/sec^2).
    c. Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.
    d. Detection of any passenger shall cause the escalator to reach full speed before a passenger, walking at 4.5ft/sec, reaches the comb plate.
    e. The passenger detection means shall detect a person within a sufficient distance along all possible paths to the escalator that do not require climbing over barriers or escalator handrails to assure that the escalator attains full operating speed before a person walking at 4.5 ft/sec reaches the escalator comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Appendix 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:
        - **$d = (V_f - V_s) \times (V_w / a)$** where
            - d = detection distance (ft)
            - V_f = normal speed (ft/min) [not to exceed 100 ft/min]
            - V_s = slow "sleep" speed (ft/min) [not less than 10 ft/min]
            - V_w = passenger walking speed (4.5 ft/sec)

- a = acceleration/deceleration rate (ft/sec^2)[not to exceed 1 ft/sec^2]

f. Detection of any passenger approaching against the direction of escalator travel shall cause the escalator to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the escalator alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.

g. The minimum speed of the escalator shall not be less than 0.05 m/s (10 ft/min). The "sleep mode" functionality shall not affect the escalator inspection operation. The speed of the escalator shall not vary during Inspection Mode.

h. There shall be two means of detecting passengers at each end of the escalator for redundancy and for detection of failure in the passenger detection means.

i. The passenger sensors (detectors) at each end of the escalator must be verified by the control system for proper operation in the following manner:

   1. If any of the passenger detection sensors remains tripped for at least 5 minutes but no more than 10 minutes, then the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

   2. If one of the paired sensors at either end of the escalator does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the escalator to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

j. The handrail speed monitoring device required by section 6.1.6.4 may be disabled while the escalator is operating in the slow speed (Sleep Mode) condition.

2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.

3. Photocell Infrared Sensors, also referred to Skirt Light Barriers located at the top and bottom comb plates, shall not cause the escalator to accelerate or decelerate the speed under any conditions or circumstances.

4. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the escalators, to demonstrate that the escalator is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the escalator.

5. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).

6. Whenever practicable, as determined by the Applicant and subject to the concurrence of Cal/OSHA, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the escalator. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to

minimize the impact of same on the movement of passengers at the destination end of the escalator.

7. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the escalators shall be provided a copy of the variance decision.
8. Cal/OSHA shall be notified when the escalator is ready for inspection, and the escalator shall be inspected by Cal/OSHA and a "Permit to Operate" issued before the escalator may be placed in service.
9. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
10. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in procedural accordance with section 411, et. seq.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

APPENDIX A

Variance No.	Escalator ID
26-V-073	01 ESC B01
26-V-073	02 ESC B02
26-V-073	03 ESC B03
26-V-073	04 ESC B04

APPENDIX 1
Detection Distance Sleep Mode Operation
Acceleration Rate (ft./sec^2) vs. Escalator Sleep Mode Speed (ft./min)

	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
1.00	6.76	6.39	6.01	5.64	5.26	4.88	4.51	4.13	3.76	3.38	3.01	2.63	2.25	1.88	1.50	1.13	0.75	0.38	0.00
0.95	7.12	6.72	6.33	5.93	5.54	5.14	4.75	4.35	3.96	3.56	3.16	2.77	2.37	1.98	1.58	1.19	0.79	0.40	0.00
0.90	7.52	7.10	6.68	6.26	5.85	5.43	5.01	4.59	4.18	3.76	3.34	2.92	2.51	2.09	1.67	1.25	0.84	0.42	0.00
0.85	7.96	7.52	7.07	6.63	6.19	5.75	5.30	4.86	4.42	3.98	3.54	3.09	2.65	2.21	1.77	1.33	0.88	0.44	0.00
0.80	8.45	7.98	7.52	7.05	6.58	6.11	5.64	5.17	4.70	4.23	3.76	3.29	2.82	2.35	1.88	1.41	0.94	0.47	0.00
0.75	9.02	8.52	8.02	7.52	7.01	6.51	6.01	5.51	5.01	4.51	4.01	3.51	3.01	2.51	2.00	1.50	1.00	0.50	0.00
0.70	9.66	9.13	8.59	8.05	7.52	6.98	6.44	5.90	5.37	4.83	4.29	3.76	3.22	2.68	2.15	1.61	1.07	0.54	0.00
0.65	10.41	9.83	9.25	8.67	8.09	7.52	6.94	6.36	5.78	5.20	4.62	4.05	3.47	2.89	2.31	1.73	1.16	0.58	0.00
0.60	11.27	10.65	10.02	9.39	8.77	8.14	7.52	6.89	6.26	5.64	5.01	4.38	3.76	3.13	2.51	1.88	1.25	0.63	0.00
0.55	12.30	11.61	10.93	10.25	9.56	8.88	8.20	7.52	6.83	6.15	5.47	4.78	4.10	3.42	2.73	2.05	1.37	0.68	0.00
0.50	13.53	12.78	12.02	11.27	10.52	9.77	9.02	8.27	7.52	6.76	6.01	5.26	4.51	3.76	3.01	2.25	1.50	0.75	0.00
0.45	15.03	14.20	13.36	12.53	11.69	10.86	10.02	9.19	8.35	7.52	6.68	5.85	5.01	4.18	3.34	2.51	1.67	0.84	0.00
0.40	16.91	15.97	15.03	14.09	13.15	12.21	11.27	10.33	9.39	8.45	7.52	6.58	5.64	4.70	3.76	2.82	1.88	0.94	0.00
0.35	19.32	18.25	17.18	16.10	15.03	13.96	12.88	11.81	10.74	9.66	8.59	7.52	6.44	5.37	4.29	3.22	2.15	1.07	0.00
0.30	22.55	21.29	20.04	18.79	17.54	16.28	15.03	13.78	12.53	11.27	10.02	8.77	7.52	6.26	5.01	3.76	2.51	1.25	0.00
0.25	27.05	25.55	24.05	22.55	21.04	19.54	18.04	16.53	15.03	13.53	12.02	10.52	9.02	7.52	6.01	4.51	3.01	1.50	0.00
0.20	33.82	31.94	30.06	28.18	26.30	24.42	22.55	20.67	18.79	16.91	15.03	13.15	11.27	9.39	7.52	5.64	3.76	1.88	0.00
0.15	45.09	42.59	40.08	37.58	35.07	32.57	30.06	27.56	25.05	22.55	20.04	17.54	15.03	12.53	10.02	7.52	5.01	2.51	0.00
0.10	67.64	63.88	60.12	56.36	52.61	48.85	45.09	41.33	37.58	33.82	30.06	26.30	22.55	18.79	15.03	11.27	7.52	3.76	0.00
0.05	135.27	127.76	120.24	112.73	105.21	97.70	90.18	82.67	75.15	67.64	60.12	52.61	45.09	37.58	30.06	22.55	15.03	7.52	0.00

$$d = (V_f - V_s) \times V_w / a$$

d = Detection distance (ft.)

V_f = Escalator Rated Speed (Escalators with rated speeds of 100 ft./min.)

V_s = Slow Speed["Sleep mode" Speed] (ft./min.)

V_w = Passenger Walking Speed of 4.5 ft./sec.

a = Acceleration/Deceleration Rate (ft./sec.^{2})

Note: 1 ft./min. = 0.0167 ft./sec.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance regarding: Schindler Moving Walk Sleep Mode	OSHSB File Nos.: See Section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter and Jurisdiction

1. Sacramento County, Department of Airports, ("Applicant") has applied for permanent variance from certain provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations, with respect to a conveyance, or conveyances, in the listed quantity, at the listed location:

Variance No.	Application Name	Variance Location Address	No. of Moving Walkways
26-V-074	Sacramento County, Department of Airports	6900 Airport Blvd., Sacramento, CA	4

2. This proceeding is conducted in accordance with Labor Code section 143, and California Code of Regulations, title 8, section 401, et. seq.

3. The safety orders at issue are California Code of Regulations, title 8, section 3141.12, incorporated ASME A17.1-2004, sections 6.2.4.1 and 6.2.6.4.

B. Process and Procedure

1. This hearing was held on March 25, 2026 via teleconference, by the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit, as a basis of proposed decision to be advanced to the Board for its consideration, in accordance with California Code of Regulations, title 8, section 426.

2. At the hearing, Pete Cuellar with Schindler Elevator Corporation appeared on behalf of Sacramento County, Department of Airports; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA")

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD-1	Application(s) for Permanent Variance per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Division Review of Variance Application
PD-4	Review Draft-1 Proposed Decision

Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On «Hearing_Date», the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. **Findings of Fact**

1. Applicant seeks variance from certain Code of Regulations, title 8, Elevator Safety Orders, toward the stated purpose of installing new moving walks that include a "Sleep Mode" capability that will cause the moving walk to run at a reduced speed when not in use, thus resulting in conservation of electrical energy.

2. Each subject moving walkway are to be situated at the variance location per Section A.1 table, and more specifically per below Appendix A.

3. The Applicant's proposed Sleep Mode feature is not compliant with existing California Code of Regulation title 8, Elevator Safety Orders, which prohibits the intentional variation of a moving walk's speed after start-up.

4. In order to install moving walks that include a Sleep Mode capability, Applicant requires a permanent variance from the provisions of California Code of Regulations, title 8, Elevator Safety Orders, Group IV, section 3141.12 [ASME A17.1-2004, sections 6.2.4] regarding the variation of moving walk speed.

5. Concerning variance in moving walk speed, Code of Regulations, title 8, section 3141.12 [ASME A17.1-2004, section 6.2.4] states:

   The maximum speed of a treadway shall depend on the maximum slope at any point on the treadway. The speed shall not exceed the value determined by Table 6.2.4.

   The speed attained by a moving walk after startup shall not be intentionally varied.

Table 6.2.4	Treadway Speed

Maximum Treadway Slope at Any Point on Treadway, deg	Maximum Treadway Speed,m/s (ft/min)
0 to 8 Above 8 to 12	0.9 (180) 0.7 (140)

6. As quoted above, the intent of section 3141.12 is to ensure that the speed of the moving walk during normal operation is kept constant to prevent passengers from losing their balance.

7. The Applicant contends that equivalent safety is achieved through the use of a controller that is capable of varying the moving walk drive motor speed in conjunction with dual redundant sensors strategically placed at each end of the unit to detect passenger traffic. When the sensors indicate a lack of traffic approaching the moving walk for 10 minutes, the control system will initiate the "sleep mode" function, decelerating the moving walk to approximately 20 feet per minute. If passenger traffic is detected while the moving walk is in "sleep mode", a signal will be sent to the controller to "wake up", resulting in the moving walk accelerating to normal operating speed within 1.5 seconds at a rate no greater than one ft/sec^2.

8. The Applicant states that if passenger traffic is detected approaching the moving walk opposite the motion of the moving walk while in "sleep mode", an alarm will sound and the moving walk will exit "sleep mode" and accelerate until it reaches normal operating speed at a rate no greater than one ft/sec^2. This arrangement is to discourage passengers from entering the moving walk opposite the motion of the treadway while at reduced speed. The Applicant proposes sensors used to detect passenger traffic being installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the moving walk providing the same coverage field.

9. The Applicant states that the sensors used to detect passenger traffic are installed and arranged in a double redundant, fail-safe fashion with two sensors installed at each end of the moving walk, providing the same coverage field. This arrangement allows for passenger traffic detection in the case of any single sensor failure and provides for signal comparison by the controller to detect sensor failure. In the event of a detected failure of any one of the passenger traffic sensors, "sleep mode" would be disabled and the moving walk would remain at normal operating speed until all sensors have resumed normal function. The passenger traffic sensors are wired to the moving walk controller in a fail-safe manner that prevents "sleep mode" activation if the wiring is cut or disconnected. Applicant proposes a design in which detected failure of any one of the passenger traffic sensors, result in a disabling of "sleep mode" such that the moving walk would remain at normal operating speed until all sensors have resumed normal function. In addition the proposed design would have passenger traffic sensors

wired to the moving walk controller in a fail-safe manner that prevents "sleep mode" activation if the sensor wiring is cut or disconnected.

10. The Applicant indicates that additional to the radar sensors, photocell infrared sensors (also referred to as Skirt Light Barriers) are provided at comb plates at each end of the moving walk for extra monitoring and faster detection of radar sensor failures. The Applicant asserts "these photocell sensors are not used for passenger detection and do not trigger moving walk acceleration from crawl speed to full speed."

11. Cal/OSHA, in its evaluation (Exhibit PD-3), is of the well informed opinion that the Applicant proposed Sleep Mode function meets the requirements of ASME A17.1-2010, section 6.2.4.1.2 regarding the varying the speed of an moving walk after start-up.

12. ASME A17.1-2010, section 6.2.4.1.2 states:

> "Variation of the moving-walk speed after start-up shall be permitted provided the moving-walk installation conforms to all of the following:
>
> (a) The acceleration and deceleration rates shall not exceed 0.3 m/s^2 (1.0 ft/sec^2).
>
> (b) The rated speed is not exceeded.
>
> (c) The minimum speed shall be not less than 0.05 m/s (10 ft/min).
>
> (d) The speed shall not automatically vary during inspection operation.
>
> (e) Passenger detection means shall be provided at both landings of the moving walk such that
>
> (1) detection of any approaching passenger shall cause the moving walk to accelerate to or maintain the full moving walk speed conforming to 6.2.4.1.2(a) through (d)
>
> (2) detection of any approaching passenger shall occur sufficiently in advance of boarding to cause the moving walk to attain full operating speed before a passenger walking at normal speed [1.35 m/s (270 ft/min)] reaches the combplate
>
> (3) passenger detection means shall remain active at the egress landing to detect any passenger approaching against the

direction of moving walk travel and shall cause the moving walk to accelerate to full rated speed and sound the alarm (see 6.2.6.3.2) at the approaching landing before the passenger reaches the combplate

(f) Automatic deceleration shall not occur before a period of time has elapsed since the last passenger detection that is greater than 3 times the amount of time necessary to transfer a passenger between landings.

(g) Means shall be provided to detect failure of the passenger detection means and shall cause the moving walk to operate at full rated speed only."

13. The Applicant's proposed Sleep Mode function is similar to other installations for which a permanent variance has been granted (OSHSB File No. 14-V-129, 16-V-069 and 20-V-323). In these previous variance decisions it was concluded that a variance was required from ASME A17.1-2004, section 6.2.6.4 regarding handrail speed monitoring. Conditions set forth in the previous variance decisions allow for the disabling of the handrail speed monitoring device while the conveyance is operating in slow speed Sleep Mode.

14. Concerning handrail speed monitoring, section 3141.12 [ASME A17.1-2004, section 6.2.6.4] states:

"Handrail Speed Monitoring Device. A handrail speed monitoring device shall be provided that will cause the activation of the alarm required by 6.2.6.3.1(b) without any intentional delay, whenever the speed of either handrail deviates from the treadway speed by 15% or more. The device shall also cause electric power to be removed from the driving-machine motor and brake when the speed deviation of 15% or more is continuous within a 2 s to 6 s range. The device shall be of the manual-reset type."

15. Cal/OSHA, in its Review of Application (Exhibit PD-3) conclude that the moving walk Sleep Mode function design, as proposed by the Applicant, subject to certain conditions and limitations, will provide equivalent occupational safety and health to the Code of Regulations, title 8, Elevator Safety Orders requirements from which variance is being sought, and conveyance passenger safety, and recommend that the applied for variance be granted subject to specified conditions and limitations in material conformity with those incorporated into the Decision and Order below.

D. **Conclusive Findings**

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. **Decision and Order**

The Application of each above section A table identified Applicant, is conditionally GRANTED as specified below, and to the limited extent, as of the date the Board adopts this Proposed Decision, the respective section A.1 table specified quantity of "sleep mode" moving walkway units per Appendix A, at the specified location shall have permanent variance from the following subparts of ASME A17.1-2004 sections 6.2.4, and 6.2.6.4, subject to each and all of the following requirements and limitations:

1. The Applicant may intentionally vary the moving walk speed and install proximity sensors for traffic detection subject to the following:

   (a) The rate of acceleration and deceleration shall not exceed 0.3 m/s^2 (1 ft/sec^2) when transitioning between speeds.

   (b) Failure of a single proximity sensor including its associated circuitry, shall cause the moving walk to revert to its normal operating speed at an acceleration of not more than 0.3 m/s^2 (1 ft/sec^2).

   (c) Automatic deceleration shall not occur before a period of time of not less than three times the time it takes a passenger to ride from one landing to the other at normal speed has elapsed.

   (d) Detection of any passenger shall cause the moving walk to reach full speed before a passenger, walking at 4.5ft/sec, reaches the comb plate.

   (e) The passenger detection means shall detect a person within a sufficient distance along all possible paths to the moving walk that do not require climbing over barriers or moving walk handrails to assure that the moving walk attains full operating speed before a person walking at 4.5 ft/sec reaches the moving walk comb plate. The minimum detection distance shall be calculated according to the following formula or alternatively according to Appendix 1 (Detection Distance Sleep Mode Operation) attached hereto and incorporated herein by this reference:

   $$d = (V_f - V_s) \times (V_w / a)$$ where

d = detection distance (ft)
V_f = normal speed (ft/min) [not to exceed 100 ft/min]
V_s = slow "sleep" speed (ft/min) [not less than 10 ft/min]
V_w = passenger walking speed (4.5 ft/sec)
a = acceleration/deceleration rate (ft/sec^2)[not to exceed 1 ft/sec^2]

(f) Detection of any passenger approaching against the direction of moving walk travel shall cause the moving walk to reach full speed before a passenger, walking at 4.5 ft/sec, reaches the comb plate and shall cause the moving walk alarm to sound. The sounding of the alarm may include a 3 to 5 second alarm or three 1 second alarm soundings.

(g) The minimum speed of the moving walk shall not be less than 0.05 m/s (10 ft/min). The "Sleep Mode" functionality shall not affect the moving walk inspection operation. The speed of the moving walk shall not vary during Inspection Mode.

(h) There shall be two means of detecting passengers at each end of the moving walk for redundancy and for detection of failure in the passenger detection means.

(i) The passenger sensors (detectors) at each end of the moving walk must be verified by the control system for proper operation in the following manner:

1. If any of the passenger detection sensors remains tripped for at least 5 minutes but no more than 10 minutes, then the control system shall generate a fault to indicate which sensor is faulted while causing the moving walk to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

2. If one of the paired sensors at either end of the moving walk does not trip while the other paired sensor trips at least five times but no more than ten times, the control system shall generate a fault to indicate which sensor is faulted while causing the moving walk to exit the Sleep Mode and remain at the normal run speed until the faulted sensor begins to function properly.

(j) The handrail speed monitoring device required by section 6.2.6.4 may be disabled while the moving walk is operating in the slow speed (Sleep Mode) condition.

2. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.

3. Photocell Infrared Sensors, also referred to Skirt Light Barriers located at each end of the moving walk comb plates, shall not cause the moving walk to accelerate or decelerate the speed under any conditions or circumstances.

4. An annual test shall be conducted by a Certified Competent Conveyance Mechanic (CCCM) employed by a Certified Qualified Conveyance Company (CQCC) which maintains and services the moving walks, to demonstrate that the moving walk is transitioning between "Normal Mode" and "Sleep Mode" and back in conformance with the terms of this variance. The instrumentation used shall be capable of allowing the CCCM to determine the acceleration and deceleration rates of the moving walk.

5. The results of each annual test required by Condition No. 3 shall be submitted to the appropriate Elevator Unit District Office in tabular and graphic form (speed vs. time).

6. Whenever practicable, as determined by the Applicant and subject to the concurrence of the Division, the variable speed system is to be installed without the installation of new bollards or other such new structures, if the bollards or other structures would impede passenger movement at the destination end of the moving walk. If new bollards or other such structures of that sort are constructed in connection with the variable speed system, the Applicant will take all practicable steps to minimize the impact of same on the movement of passengers at the destination end of the moving walk.

7. Any Certified Qualified Conveyance Company (CQCC; elevator contractor) performing inspection, maintenance, servicing or testing of the moving walk shall be provided a copy of the variance decision.

8. Cal/OSHA shall be notified when each subject conveyance is ready for inspection to determine compliance with the permanent variance pursuant to this Decision and Order. Each subject conveyance shall have been inspected by the Division to determine compliance with this Decision and Order, and a Permit to Operate shall have been issued and in effect, before the conveyance is placed in service.

9. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the docketed application for permanent variance per California Code of Regulations, title 8, sections 411.2 and 411.3.

10. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), the Division of Occupational Safety and Health, or by the Board on its own motion, in the procedural manner prescribed per title 8, Chapter 3.5, Subchapter 1.

Pursuant to section 426(b), the above, duly completed Proposed Decision, is hereby submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

APPENDIX A

Permanent Variance is granted as to the below specified moving walkways, identified by the Applicant assigned designations in effect on the date of Decision and Order adoption:

Variance No.	Moving Walkway ID
26-V-074	01 MW B01
26-V-074	02 MW B02
26-V-074	03 MW B03
26-V-074	04 MW B04

Exhibit 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec^2) vs. Walkway Sleep Mode Speed (ft./min)

	10	**15**	**20**	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**	**75**	**80**	**85**	**90**	**95**	**100**
1.00	6.76	6.39	6.01	5.64	5.26	4.88	4.51	4.13	3.76	3.38	3.01	2.63	2.25	1.88	1.50	1.13	0.75	0.38	0.00
0.95	7.12	6.72	6.33	5.93	5.54	5.14	4.75	4.35	3.96	3.56	3.16	2.77	2.37	1.98	1.58	1.19	0.79	0.40	0.00
0.90	7.52	7.10	6.68	6.26	5.85	5.43	5.01	4.59	4.18	3.76	3.34	2.92	2.51	2.09	1.67	1.25	0.84	0.42	0.00
0.85	7.96	7.52	7.07	6.63	6.19	5.75	5.30	4.86	4.42	3.98	3.54	3.09	2.65	2.21	1.77	1.33	0.88	0.44	0.00
0.80	8.45	7.98	7.52	7.05	6.58	6.11	5.64	5.17	4.70	4.23	3.76	3.29	2.82	2.35	1.88	1.41	0.94	0.47	0.00
0.75	9.02	8.52	8.02	7.52	7.01	6.51	6.01	5.51	5.01	4.51	4.01	3.51	3.01	2.51	2.00	1.50	1.00	0.50	0.00
0.70	9.66	9.13	8.59	8.05	7.52	6.98	6.44	5.90	5.37	4.83	4.29	3.76	3.22	2.68	2.15	1.61	1.07	0.54	0.00
0.65	10.41	9.83	9.25	8.67	8.09	7.52	6.94	6.36	5.78	5.20	4.62	4.05	3.47	2.89	2.31	1.73	1.16	0.58	0.00
0.60	11.27	10.65	10.02	9.39	8.77	8.14	7.52	6.89	6.26	5.64	5.01	4.38	3.76	3.13	2.51	1.88	1.25	0.63	0.00
0.55	12.30	11.61	10.93	10.25	9.56	8.88	8.20	7.52	6.83	6.15	5.47	4.78	4.10	3.42	2.73	2.05	1.37	0.68	0.00
0.50	13.53	12.78	12.02	11.27	10.52	9.77	9.02	8.27	7.52	6.76	6.01	5.26	4.51	3.76	3.01	2.25	1.50	0.75	0.00
0.45	15.03	14.20	13.36	12.53	11.69	10.86	10.02	9.19	8.35	7.52	6.68	5.85	5.01	4.18	3.34	2.51	1.67	0.84	0.00
0.40	16.91	15.97	15.03	14.09	13.15	12.21	11.27	10.33	9.39	8.45	7.52	6.58	5.64	4.70	3.76	2.82	1.88	0.94	0.00
0.35	19.32	18.25	17.18	16.10	15.03	13.96	12.88	11.81	10.74	9.66	8.59	7.52	6.44	5.37	4.29	3.22	2.15	1.07	0.00
0.30	22.55	21.29	20.04	18.79	17.54	16.28	15.03	13.78	12.53	11.27	10.02	8.77	7.52	6.26	5.01	3.76	2.51	1.25	0.00
0.25	27.05	25.55	24.05	22.55	21.04	19.54	18.04	16.53	15.03	13.53	12.02	10.52	9.02	7.52	6.01	4.51	3.01	1.50	0.00
0.20	33.82	31.94	30.06	28.18	26.30	24.42	22.55	20.67	18.79	16.91	15.03	13.15	11.27	9.39	7.52	5.64	3.76	1.88	0.00
0.15	45.09	42.59	40.08	37.58	35.07	32.57	30.06	27.56	25.05	22.55	20.04	17.54	15.03	12.53	10.02	7.52	5.01	2.51	0.00
0.10	67.64	63.88	60.12	56.36	52.61	48.85	45.09	41.33	37.58	33.82	30.06	26.30	22.55	18.79	15.03	11.27	7.52	3.76	0.00
0.05	135.27	127.76	120.24	112.73	105.21	97.70	90.18	82.67	75.15	67.64	60.12	52.61	45.09	37.58	30.06	22.55	15.03	7.52	0.00

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Walkway Rated Speed (Walkways with rated speeds of 100 ft./min.)

V_s Slow Speed[“Sleep mode” Speed] (ft./min.)

V_w Passenger Walking Speed of 4.5 ft./sec.

a Acceleration/Deceleration Rate (ft./sec.^{2})

Note: 1 ft./min. = 0.0167 ft./sec.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 300 (Group IV)	Permanent Variance No: See section A.1 table Below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-081	Orange County Department of Education	3001 Redhill Ave., Building 4 Costa Mesa, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer, Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Fuei Saetern, with KONE INC., appeared on behalf of each Applicant; and Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On December 3, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each respective Applicant intends to utilize the KONE, Inc. Monospace 300 type elevator, in the quantity, at the location, specified per the above section A.1 table.
2. The installation contract for this elevator was or will be signed on or after May 1, 2008, thus making the elevator subject to the Group IV Elevator Safety Orders.
3. Each Applicant proposes to use hoisting ropes that are 8 mm in diameter which also consist of 0.51 mm diameter outer wires, in variance from the express requirements of ASME A17.1-2004, section 2.20.4.
4. In relevant part, ASME A17.1-2004, section 2.20.4 states:

   2.20.4 Minimum Number and Diameter of Suspension Ropes

   …The minimum diameter of hoisting and counterweight ropes shall be 9.5 mm (0.375 in.). Outer wires of the ropes shall be not less than 0.56 mm (0.024 in.) in diameter.
5. An intent of ASME A17.1-2004, section 2.20.4, is to ensure that the number, diameter, and construction of suspension ropes are adequate to provided safely robust and durable suspension means over the course of the ropes' foreseen service life.
6. KONE has represented to Cal/OSHA, having established an engineering practice for purposes of Monospace 300 elevator design, of meeting or exceeding the minimum factor of safety of 12 for 8 mm suspension members, as required in ASME A17.1-2010 - under which, given that factor of safety, supplemental broken suspension member protection is not required.
7. Also, each Applicant proposes as a further means of maintaining safety equivalence, monitoring the rope in conformity with the criteria specified within the *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators* (per Application attachment "B", or as thereafter revised by KONE subject Cal/OSHA approval).
8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from title 8, section 3141, incorporated ASME A17.1-2004, section 2.18.5.1.
9. ASME A17.1-2004, section 2.18.5.1, specifies, in relevant part:

   2.18.5.1 Material and Factor of Safety.

   … [Governor ropes] not less than 9.5 mm (0.375 in.) in diameter. The factor of safety of governor ropes shall be not less than 5…
10. The Board takes notice of section 3141.7, subpart (a)(10):

    A reduced diameter governor rope of equivalent construction and material to that required by ASME A17.1-2004, is permissible if the factor of safety as related to the strength necessary to

activate the safety is 5 or greater;

11. Applicants propose use of 6mm governor rope having a safety factor of 5 or greater, in conformity with section 3141.7(a)(10), the specific parameters of which, being expressly set out within the Elevator Safety Orders (ESO), take precedence over more generally referenced governor rope diameter requirements per ASME A17.1-2004, section 2.18.5.1. Accordingly, the governor rope specifications being presently proposed, inclusive of a factor of safety of 5 or greater, would comply with current requirements, and therefore not be subject to issuance of permanent variance.

12. Absent evident diminution in elevator safety, over the past decade the Board has issued numerous permanent variances for use in KONE (Ecospace) elevator systems of 8 mm diameter suspension rope materially similar to that presently proposed (e.g. Permanent Variance Nos. 06-V-203, 08-V-245, and 13-V-303).

13. As noted by the Board in permanent Variance Nos. 18-V-044, and 18-V-045, Decision and Order Findings, subpart B.17 (hereby incorporated by reference), the strength of wire rope operating as an elevator's suspension means does not remain constant over its years of projected service life. With increasing usage cycles, a reduction in the cross-sectional area of the wire rope normally occurs, resulting in decreased residual strength. This characteristic is of particular relevance to the present matter because, decreasing wire rope diameter is associated with a higher rate of residual strength loss. This foreseeable reduction in cross-sectional area primarily results from elongation under sheave rounding load, as well as from wear, and wire or strand breaks. However, these characteristics need not compromise elevator safety when properly accounted for in the engineering of elevator suspension means, and associated components.

14. The presently proposed wire rope is Wuxi Universal steel rope Co LTD. 8 mm 8x19S+8x7+PP, with a manufacturer rated breaking strength of 35.8 kN, and an outer wire diameter of less than 0.56 mm, but not less than 0.51 mm. Cal/OSHA's safety engineer has scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and concluded it will provide for safety equivalent to ESO compliant 9.5 mm wire rope, with 0.56 mm outer wire (under conditions of use included within the below Decision and Order).

15. The applicant supplies tabulated data regarding the "Maximum Static Load on All Suspension Ropes." To obtain the tabulated data, the applicant uses the following formula derived from ASME A17.1 2004, section 2.20.3:

$$W = \frac{(S \times N)}{f}$$ *where:*

W = maximum static load imposed on all car ropes with the car and its rated load at any position in the hoistway

N = number of runs of rope under load. For 2:1 roping, N shall be two times the number of ropes used, etc.

S = manufacturer's rated breaking strength of one rope

f = the factor of safety from Table 2.20.3

16. ASME A17.1-2010 sections 2.20.3 and 2.20.4 utilize the same formula, but provide for use of

suspension ropes having a diameter smaller than 9.5 mm, under specified conditions, key among them being that use of ropes having a diameter of between 8 mm to 9.5 mm be engineered with a factor of safety of 12 or higher This is a higher minimum factor of safety than that proposed by Applicant but a minimum recommended by Cal/OSHA as a condition of variance necessary to the achieving of safety equivalence to 9.5 mm rope

17. Cal/OSHA is in accord with Applicant, in proposing as a condition of safety equivalence, that periodic physical examination of the wire ropes be performed to confirm the ropes continue to meet the criteria set out in the (Application attachment) *Inspector's Guide to 6 mm Diameter Governor and 8 mm Diameter Suspension Ropes for KONE Elevators*. Adherence to this condition will provide an additional assurance of safety equivalence, regarding smaller minimum diameter suspension rope outer wire performance over the course of its service life.
18. Cal/OSHA, by way of written submission to the record (Exhibit PD3), and stated position at hearing, is of the well informed opinion that grant of permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each Application being the subject of this proceeding, per above section A.1 table, is conditionally GRANTED, to the extent that each such Applicant shall be issued permanent variance from section 3141 incorporated ASME A17.1-2004, section 2.20.4, in as much as it precludes use of suspension rope of between 8 mm and 9.5 mm, or outer wire of between 0.51 mm and 0.56 mm in diameter, at such locations and numbers of Group IV KONE Monospace 300 elevators identified in each respective Application, subject to the following conditions:

1. The diameter of the hoisting steel ropes shall be not less than 8 mm (0.315 in) diameter and the roping ratio shall be two to one (2:1).
2. The outer wires of the suspension ropes shall be not less than 0.51 mm (0.02 in.) in diameter.
3. The number of suspension ropes shall be not fewer than those specified per hereby incorporated Decision and Order Appendix 1 Table.
4. The ropes shall be inspected annually for wire damage (rouge, valley break etc.) in accordance with "KONE, Inc. Inspector's Guide to 6 mm diameter and 8 mm diameter steel ropes for KONE Elevators" (per Application Exhibit B, or as thereafter amended by KONE subject to Cal/OSHA approval).
5. A rope inspection log shall be maintained and available in the elevator controller room / space at all times.
6. The elevator rated speed shall not exceed those speeds specified per the Decision and Order

Appendix 1 Table.

7. The maximum suspended load shall not exceed those weights (plus 5%) specified per the Decision and Order Appendix 1 Table.
8. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of the elevator equipment in the hoistway is required. If the service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
9. The installation shall meet the suspension wire rope factor of safety requirements of ASME A17.1-2013 section 2.20.3.
10. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing or testing the elevators shall be provided a copy of this variance decision.
11. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA and a “Permit to Operate” issued before the elevator is placed in service.
12. The Applicant shall comply with suspension means replacement reporting condition per hereby incorporated Decision and Order Appendix 2.
13. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
14. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau

Kelly Chau, Hearing Officer

APPENDIX 1

Variance Number	Elevator ID	Minimum Quantity of Ropes (per Condition 3)	Maximum Speed in Feet per Minute (per Condition 6)	Maximum Suspended Load (per Condition 7)
26-V-081	1	6	150	10,497

APPENDIX 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-082	California State University Northridge	CSUN Matador Success & Inclusion Center 18111 Nordhoff St. Northridge, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the

following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once

a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

   a. The width and thickness in millimeters or inches;

   b. The manufacturer's rated breaking strength in (kN) or (lbf);

   c. The name of the person or organization that installed the flat coated steel belts;

   d. The month and year the flat coated steel belts were installed;

   e. The month and year the flat coated steel belts were first shortened;

   f. The name or trademark of the manufacturer of the flat coated steel belts; and

   g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

   b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

   c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives

are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-083	BC Boulevard, LLC	2104 El Cajon Blvd., San Diego, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-084	Algarve Apartments Development, LP	1135 E. Santa Clara St. San Jose, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2O and/or Gen3 Peak with Variant Governor Rope and Sheaves & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-085	Addison Labs Foundation	Bakar ClimatEnginuity Hub 2121 Addison St., Berkeley, CA	3

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	**Description of Exhibit**

PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Applicable Regulation

1. The Applicants request variance from some or all of the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

   a. Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (to permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);

   b. Cartop Railing: 2.14.1.7.1 (to permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);

   c. Inspection transfer switch: 2.26.1.4.4(a) (to permit the inspection transfer switch to reside at a location other than the machine room);

   d. Seismic reset switch: 8.4.10.1.1(a)(2)(b) (to permit the seismic reset switch to reside at a location other than the machine room);

   e. Governor Rope Diameter: 2.18.5.1 (to permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.

   f. Pitch Diameter: 2.18.7.4 (to permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).

   g. Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

D. Findings of Fact

1. The Board incorporates by reference the findings stated in:

   a. Items 3 through 5.c, 5.e, and 5.f of the "Findings of Fact" section of the Proposed Decision adopted by the Board on February 19, 2009, in Permanent Variance No. 08-V-247;

   b. Item D.3 of the Proposed Decision adopted by the Board on July 16, 2009, in Permanent Variance No. 09-V-042;

   c. Item D.4 of the Proposed Decision adopted by the Board on September 16, 2010, in

Permanent Variance No. 10-V-029;

d. Items D.4, D.5, and D.7 of the Proposed Decision adopted by the Board on July 18, 2013, in Permanent Variance No. 12-V-146; and

e. Items D.4 and D.5 of the Proposed Decision adopted by the Board on September 25, 2014, in Permanent Variance No. 14-V-170.

f. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for OSHSB File No. 22-V-302 regarding medical emergency car dimensions.

2. Regarding requested variance in governor sheave diameter, and governor rope diameter, in variance from section 3141, incorporated ASME A17.1-2004, sections 2.18.7.4 and 2.18.5.1, respectively, the Board incorporates by reference the following previous findings of record: Items 8 through 12 of the Proposed Decision adopted by the Board on December 13, 2018, in Permanent Variance No. 18-V-425, and further substantiating bases per therein cited Permanent Variance Decisions of the Board.

3. The installation contracts for elevators, the subject of the permanent variance application, were signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders ("ESO").

4. Cal/OSHA safety engineers, by way of written submissions to the record (Exhibit PD-3), and positions stated at hearing, are of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

E. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

F. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, Applicant shall have permanent variances from section 3141 and from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- Suspension Means: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4, and 2.20.9.5.4 (To permit the use of the Elastomeric Coated Steel Belts proposed by the Applicant in lieu of circular steel suspension ropes.);
- Cartop Railing: 2.14.1.7.1 (To permit the use of the car top railing system proposed by the Applicant, where the railing system is located inset from the elevator car top perimeter);
- Inspection transfer switch: 2.26.1.4.4(a) (To permit the inspection transfer switch to reside at a location other than the machine room);

- Seismic reset switch: 8.4.10.1.1(a)(2)(b) (To permit the seismic reset switch to reside at a location other than the machine room);
- Governor Rope Diameter: 2.18.5.1 (To permit the use of the governor rope proposed by the Applicant, where the rope has a diameter of 8 mm [0.315 in.]); Note: A variance from the section above is not required. However, the Board has included a variance from this code requirement in similar previous variances.
- Pitch Diameter: 2.18.7.4 (To permit the use of the speed governor system, proposed by the Applicant, where the rope sheave pitch diameter is less than what is required by the Elevator Safety Orders).
- Minimum Inside Car Platform Dimensions: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

The variance shall be subject to, and limited by, the following additional conditions:

1. Each elevator subject to this variance shall comply with all applicable Group IV Elevator Safety Orders and with all ASME provisions made applicable by those Group IV Elevator Safety Orders, except those from which variances are granted, as set forth in the prefatory portion of this Decision and Order.
2. The suspension system shall comply with the following:
    a. The coated steel belt shall have a factor of safety at least equal to the factor of safety that ASME A17.1-2004, section 2.20.3, would require for wire ropes if the elevator were suspended by wire ropes rather than the coated steel belt.
    b. Steel-coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.
    g. The installation of belts and connections shall be in conformance with the manufacturer's specifications, which shall be provided to Cal/OSHA.
3. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, a copy of which is attached hereto as Addendum 1 and incorporated herein by this reference.
4. The Applicant shall not utilize each elevator unless the manufacturer has written procedures for

the installation, maintenance, inspection, and testing of the belts and monitoring device, and criteria for belt replacement, and shall make those procedures and criteria available to Cal/OSHA upon request.

5. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:
    a. The width and thickness in millimeters or inches;
    b. The manufacturer's rated breaking strength in (kN) or (lbf);
    c. The name of the person who, or organization that, installed the flat coated steel belts;
    d. The month and year the flat coated steel belts were installed;
    e. The month and year the flat coated steel belts were first shortened;
    f. The name or trademark of the manufacturer of the flat coated steel belts;
    g. Lubrication information.

6. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:
    a. The number of belts,
    b. The belt width and thickness in millimeters or inches, and
    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

7. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
8. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a), does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. When the inspection and test control panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
10. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.
11. If there is an inset car top railing:
    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs, or inspections. The Applicant shall not permit anyone to stand on or climb over the car top railing.
    b. The distance that the car top railing may be inset from the car top perimeter shall be limited to no more than 6 inches.

c. All exposed areas of the car top outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or the car top outside the railing, shall be clearly marked. The markings shall consist of alternating four-inch diagonal red and white stripes.

e. The Applicant shall provide, on each inset railing, durable signs with lettering not less than ½ inch on a contrasting background. Each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top, and not from the required bevel).

11. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 8 mm (0.315 in.) diameter steel governor rope with 8-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 240 mm (9.45 in.).

12. Each elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen2(O) and/or Gen3 Peak elevator system the Applicant proposes to use, in accordance with the written procedures and criteria required by Condition No. 4 and the terms of this permanent variance.

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21- inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5 inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

15. Cal/OSHA shall be notified when each elevator is ready for inspection. Each elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before each elevator is placed in service.
16. The Applicant shall be subject to the suspension means replacement reporting condition stated in Addendum 2; that condition is incorporated herein by this reference.
17. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way that the Applicant was required to notify them of the application for permanent variance, per sections 411.2 and 411.3.
18. This Decision and Order shall remain in effect unless duly modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-086	Kooser Apartments, LP	1371 Kooser Rd., San Jose, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-091	Avalon Mission Valley, LP	AVB Mission Valley - SDSU 9400 Sycamore St., San Diego, CA	7

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the

following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once

a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

   a. The width and thickness in millimeters or inches;

   b. The manufacturer's rated breaking strength in (kN) or (lbf);

   c. The name of the person or organization that installed the flat coated steel belts;

   d. The month and year the flat coated steel belts were installed;

   e. The month and year the flat coated steel belts were first shortened;

   f. The name or trademark of the manufacturer of the flat coated steel belts; and

   g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

   b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

   c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives

are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-096	Donner Field Senior L.P.	Donner Field B5 3311 45th St., Sacramento, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the

subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance

record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

   a. The width and thickness in millimeters or inches;

   b. The manufacturer's rated breaking strength in (kN) or (lbf);

   c. The name of the person or organization that installed the flat coated steel belts;

   d. The month and year the flat coated steel belts were installed;

   e. The month and year the flat coated steel belts were first shortened;

   f. The name or trademark of the manufacturer of the flat coated steel belts; and

   g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

   b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

   c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives

are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Garaventa GVL-168 (SW or EN) Vertical Platform Lift

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-097	Southwestern Community College District	900 Otay Lakes Rd., Chula Vista, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Craig Fiore, with McKinley Elevator Corporation appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

Based on the record of this proceeding, and officially noticed Board records per stipulation of Applicant and Cal/OSHA—inclusive of permanent variance file records of sworn testimony, findings and decisions in OSHSB File No. 26-V-097, the Board finds the following:

1. The Applicant proposes to install 1 vertical platform (wheelchair) lift at a location having the address of:

   900 Otay Lakes Rd.,
   Chula Vista, CA

2. Applicant requests variance solely from section 3142(a) and section 3142.1.
3. The subject vertical lift is proposed to be a Garaventa GVL-168 (SW or EN) Vertical Platform Lift, with a vertical travel range of approximately 168 inches. That range of travel exceeds the 12 foot maximum vertical rise allowed by ASME A18.1-2003, section 2.7.1—the standard in force at the time of this Decision.
4. Cal/OSHA's evaluation in this matter, states that the more recent consensus code, ASME A18.1-2005, allows for vertical platform lifts to have a travel not exceeding 14 feet (168 in.).
5. Permanent variances regarding the extended travel of vertical platform lifts, of similar configuration to that of the subject proposed model, have been previously granted, without subsequent safety problems attributable to such variance being reported. (e.g. Permanent Variance Nos. 13-V-260, 15-V-097, 15-V-297, 18-V-069).
6. It is the opinion of Cal/OSHA that equivalent safety will be achieved upon grant of presently requested permanent variance, subject to conditions materially equivalent to those imposed by Board adopted Decision and Order, In Matters of Application for Permanent Variance Nos. 15-V-297, and 18-V-069.
7. With respect to the equivalence or superior of safety, conditions and limitations of the below Decision and Order are in material conformity with those of previously issued Permanent Variance Nos. 15-V-297, and 18-V-069.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

OSHSB File No. 26-V-097, is conditionally GRANTED to the limited extent, upon the Board's adoption of this Proposed Decision, Southwestern Community College District, shall have permanent variance from sections 3142(a) and 3142.1 incorporated ASME A18.1-2003, section 2.7.1, inasmuch as each restricts the vertical rise of a wheelchair lift to a maximum of 12 feet, with respect to 1 Garaventa GVL-168 (SW or EN) Vertical Platform Lift, subject to the following further conditions and limitations:

1. This lift may travel up to 168 inches, unless the manufacturer's instructions provide for a lesser vertical travel limit, or lesser total elevation change, in which case, travel shall be limited to the lesser limit or elevation change.
2. The wheelchair lift shall be installed and operated in accordance with the manufacturer's instructions, unless the provisions of this variance or applicable provisions of the law provide or require otherwise.
3. Durable signs with lettering not less than 5/16 inch on a contrasting background shall be permanently and conspicuously posted inside the car and at all landings indicating that the lift is for the exclusive use of persons with physical impairments and that the lift is not to be used to transport material or equipment. The use of the lift shall be limited in accordance with these signs.
4. A maintenance contract shall be executed between the owner/operator and a Certified Qualified Conveyance Company (CQCC). The contract shall stipulate that the routine preventive maintenance required by section 3094.5(a)(1) shall be performed at least quarterly and shall include but not be limited to:
    a. Platform driving means examination;
    b. Platform examination;
    c. Suspension means examination;
    d. Platform alignment;
    e. Vibration examination;
    f. Door/gate electrical; and
    g. Mechanical lock examination.
5. The lift shall be tested annually for proper operation under rated load conditions. Cal/OSHA's Elevator Unit District Office shall be provided written notification in advance of the test, and the test shall include a check of car or platform safety device.
6. The lift shall be shut down immediately if the lift experiences unusual noise and vibration, and the Applicant shall notify the CQCC immediately. The lift shall only be restarted by the CQCC.
7. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.
8. Service logs including, but not limited to, the device shutdown(s) shall be kept in the maintenance office and shall be available to Cal/OSHA. The shutdown information shall contain the date of the shutdown, cause of the shutdown, and the action taken to correct the shutdown.
9. The Applicant shall provide training on the safe operation of the lift in accordance with section 3203. Such training shall be conducted annually for all employees using or who will be assisting

others in using the lift. The Applicant shall notify Cal/OSHA in writing that training has been conducted. A copy of the training manual, and documentation identifying the trainer and attendees, shall be maintained for at least 1 year and provided to Cal/OSHA upon request.

10. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.
11. Cal/OSHA shall be notified when the lift is ready for inspection, and the lift shall be inspected by Cal/OSHA and a Permit to Operate shall be issued before the lift is put into service.
12. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
13. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed per the Board's procedural regulations.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding: KONE Medical Emergency Elevator Car Dimensions	Permanent Variance No: See section A.1 table below **PROPOSED DECISION** Hearing Date: March 25, 2026 Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-098	Etiwanda School District	6925 Etiwanda Ave., Etiwanda, CA	N/A
26-V-110	Wakeland Alma LP	3520 E 1st Street Los Angeles, CA	N/A
26-V-111	Robert Bosch Semiconductor LLC	7501 Foothills Blvd. Roseville, CA	N/A

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2025 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Fuei Saetern, with KONE Inc., appeared on behalf of each Applicant; and Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and

Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact and Applicable Regulations

1. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:

> (1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:
>
> ...
>
> (C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, "Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e)."

2. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:
The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

1. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

   > The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

2. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: March 30, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-101	East Bay Asian Local Development Corporation	3431 San Pablo Ave., Oakland, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the

subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance

record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

   a. The width and thickness in millimeters or inches;

   b. The manufacturer's rated breaking strength in (kN) or (lbf);

   c. The name of the person or organization that installed the flat coated steel belts;

   d. The month and year the flat coated steel belts were installed;

   e. The month and year the flat coated steel belts were first shortened;

   f. The name or trademark of the manufacturer of the flat coated steel belts; and

   g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

   b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

   c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives

are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-102	US 216 Pico Owner LLC	234 Pico Blvd., Santa Monica, CA	3

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-103	Aztec Shops, Ltd.	SDSU Evolve - Student Housing, University Towers East 5555 Montezuma Rd., San Diego, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit

PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision,

each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these “suspension means” provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.

e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

a. The width and thickness in millimeters or inches;

b. The manufacturer's rated breaking strength in (kN) or (lbf);

c. The name of the person or organization that installed the flat coated steel belts;

d. The month and year the flat coated steel belts were installed;

e. The month and year the flat coated steel belts were first shortened;

f. The name or trademark of the manufacturer of the flat coated steel belts; and

g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

a. The number of belts;

b. The belt width and thickness in millimeters or inches; and

c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the

car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at

least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-105	Studios on Fig LLC	7408 S. Figueroa St. Los Angeles, CA	2

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-113	AvalonBay Communities, Inc.	5601 Owens Dr. Pleasanton, CA	3

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Medical Emergency Elevator Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-114	Cancer Support Community, San Francisco Bay Area	3939 Mt Diablo Blvd. Lafayette, CA	

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact and Applicable Regulations

1. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:

> (1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:
>
> ...
>
> (C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, "Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e)."

2. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:
The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

1. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

   > The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

2. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-115	Chung Soonkyo, LLC	543 N. Oxford Ave. Los Angeles, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Medical Emergency Elevator Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-117	Claremont McKenna College	CMC Sports Bowl Garage 725 N. Claremont Blvd. Claremont, CA	

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact and Applicable Regulations

1. Applicant requests a permanent variance from section 3041, subdivision (e)(1)(C), which states:

> (1) All buildings and structures constructed after the effective date of this order that are provided with one or more passenger elevators shall be provided with not less than one passenger elevator designed and designated to accommodate the loading and transport of an ambulance gurney or stretcher maximum size 22 ½ in. (572 mm) by 75 in. (1.90 m) in its horizontal position and arranged to serve all landings in conformance with the following:
>
> ...
>
> (C) The elevator car shall have a minimum inside car platform of 80 in. (2.03 m) wide by 51 in. (1.30 m) deep.

The intent of this language is to ensure that there is enough space to accommodate the access and egress of a gurney and medical personnel inside of a medical service elevator.

This standard is made applicable to Group IV by section 3141.7, subdivision (b), which reads, "Elevators utilized to provide medical emergency service shall comply with Group II, section 3041(e)."

2. Applicant proposes to comply with the requirements of the 2019 California Building Code, section 3002.4.1a in the design of its medical emergency service elevator. That section requires:
The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

The purpose of this requirement is to ensure that an elevator designated for emergency medical service will accommodate a minimum of two emergency personnel with an ambulance gurney or stretcher.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A.1 table shall have permanent variances from sections 3041, subdivision (e)(1)(C) and 3141.7, subdivision (b) subject of the following conditions:

1. All medical emergency service elevator(s) shall comply with the requirements of the 2019 California Building Code section 3002.4.1a:

   > The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners] in the horizontal, open position.

2. All medical emergency service elevator(s) shall be identified in the building construction documents in accordance with the 2019 California Building Code, section 3002.4a.
3. Dimensional drawings and other information necessary to demonstrate compliance with the conditions of this permanent variance decision shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).
4. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing the elevators shall be provided a copy of this variance decision.
5. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and all applicable requirements met, including conditions of this permanent variance, prior to a Permit to Operate the elevator being issued. The elevator shall not be placed in service prior to the Permit to Operate being issued by Cal/OSHA.
6. Applicant shall notify its employees and their authorized representative, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications pursuant to sections 411.2 and 411.3.
7. This Decision and Order shall remain in effect unless duly modified or revoked upon application by Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with then in effect administrative procedures of the Board.

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-118	Everwin Hi Point LLC	1532 S Hi Point St. Los Angeles, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table
PD2	OSHSB Notice of Hearing

PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

    a. The width and thickness in millimeters or inches;

    b. The manufacturer's rated breaking strength in (kN) or (lbf);

    c. The name of the person or organization that installed the flat coated steel belts;

    d. The month and year the flat coated steel belts were installed;

    e. The month and year the flat coated steel belts were first shortened;

    f. The name or trademark of the manufacturer of the flat coated steel belts; and

    g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

    a. The number of belts;

    b. The belt width and thickness in millimeters or inches; and

    c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

    a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

    b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

    c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

    d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

    e. The applicant shall provide durable signs with lettering not less than ½ inch on a

contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon

request.

12. The speed governor rope and sheaves shall comply with the following:
    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.
    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.
    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:
    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.
    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.
15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.
16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.
17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.
18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives are to be notified of docketed permanent variance applications.
19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in

accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

BEFORE THE
OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
DEPARTMENT OF INDUSTRIAL RELATIONS
STATE OF CALIFORNIA

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3 Core Elevator & Medical Emergency Car Dimensions

Permanent Variance No: See section A.1 table below

PROPOSED DECISION

Hearing Date: March 25, 2026
Location: Zoom

A. Subject Matter

1. The applicants ("Applicants") below have applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations. Unless otherwise noted, all references in this matter are to the California Code of Regulations, title 8. The variance applications are as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Conveyances
26-V-119	Petaluma Corona Station, LP	890 North McDowell Blvd. Petaluma, CA	1

2. This proceeding is conducted in accordance with Labor Code section 143 and section 401, et seq. of the Occupational Safety and Health Standards Board's ("Board" or "OSHSB") procedural regulations.

B. Procedural

1. This hearing was held on March 25, 2026 via videoconference by the Board with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit as a basis of proposed decision to be advanced to the Board for its consideration.

2. At the hearing, Dan Leacox, with Leacox & Associates, and Wolter Geesink with Otis Elevator Company, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

3. Documentary and oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

Exhibit Number	Description of Exhibit
PD1	Application(s) for Permanent Variance per section A.1 table

PD2	OSHSB Notice of Hearing
PD3	Cal/OSHA Review of Variance Application
PD4	Review Draft-1 Proposed Decision

4. Official notice is taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On March 25, 2026, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S/Gen3 Core elevators at the locations and in the numbers stated in the above section A.1 table. Applicant may utilize the variance from minimum inside car platform dimensions for other elevators designated for emergency medical service at the same variance location.
2. The installation contracts for these elevators were or will be signed on or after May 1, 2008, making the elevators subject to the Group IV Elevator Safety Orders.
3. The Board incorporates by reference the relevant findings in previous Board decisions:
    a. Items D.3 through D.9 of the Proposed Decision adopted by the Board on July 18, 2013 for Permanent Variance No. 12-V-093;
    b. Item D.4 of the Proposed Decision adopted by the Board on September 25, 2014 for Permanent Variance No. 14-V-206;
    c. Item B of the Proposed Decision adopted by the Board on September 15, 2022 for Permanent Variance No. 22-V-302 regarding medical emergency car dimensions; and
    d. Items C and D of the Proposed Decision adopted by the Board on June 20, 2024 for Permanent Variance No. 24-V-193 regarding the Gen3 Core elevator equivalent safety.
4. Cal/OSHA, by way of written submissions to the record (Exhibit PD-3), and position stated at hearing, is of the well informed opinion that grant of requested permanent variance, as limited and conditioned per the below Decision and Order will provide employment, places of employment, and subject conveyances, as safe and healthful as would prevail given non-variant conformity with the Elevator Safety Order requirements from which variance has been requested.

D. Conclusive Findings

A preponderance of the evidence supports the finding that each Applicants' proposal, subject to all conditions and limitations set forth in the below Decision and Order, will provide equivalent safety and health to that which would prevail upon full compliance with the requirements of the Elevator Safety Orders from which variance is being sought.

E. Decision and Order

Each permanent variance application the subject of this proceeding is conditionally GRANTED as specified below, and to the extent, as of the date the Board adopts this Proposed Decision, each Applicant listed in the above section A table shall have permanent variances from the following sections of ASME A17.1-2004 that section 3141 makes applicable to the elevators the

subject of those applications:

- **Car top railing**: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- **Speed governor over-speed switch**: 2.18.4.2.5(a) (to permit the use of the speed reducing system proposed by the Applicants, where the speed reducing switch resides in the controller algorithms, rather than on the governor, with the necessary speed input supplied by the main encoder signal from the motor);
- **Governor rope diameter**: 2.18.5.1 (to allow the use of reduced diameter governor rope);
- **Pitch diameter**: 2.18.7.4 (to permit the use of the speed-reducing system proposed by the Applicant, where the rope sheave pitch diameter is not less than 180 mm [7.1 in.]);
- **Suspension means**: 2.20.1, 2.20.2.1, 2.20.2.2(a), 2.20.2.2(f), 2.20.3, 2.20.4, 2.20.9.3.4 and 2.20.9.5.4—the variances from these "suspension means" provisions to permit the use of Otis Gen2 flat coated steel suspension belts in lieu of conventional steel suspension ropes;
- **Inspection transfer switch**: 2.26.1.4.4(a) (to allow the inspection transfer switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room); and
- **Seismic reset switch**: 8.4.10.1.1(a)(2)(b) (to allow the seismic reset switch to reside at a location other than a machine room, if, in fact, it does not reside in the machine room).
- **Minimum Inside Car Platform Dimensions**: 3041(e)(1)(C) and 3141.7(b) (to comply with the performance-based requirements of the 2019 California Building Code section 3002.4.1a)

These variances apply to the locations and numbers of elevators stated in the section A table (so long as the elevators are Gen3 Edge/Gen2S Group and Gen3 Core & Medical Emergency Elevator Car Dimensions (Group IV) that are designed, equipped, and installed in accordance with, and are otherwise consistent with, and are subject to the following conditions:

1. The suspension system shall comply with the following:
    a. The coated steel belt and connections shall have factors of safety equal to those permitted for use by section 3141 [ASME A17.1-2004, section 2.20.3] on wire rope suspended elevators.
    b. Steel coated belts that have been installed and used on another installation shall not be reused.
    c. The coated steel belt shall be fitted with a monitoring device which has been accepted by Cal/OSHA and which will automatically stop the car if the residual strength of any single belt drops below 60 percent. If the residual strength of any single belt drops below 60 percent, the device shall prevent the elevator from restarting after a normal stop at a landing.
    d. Upon initial inspection, the readings from the monitoring device shall be documented and submitted to Cal/OSHA.
    e. A successful test of the monitoring device's functionality shall be conducted at least once a year (the record of the annual test of the monitoring device shall be a maintenance

record subject to ASME A17.1-2004, section 8.6.1.4).

f. The coated steel belts used shall be accepted by Cal/OSHA.

2. With respect to each elevator subject to this variance, the applicant shall comply with Cal/OSHA Circular Letter E-10-04, the substance of which is attached hereto as Addendum 1 and incorporated herein by this reference.

3. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the installation, maintenance, inspection, and testing of the belts and monitoring device and criteria for belt replacement, and the applicant shall make those procedures and criteria available to Cal/OSHA upon request.

4. The flat coated steel belts shall be provided with a metal data tag that is securely attached to one of those belts. This data tag shall bear the following flat steel coated belt data:

   a. The width and thickness in millimeters or inches;

   b. The manufacturer's rated breaking strength in (kN) or (lbf);

   c. The name of the person or organization that installed the flat coated steel belts;

   d. The month and year the flat coated steel belts were installed;

   e. The month and year the flat coated steel belts were first shortened;

   f. The name or trademark of the manufacturer of the flat coated steel belts; and

   g. Lubrication information.

5. There shall be a crosshead data plate of the sort required by section 2.20.2.1, and that plate shall bear the following flat steel coated belt data:

   a. The number of belts;

   b. The belt width and thickness in millimeters or inches; and

   c. The manufacturer's rated breaking strength per belt in (kN) or (lbf).

6. The opening to the hoistway shall be effectively barricaded when car top inspection, maintenance, servicing, or testing of elevator equipment in the hoistway is required. If service personnel must leave the area for any reason, the hoistway and control room doors shall be closed.

7. If there is an inset car top railing:

   a. Serviceable equipment shall be positioned so that mechanics and inspectors do not have to climb on railings to perform adjustment, maintenance, repairs or inspections. The applicant shall not permit anyone to stand on or climb over the car top railing.

   b. The distance that the car top railing may be inset shall be limited to no more than 6 inches.

   c. All exposed areas outside the car top railing shall preclude standing or placing objects or persons which may fall and shall be beveled from the mid- or top rail to the outside of the car top.

d. The top of the beveled area and/or car top outside the railing, shall be clearly marked. The markings shall consist of alternating 4 inch diagonal red and white stripes.

e. The applicant shall provide durable signs with lettering not less than ½ inch on a contrasting background on each inset railing; each sign shall state:

CAUTION
DO NOT STAND ON OR CLIMB OVER RAILING

f. The Group IV requirements for car top clearances shall be maintained (car top clearances outside the railing shall be measured from the car top and not from the required bevel).

8. If the seismic reset switch does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
9. If the inspection transfer switch required by ASME A17.1, rule 2.26.1.4.4(a) does not reside in a machine room, that switch shall not reside in the elevator hoistway. The switch shall reside in the inspection and test control panel located in one upper floor hoistway door jamb or in the control space (outside the hoistway) used by the motion controller.
10. When the inspection and testing panel is located in the hoistway door jamb, the inspection and test control panel shall be openable only by use of a Security Group I restricted key.
11. The governor speed-reducing switch function shall comply with the following:
    a. It shall be used only with direct drive machines; i.e., no gear reduction is permitted between the drive motor and the suspension means.
    b. The velocity encoder shall be coupled to the driving machine motor shaft. The “C” channel of the encoder shall be utilized for velocity measurements required by the speed reducing system. The signal from “C” channel of the encoder shall be verified with the “A” and “B” channels for failure. If a failure is detected then an emergency stop shall be initiated.
    c. Control system parameters utilized in the speed-reducing system shall be held in non-volatile memory.
    d. It shall be used in conjunction with approved car-mounted speed governors only.
    e. It shall be used in conjunction with an effective traction monitoring system that detects a loss of traction between the driving sheave and the suspension means. If a loss of traction is detected, then an emergency stop shall be initiated.
    f. A successful test of the speed-reducing switch system’s functionality shall be conducted at least once a year (the record of the annual test of the speed-reducing switch system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).
    g. A successful test of the traction monitoring system’s functionality shall be conducted at least once a year (the record of the annual test of the traction monitoring system shall be a maintenance record subject to ASME A17.1-2004, section 8.6.1.4).

h. The Applicant shall not utilize the elevator unless the manufacturer has written procedures for the maintenance, inspection, and testing of the speed-reducing switch and traction monitoring systems. The Applicant shall make the procedures available to Cal/OSHA upon request.

12. The speed governor rope and sheaves shall comply with the following:

    a. The governor shall be used in conjunction with a 6 mm (0.25 in.) diameter steel governor rope with 6-strand, regular lay construction.

    b. The governor rope shall have a factor of safety of 8 or greater as related to the strength necessary to activate the safety.

    c. The governor sheaves shall have a pitch diameter of not less than 180 mm (7.1 in.).

13. All medical emergency service elevators shall comply with the following:

    a. The requirements of the 2019 California Building Code (CBC), section 3002.4.1a;

    The medical emergency service elevator shall accommodate the loading and transport of two emergency personnel, each requiring a minimum clear 21-inch (533 mm) diameter circular area and an ambulance gurney or stretcher [minimum size 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5inch (127 mm) radius corners] in the horizontal, open position.

    b. All medical emergency service elevators shall be identified in the building construction documents in accordance with the 2019 CBC, section 3002.4a.

    c. Dimensional drawings and other information necessary to demonstrate compliance with these conditions shall be provided to Cal/OSHA, at the time of inspection, for all medical emergency service elevator(s).

14. The elevator shall be serviced, maintained, adjusted, tested, and inspected only by Certified Competent Conveyance Mechanics who have been trained to, and are competent to, perform those tasks on the Gen3 Edge/Gen2S/Gen3 Core elevator system in accordance with the written procedures and criteria required by Condition No. 3 and in accordance with the terms of this permanent variance.

15. Any Certified Qualified Conveyance Company performing inspections, maintenance, servicing, or testing of the elevators shall be provided a copy of this variance decision.

16. Cal/OSHA shall be notified when the elevator is ready for inspection. The elevator shall be inspected by Cal/OSHA, and a Permit to Operate shall be issued before the elevator is placed in service.

17. The Applicant shall be subject to the Suspension Means – Replacement Reporting Condition stated in Addendum 2, as hereby incorporated by this reference.

18. The Applicant shall notify its employees or their authorized representative(s), or both, of this order in the same way and to the same extent that employees and authorized representatives

are to be notified of docketed permanent variance applications.

19. This Decision and Order shall remain in effect unless modified or revoked upon application by the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in accordance with the Board's procedural regulations at section 426, subdivision (b).

Pursuant to section 426(b), the Proposed Decision is submitted to the Board for consideration of adoption.

DATED: April 1, 2026

Kelly Chau, Hearing Officer

ADDENDUM 1

October 6, 2010

CIRCULAR LETTER E-10-04

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Coated Steel Belt Monitoring

The Elevator Safety Orders require routine inspection of the suspension means of an elevator to assure its safe operation.

The California Labor Code section 7318 allows Cal/OSHA to promulgate special safety orders in the absence of regulation.

As it is not possible to see the steel cable suspension means of a Coated Steel Belt, a monitoring device which has been accepted by Cal/OSHA is required on all Coated Steel Belts which will automatically stop the car if the residual strength of any belt drops below 60%. The Device shall prevent the elevator from restarting after a normal stop at a landing.

The monitoring device must be properly installed and functional. A functioning device may be removed only after a determination has been made that the residual strength of each belt exceeds 60%. These findings and the date of removal are to be conspicuously documented in the elevator machine room. The removed device must be replaced or returned to proper service within 30 days.

If upon routine inspection, the monitoring device is found to be in a non-functional state, the date and findings are to be conspicuously documented in the elevator machine room.

If upon inspection by Cal/OSHA, the monitoring device is found to be non-functional or removed, and the required documentation is not in place, the elevator will be removed from service.

If the device is removed to facilitate belt replacement, it must be properly installed and functional before the elevator is returned to service.

A successful test of the device’s functionality shall be conducted once a year.

This circular does not preempt Cal/OSHA from adopting regulations in the future, which may address the monitoring of Coated Steel Belts or any other suspension means.

This circular does not create an obligation on the part of Cal/OSHA to permit new conveyances utilizing Coated Steel Belts.

Debra Tudor
Principal Engineer
Cal/OSHA-Elevator Unit HQS

ADDENDUM 2

Suspension Means - Replacement Reporting Condition

Beginning on the date the Board adopts this Proposed Decision and continuing for a period of two years, the Applicant shall report to Cal/OSHA within 30 days any and all replacement activity performed on the elevator(s) pursuant to the requirements of ASME A17.1-2004, section 8.6.3 involving the suspension means or suspension means fastenings.

Further:

1. A separate report for each elevator shall be submitted, in a manner acceptable to Cal/OSHA, to the following address (or to such other address as Cal/OSHA might specify in the future): Cal/OSHA Elevator Unit, 2 MacArthur Place, Suite 700, Santa Ana, CA 92707, Attn: Engineering section.
2. Each such report shall contain, but not necessarily be limited to, the following information:
    a. The State-issued conveyance number, complete address, and Permanent Variance number that identifies the permanent variance.
    b. The business name, complete address, telephone number, and contact person of the elevator responsible party (presumably the Applicant or the subsequent holder of this variance).
    c. The business name, complete address, telephone number, and Certified Qualified Conveyance Company (CQCC) certification number of the firm performing the replacement work.
    d. The name (as listed on certification), Certified Competent Conveyance Mechanic (CCCM) certification number, certification expiration date, and signature of each CCCM performing the replacement work.
    e. The date and time the elevator was removed from normal service for suspension replacement, the date and time the replacement work commenced, the date and time the replacement work was completed, and the date and time the elevator was returned to normal service.
    f. A detailed description of, and clear color photographs depicting, (1) all the conditions that existed in the suspension components requiring their replacement and (2) any conditions that existed to cause damage or distress to the suspension components being replaced.
    g. A detailed list of all elevator components adjusted, repaired, or replaced in conjunction with the suspension component replacement.
    h. All information provided on the crosshead data plate per ASME A17.1-2004, section 2.20.2.1, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.
    i. For the suspension means being replaced, all information provided on the data tag required per ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is

modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

j. For the replacement suspension means, all information provided on the data tag required by ASME A17.1-2004, section 2.20.2.2, unless that ASME requirement is modified by the conditions of a variance that pertains to the elevator in question, in which case, the information to be reported shall be the information required by the ASME provision as modified by the variance.

k. Any other information requested by Cal/OSHA regarding the replacement of the suspension means or fastenings.

3. In addition to the submission of the report to Cal/OSHA, the findings of any testing, failure analysis, or other engineering evaluations performed on any portion of the replaced suspension components, or other elevator components replaced in conjunction therewith, shall be submitted to Cal/OSHA referencing the information contained in item 2a above.

Occupational Safety and Health Standards Board

Business Meeting
Legislative Update

Prepared by the Department of Industrial Relations
Available on the DIR web page: Standards Board (OSHSB) 2026 Meeting Schedule

AB-2137 Occupational safety and health: fabrication activities: slab solid surface products. (2025-2026) – NEW

(Chen)

Date	Action
03/23/26	Re-referred to Com. on L. & E.
03/19/26	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/19/26	Referred to Com. on L. & E.
02/19/26	From printer. May be heard in committee March 21.
02/18/26	Read first time. To print.

Summary:

AB 2137, as amended, Chen. Occupational safety and health. health: fabrication activities: slab solid surface products.

Existing law establishes the Occupational Safety and Health Standards Board within the Department of Industrial Relations to adopt occupational safety and health standards for the state, including standards dealing with exposure to harmful airborne contaminants. Existing law requires the Division of Occupational Safety and Health within the department to enforce all occupational safety and health standards, as specified.

Existing law imposes restrictions on specified high-exposure trigger tasks on artificial stone, as those terms are defined. Specifically, a person or entity engaged in high-exposure trigger tasks is prohibited from using dry methods, and is required to use effective wet methods when engaging in any high-exposure trigger tasks. Existing law requires the owner or operator of a fabrication shop, or any individual who will employ another individual to perform high-exposure trigger tasks in a fabrication shop, to ensure that an employee who will perform high-exposure tasks receives specified training and to annually attest to the division that these employees have been trained. Existing law requires the division to enforce these provisions by issuing a citation alleging a violation and a notice of civil penalty.

This bill would require, on or before January 1, 2028, the department to develop an application and certification process for fabrication shops to lawfully engage in slab solid surface product fabrication activities. The bill would authorize fabrication shops to engage in those fabrication activities during the pendency of the application development and certification process. The bill would require the department to develop an initial deposit process for fabrication shops to, during the pendency of the application development and certification process, submit a deposit fee for the application and certification subject to specified requirements, including that the deposit amount goes towards the initial certification fee collected by the department.

This bill would require, beginning July 1, 2028, the department to grant a 3-year certification to a fabrication shop that demonstrates satisfaction of specified criteria involving workplace safety conditions and precautions, and would authorize certification renewal, as specified. Among other conditions, the bill would establish certain regulatory fees in amounts to be determined and adjusted by the department, as specified, for the certification and renewal thereof. The bill would authorize the department to suspend or revoke a certification in certain cases, including for gross negligence, as specified. The bill would require the department, in consultation with the division and the State Department of Public Health, to track and keep a record of specified information on fabrication shops, including the number of citations issued to any of the fabrication shops for failure to comply with any temporary or future standards relating to respirable crystalline silica, as specified.

This bill would prohibit a person or entity, or an employee thereof, from engaging in fabrication activities, as defined, on slab solid surface products unless they conduct the fabrication activities at a fabrication shop that has submitted a valid initial deposit to the department, or, after July 1, 2028, has submitted an application for initial certification or renewal and the application is pending or has a valid certification, as provided. The bill would require the division to enforce this prohibition by issuing a citation alleging a violation and a notice of civil penalty.

This bill would prohibit, beginning July 1, 2028, a person from supplying a slab solid surface product directly to a person, entity, or business engaged in fabrication activities on those products if the person, entity, or business does not have a valid, or pending application for, certification. The bill would require a person that supplies a slab solid surface product to a person, entity, or business engaged in fabrication activities on those products to verify that the person, entity, or business has a certification, or a pending application for certification, as specified. The bill would require a person that supplies a slab solid surface product to a person, entity, or business that is not engaged in fabrication activities to rely on written certification issued under penalty of perjury that, among other things, they will not directly engage in fabrication activities with the product without a certification. By expanding the scope of the crime of perjury, the bill would impose a state-mandated local program. The bill would require a person that seeks services that require fabrication activities and enters into a contract with a person, entity, or business to undertake fabrication activities to verify that the person, entity, or business has a valid certificate before engaging with and providing slab solid surface products to that person, entity, or business. The bill would require the division to enforce these requirements by issuing a citation alleging a violation and a notice of civil penalty.

The bill would establish the Slab Fabrication Activity Account in the Occupational Safety and Health Fund in the State Treasury, and would require all fees, penalties, or other moneys collected by the department under the bill and under the above-described provisions relating to high-exposure trigger tasks to be deposited into the account. The bill would authorize moneys in the account to be expended by the department, upon appropriation by the Legislature, for the purposes of administering the bill and other provisions related to silicosis risk exposure in fabrication shops.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Board staff is monitoring for potential impacts on Board operations.

AB 2321, as amended, Ortega. Bureau of Investigations. (2025-2026) – NEW

Date	Action
03/17/26	Re-referred to Com. on L. & E.
03/16/26	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/16/26	Referred to Com. on L. & E.
02/20/26	From printer. May be heard in committee March 22.
02/19/26	Read first time. To print.

Summary:

AB 2321, as amended, Ortega. Bureau of Investigations.

Existing law makes the Bureau of Investigations within the Division of Occupational Safety and Health responsible for directing accident investigations involving violations of laws, standards, and orders in which there is a serious injury, death, or request for prosecution by a division representative, reviewing inspection reports involving a serious violation if there have been serious injuries or a serious exposure, and preparing cases for the purpose of prosecution, as specified. Existing law requires the bureau to refer the results of investigations it is required to conduct to the appropriate prosecuting authority having jurisdiction for appropriate action unless it determines that there is legally insufficient evidence of a violation of the law.

This bill would require the bureau to establish written policies and procedures for the process of reviewing cases and whether to investigate or refer them for prosecution. The bill would, upon appropriation of sufficient funding, remove the bureau’s investigation responsibility for violations in which there is a death or permanent total disability, as defined, and would instead require the appropriate prosecuting authority to be responsible for directing those investigations, as specified. The bill would require the division to notify the prosecuting authority and provide information to the authority, as specified. The bill would authorize the Occupational Safety and Health Fund or the Labor and Workforce Development Fund to be expended by the prosecuting authorities, upon appropriation, for the support of these investigatory activities. By imposing new responsibilities on prosecuting authorities, this bill would impose a state-mandated local program.

Existing law requires the bureau to submit an annual report to the division on its activities.

This bill would additionally require the report to be submitted to the Legislature and to include information relating to job classifications and vacancies within the bureau.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the

statutory provisions noted above.

Board staff is monitoring for potential impacts on Board operations.

AB-2499 Corrections: prison conditions. (2025-2026) – NO UPDATE

(Gipson)

Date	Action
03/25/26	From committee: Do pass and re-refer to Com. on L. & E. (Ayes 7. Noes 0.) (March 24). Re-referred to Com. on L. & E.
03/25/26	Coauthors revised.
03/09/26	Referred to Coms. on PUB. S. and L. & E.
02/21/26	From printer. May be heard in committee March 23.
02/20/26	Read first time. To print.

Summary:

AB 2499, as introduced, Gipson. Corrections: prison conditions.

Under existing law, the California Occupational Safety and Health Act of 1973, the Division of Occupational Safety and Health investigates complaints that a workplace is not safe and may issue orders necessary to ensure employee safety. Under existing law, certain violations of those provisions or a standard, order, or special order authorized by those provisions are a crime.

Existing law establishes the Department of Corrections and Rehabilitation and sets forth its powers and duties regarding the administration of correctional facilities and the care and custody of inmates. Existing law establishes the Office of Emergency Services within the office of the Governor. Existing law requires the Office of Emergency Services to be responsible for the state's emergency and disaster response services for natural, technological, or manmade disasters and emergencies.

This bill would require the division, by July 1, 2027, to submit a rulemaking proposal for the Occupational Safety and Health Standards Board's review and adoption, specifically applicable to workers in any prison or institution under the jurisdiction of the Department of Corrections and Rehabilitation, as specified.

This bill would require the department to comply with these provisions and any order, rule, or regulation adopted by the Occupational Safety and Health Standards Board pursuant to them. Because this bill would expand the definition of an existing crime, this bill would impose a state-mandated local program.

This bill would also adopt the Climate Justice in Prisons Emergency Response Act, which would

require the department to take various actions at specified times, relating to climate control and working conditions in prisons, including, among other things, establishing and implementing minimum interim relief measures during excessive weather events and establishing a working group consisting of representatives from various entities, including community-based organizations and an incarcerated person advisory council. The bill would require the department, subject to an appropriation by the Legislature, to implement a plan to ensure that living quarters, work areas, and recreational spaces at correctional facilities are equipped with specified cooling systems and to install shade structures at facilities that have the greatest exposure to excessive heat. The bill would require the department, by July 1, 2027, to establish a Temperature Monitoring and Data Transparency Pilot Program in at least 3 prisons that represent distinct climate zones. Under the program, the bill would require the department to collect certain temperature data and provide weekly and quarterly summary data, from digital sensors installed at the prisons, to the Office of the Inspector General, the Division of Occupational Safety and Health, and the appropriate policy and budget committees of the Legislature, as specified. The bill would require the department to establish a monitoring system that includes data collection and reporting mechanisms in order to carry out the provisions of the act.

This bill would make related findings and declarations.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Board staff is monitoring for potential impacts on Board operations.

SB-1046 Occupational safety: transboundary pollution. (2025-2026) – NEW

(Blakespear)

Date	Action
03/17/26	Re-referred to Com. on L. & E.
03/16/26	From committee chair, with author's amendments: Amend, and re-refer to Com. on L. & E. Read second time and amended.
03/16/26	Referred to Com. on L. & E.
02/20/26	From printer. May be heard in committee March 22.
02/19/26	Read first time. To print.

Summary:

SB 1046, as amended, Blakespear. Occupational safety: transboundary pollution.

Existing law, the California Occupational Safety and Health Act of 1973, exists for the purpose of assuring safe and healthful working conditions for all California workers by authorizing the enforcement of effective standards, assisting and encouraging employers to maintain safe and healthful working conditions, and providing for research, information, education, training, and enforcement in the field of occupational safety and health. Existing law establishes the Occupational Safety and Health Standards Board within the Department of Industrial Relations for the adoption of occupational safety and health standards and establishes the Division of Occupational Safety and Health in that department for the enforcement of those occupational safety and health standards, as prescribed.

This bill would require the division, on or before January 1, 2030, to propose to the board for its review and adoption, a standard that protects the health and safety of employees who risk high or prolonged exposure to transboundary pollution, as defined, in outdoor occupational environments, as specified. The bill would require the board to consider identifying an exposure threshold for hydrogen sulfide at which acute or chronic health effects occur to reference in the standards and may consider exposure thresholds for other relevant pollutants. The bill would authorize the board to develop the standards in consultation with other specified groups. The bill would authorize the board to adopt emergency regulations to implement these provisions.

Board staff is monitoring for potential impacts on Board operations.

H.R.86 NOSHA Act. (2025-2026) – NO UPDATE

(Biggs)

Date	Action
01/03/25	Referred to the House Committee on Education and Workforce.
01/03/25	Introduced in House

Summary:

H.R., as introduced, Biggs. NOSHA Act.

This bill abolishes the Occupational Safety and Health Administration (OSHA) and its functions. OSHA, which is part of the Department of Labor, sets and enforces workplace safety and health standards and provides related training, outreach, education, and assistance.

Board staff is monitoring for potential impacts on Board operations.