Occupational Safety and Health Standards Board

Public Meeting and Business Meeting

February 20, 2025

Elihu Harris State Building
Auditorium
1515 Clay Street
Oakland, California

AND

Via teleconference / videoconference

Occupational Safety and Health Standards Board

Meeting Agenda

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 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.

FEBRUARY 20, 2025 10:00 a.m.

In-person:

Elihu Harris State Building Auditorium 1515 Clay Street Oakland, CA 94612

Videoconference:

- 1. Go to www.webex.com
- 2. Select "Join a Meeting"
- 3. Enter the meeting number: 1469 63 6425
- 4. Join the meeting through the WebEx application **OR** web browser
- 5. Videoconference will be opened to the public at 9:50 a.m.

Teleconference:

- 1. Dial (844) 992-4726
- 2. Enter the meeting number 1469 63 6425 and follow the prompts
- Teleconference will be opened to the public at 9:50 a.m.
 Note: Please mute your phone by pressing *6 when not speaking.
 If you are to provide a comment, press *6 to unmute.

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 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. 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 determine to be appropriate by the Board Chair.

For items A, B and E below, public comment will be limited to two minutes per speaker or four minutes for speakers requiring concurrent English translation.

A. PROPOSED SAFETY ORDERS FOR ADOPTION

1. TITLE 8: CONSTRUCTION SAFETY ORDERS

Sections 1635

Cone and Bar Barricades

- Briefing by Board staff on proposed regulation for adoption
- Public comment on Cone and Bar Barricades
- Board discussion and vote

2. <u>TITLE 8:</u> <u>CONSTRUCTION SAFETY ORDERS</u>

Sections 1951, 1952, 1953, 1955, 1956, and 1960

GENERAL INDUSTRY SAFETY ORDERS

Section 5156

Confined Spaces in Construction Clean-up

- Briefing by Board staff on proposed regulation for adoption
- Public comment on Confined Spaces in Construction Clean-up
- Board discussion and vote

B. ASSEMBLY BILL 521 SINGLE USER TOILETS IN CONSTRUCTION

AB-521 (Chapter 529, Statutes of 2023) has been codified in California Labor Code. The law asks the Board to consider revising section 1526 of title 8. Board staff has drafted a memo outlining possible revision of section 1526 of title 8 of the California Code of Regulations to require at least one single-user toilet facility on all construction jobsites, designed for employees who self-identify as female or nonbinary, as required by Labor Code section 6722(a)(1), for the Board's consideration.

- Briefing by Board staff on AB-521
- Public comment on AB-521
- Board discussion and vote

C. PROPOSED VARIANCE DECISIONS FOR ADOPTION

- Consent Calendar
- Vote on consent calendar

D. **REPORTS**

- Executive Officer's Report
- Legislative Report
- Cal/OSHA Report

E. 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). The Board is prohibited to act on items that are not on the noticed 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 supports 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 night prior to the meeting. Your comment should be clear, concise, and 500 words or less.

Any individual or group wishing to make a presentation during the Public Meeting is requested to contact Board staff at (916) 274-5721 or oshsb@dir.ca.gov at least three weeks prior to the meeting to address any logistical concerns.

F. COMMENTS BY BOARD MEMBERS

Although any Board member may identify a topic of interest, 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).).

G. 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)

Personnel

None

H. RETURN TO OPEN SESSION

Report from closed session

I. ADJOURNMENT OF THE MEETING

Next Meeting: March 20, 2025

City of Palm Desert – Council Chamber

73-510 Fred Waring Drive Palm Desert, CA 92260

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 public hearings, 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 Public Meeting, members of the public can address the Board on items of interest that are either on the Business Meeting agenda or 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.

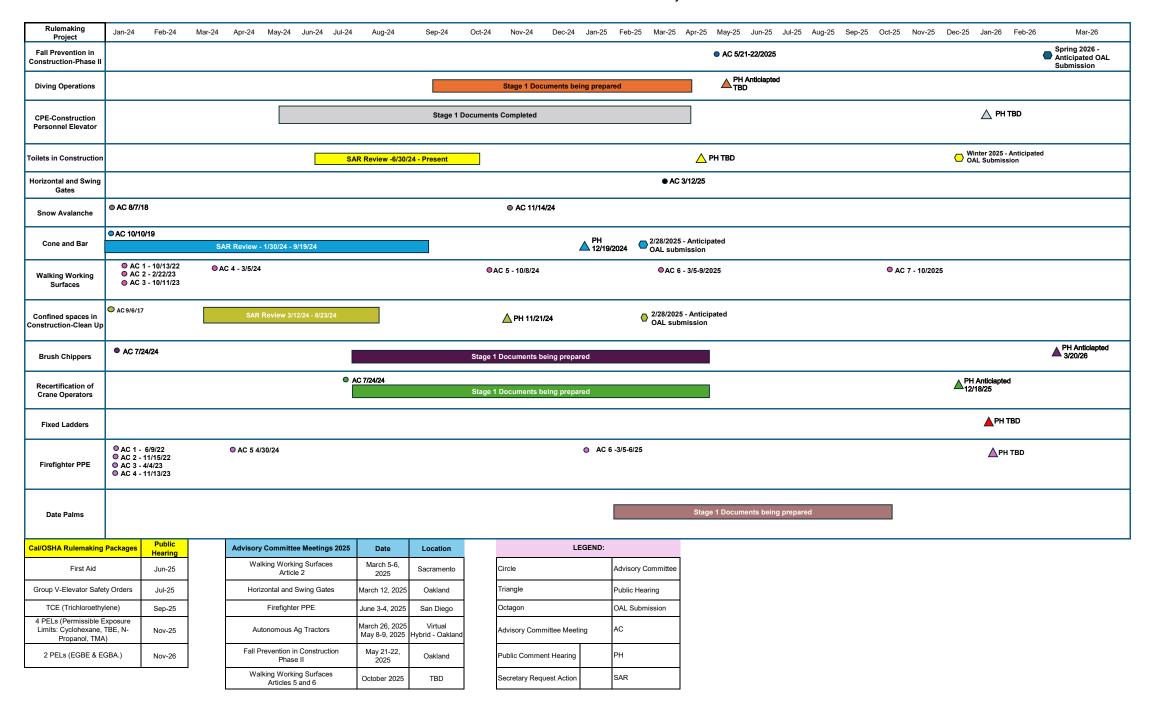
If disability-related modifications or accommodations are required to participate in the meeting, please contact: <u>DIO@DIR.CA.GOV</u>. To ensure the availability of your requested accommodation, please submit your request at least 10 days in advance.

Please contact the <u>California Relay Service</u> by dialing 711 or 1-800-855-3000 (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.

OSHSB Rulemaking Timeline February 2025



2025 Advisory Committee Meetings

Walking Working Surfaces Article 2 March 5 & 6, 2025 Sacramento, CA

Walking-Working Surfaces Article 2 - 6th AC

Horizontal and Swing Gates Section 3324 March 12, 2025 Oakland, CA Horizontal Sliding and Swinging Gates

- 3. Autonomous Ag Tractors March 26, 2025 Virtual Meeting
- 4. Autonomous Ag Tractors May 8 & 9, 2025 Oakland, CA
- Fall Prevention in Construction Phase II May 21 & 22, 2025 Oakland, CA
- 6. Firefighters' PPE
 Labor Code 147.4 (c)
 GISO Article 10.1
 NEW DATE: June 3 & 4, 2025
 San Diego, CA

Occupational Safety and Health Standards Board

Meeting Notice

STATE OF CALIFORNIA GAVIN NEWSOM, Governor

DEPARTMENT OF INDUSTRIAL RELATIONS Occupational Safety and Health Standards Board 2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833 Tel: (916) 274-5721

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:

PUBLIC MEETING: On **February 20, 2025,** at 10:00 a.m.

in the Auditorium of the Elihu Harris State Building

1515 Clay Street, Oakland, California

as well as via the following:

Videoconference at www.webex.com (meeting ID 1469 63 6425)

- Teleconference at (844) 992-4726 (Access code 1469 63 6425)
- 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.

BUSINESS MEETING:

On **February 20, 2025,** at 10:00 a.m. in the Auditorium of the Elihu Harris State Building 1515 Clay Street, Oakland, California

as well as via the following:

- Videoconference at www.webex.com (meeting ID 1469 63 6425)
- Teleconference at (844) 992-4726 (Access code 1469 63 6425)
- Live video stream and audio stream (English and Spanish) at https://videobookcase.com/california/oshsb/

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. ALIO O JR., Chairman

Occupational Safety and Health Standards Board

Business Meeting

Occupational Safety and Health Standards Board

Business Meeting

Standards for Adoption

Cone and Bar Barricades

MOVED, That the following resolution be adopted:

WHEREAS, On November 1, 2024, the Occupational Safety and Health Standards Board, pursuant to Government Code Section 11346.4, fixed the time and place for a Public Hearing to consider the revisions to Title 8, Construction Safety Orders, Section 1635, Cone and Bar Barricades.

WHEREAS, Such Public Hearing was held in person in Rancho Cordova, California and via teleconference and videoconference, on December 19, 2024, and there are now before the Occupational Safety and Health Standards Board the proposed revisions to Title 8, Construction Safety Orders, Section 1635, Cone and Bar Barricades; therefore, be it

RESOLVED By the Occupational Safety and Health Standards Board in regular meeting held in person in Oakland, California and via teleconference and videoconference, on February 20, 2025, that the proposed revisions to Title 8, Construction Safety Orders, Section 1635, Cone and Bar Barricades, be adopted.

RESOLVED That the Occupational Safety and Health Standards Board shall file with the Office of Administrative Law a sufficient number of copies of said filing documents and a copy of the rulemaking file for use by the Office of Administrative Law.

OCCUPATIONAL SAFETY AND HEALTH

	STANDARDS BOARD
	JOSEPH M. ALIOTO JR., CHAIRMAN
Certified As A Regulation	
Of the Occupational Safety	
And Health Standards Board	
BY:	
Millicent Barajas, Executive Officer	

DATED: February 20, 2025

TITLE 8

CONSTRUCTION SAFETY ORDERS SECTION 1635

CONE AND BAR BARRICADES

HYPERLINKS TO RULEMAKING DOCUMENTS:

TEXT FOR BOARD CONSIDERATION

FINAL STATEMENT OF REASONS

INITIAL STATEMENT OF REASONS

Occupational Safety and Health Standards Board

Business Meeting

Standards for Adoption

Confined Spaces in Construction Clean-up

MOVED, That the following resolution be adopted:

WHEREAS, On October 4, 2024, the Occupational Safety and Health Standards Board, pursuant to Government Code Section 11346.4, fixed the time and place for a Public Hearing to consider the revisions to Title 8, Construction Safety Orders, Sections 1951, 1952, 1953, 1955, 1956, and 1960; General Industry Safety Orders, Section 5156, Confined Spaces in Construction Clean-up.

WHEREAS, Such Public Hearing was held in person in Los Angeles, California and via teleconference and videoconference, on November 21, 2024, and there are now before the Occupational Safety and Health Standards Board the proposed revisions to Title 8, Construction Safety Orders, Sections 1951, 1952, 1953, 1955, 1956, and 1960; General Industry Safety Orders, Section 5156, Confined Spaces in Construction Cleanup; therefore, be it

RESOLVED By the Occupational Safety and Health Standards Board in regular meeting held in person in Oakland, California and via teleconference and videoconference, on February 20, 2025, that the proposed revisions to Title 8, Construction Safety Orders, Sections 1951, 1952, 1953, 1955, 1956, 1960; General Industry Safety Orders, Section 5156, Confined Spaces in Construction Clean-up, be adopted.

RESOLVED That the Occupational Safety and Health Standards Board shall file with the Office of Administrative Law a sufficient number of copies of said filing documents and a copy of the rulemaking file for use by the Office of Administrative Law.

OCCUPATIONAL SAFETY AND HEALTH

	STANDARDS BOARD
	JOSEPH M. ALIOTO JR., CHAIRMAN
Certified As A Regulation Of the Occupational Safety	
And Health Standards Board	
BY: Millicent Barajas, Executive Officer	

DATED: February 20, 2025

TITLE 8

CONSTRUCTION SAFETY ORDERS

SECTIONS 1951, 1952, 1953, 1955, 1956,

AND 1960

GENERAL INDUSTRY SAFETY ORDERS

SECTION 5156

CONFINED SPACES IN CONSTRUCTION CLEAN-UP

HYPERLINKS TO RULEMAKING DOCUMENTS:

TEXT FOR BOARD CONSIDERATION

FINAL STATEMENT OF REASONS

INITIAL STATEMENT OF REASONS

Occupational Safety and Health Standards Board

Business Meeting

Assembly Bill 521

Single User Toilets in Construction

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

California

Standards

Board

2520 Venture Oaks Way, Suite 350 Sacramento, CA 95833 (916) 274-5721 www.dir.ca.gov/oshsb

TO: Occupational Safety and Health Standards Board Members

FR: Kelly Chau, Attorney III

RE: AB-521: Construction Jobsites: Toilet Facilities – Possible Interpretations

DATE: February 4, 2025

I. Background and Purpose of Memo

AB-521 (Chapter 529, Statutes of 2023) provides the framework for the Occupational Safety and Health Standards Board ("OSHSB" or "Board") to consider revising <u>section 1526</u> of title 8 of the California Code of Regulations. This section pertains to the number of toilet facilities required at all jobsites. According to the author, Assemblymember Rebecca Bauer-Kahan, to encourage women to enter into the trades, this bill aimed to ensure women on jobsites have access to the clean, private restrooms they deserve.

However, as this bill was amended, terms such as "self-identify as female or nonbinary" and "all" jobsites were added, expanding its scope. The bill did not define these terms, leaving room for ambiguity in interpreting and implementing the law. Additionally, no economic costs to California businesses were analyzed.

Given the various conflicting interpretations, Board legal staff drafted this memo to highlight the challenges OSHSB staff will likely encounter in revising and implementing this regulation. This memo is intended as a guide to help the Board evaluate the feasibility of rulemaking in considering whether to revise section 1526.

II. Overview of the Requirements Codified in Labor Code Section 6722(a)(1)

Per Labor Code section 6722(a)(1), the Board shall draft a rulemaking proposal to consider revising section 1526 to require at least one single-user toilet facility on all construction jobsites, designed² for employees who <u>self-identify</u> as female or nonbinary. Additionally, subsection (a)(2) states the Board shall consider adopting revised standards on or before December 31, 2025.

¹ All references are to title 8 sections unless otherwise noted.

² The Assembly Member's office confirmed this is a typo and should say "designated."

A. The Term Self-Identify is not Defined.

Generally, when a term is not defined, the dictionary meaning is used. According to the Oxford English Dictionary, self-identify means "(t)o assign or describe oneself as belonging to a particular category or group of people; to assign a particular characteristic or categorization to oneself."

It is unknown how employees would self-identify as female or nonbinary - whether self-identifying via a job application (when this option is available) or communicating to their supervisor or human resources department. For purposes of interpretation, OSHSB staff could draft a regulation placing the burden on the employee to self-identify as female or nonbinary. However, given that this bill was drafted with the intent to encourage women in construction, it is less likely that the ability to obtain a designated single-user facility toilet facility once employed instead of already having on-site and readily available would encourage women to enter the construction field.

1. Possible Broader Protections?

Amendments to this bill, specifically the addition of the "self-identify as female or nonbinary" language, taken together appear to broaden the scope to apply to transgender individuals and those who do not identify as either male or female. These individuals may not feel safe to self-identify. Thus, placing the burden on employees to self-identify is counterintuitive to this bill and its intentions regarding having a separate, safe toilet facility.

Alternatively, the Board could draft regulations which place the burden on all employers to unilaterally require an extra single-user toilet facility at all jobsites in the event an employee self-identifies as female or non-binary. For a variety of privacy and other reasons, employers may be hesitant to ask employees whether they self-identify as female or nonbinary, and employees may not welcome such inquiries.

It is unclear if an employee self-identifying as female or nonbinary triggers an employer to provide a single-user toilet facility, or if all employers must provide a single-user toilet facility as a matter of law.

III. Which Employers Does This Bill Apply To?

Interpretation of this bill is difficult due to inconsistent results when analyzing the literal wording, legislative intent, and analysis provided to legislative members via arguments in support of the bill.

A. The Literal Wording of the Bill.

In comparing the text of the bill as introduced and as chaptered³, the words "jobsites with two or more required water closets" were deleted. In its place, the words "single-user toilet facility on all construction jobsites" was added.

This amendment occurred in the state Senate on September 8, 2023.⁴ The bill was presented to the Governor for signing on September 18, 2023, with no further amendments to this portion and chaptered with the Secretary of State on October 8, 2023.

1. A Separate Designated Toilet Facility at All Jobsites

The plain meaning of the words "all construction jobsites" leaves no room for interpretation. This means every construction jobsite, irrespective of number of employees, must have at least one single-user toilet facility for those who self-identify as female or nonbinary. Coupled with the current exception to section 1526(a), where there are less than five employees, one single-user toilet facility designated for all-gender use is sufficient, and all employers must now have a minimum of two single-user toilet facilities.

2. The Economic Impact on California Businesses is Daunting.

Under this interpretation, construction companies with less than five employees must have an extra single-user toilet facility for those that self-identify as female or nonbinary – even if the company does not knowingly currently employ any women or self-identified nonbinary people. According to the California Department of Civil Rights, all employees have a right to safe and appropriate restroom facilities including the right to use a restroom that corresponds to the employee's gender identity, regardless of the employee's sex assigned at birth. Additionally, the use of single stall restrooms should always be a matter of choice. Employees should never be forced to use one, as a matter of policy or due to harassment.⁵

Moreover, there are various confidentiality, privacy, and legal issues that arise when questioning employees about their gender identity. Employers may be hesitant to place the burden of identifying as female or nonbinary on employees, and instead opt to bear the cost of an extra single-user toilet facility, even if not required by a current employee.

Doubling the cost to do business in this manner multiplied by the number of small business construction companies in California would bring the costs into the

³ Compare Versions - AB-521 Occupational safety and health standards: construction jobsites: toilet facilities. Occupational safety and health standards: construction jobsites: toilet facilities.

⁴ https://calmatters.digitaldemocracy.org/bills/ca 202320240ab521?slug=CA 202320240AB521

⁵ The Rights of Employees Who Are Transgender or Gender Nonconforming (Fact Sheet Fact 4, pages 1-2) California Civil Rights Department.

Standardized Regulatory Impact Assessment category, which requires expensive and lengthy extra economic analysis by specialized consultants⁶.

It is unclear whether the Legislature intended such a large economic impact on California construction companies or if these costs were anticipated as there was no opposition or business impact analysis related to this bill.

B. The Legislative Intent.

The Legislature found that due to sanitary and safety concerns, women and nonbinary individuals must have access to at least one separate designated toilet facility at construction jobsites "when other toilet facilities are also available for others" at the construction jobsite. The word "others" in this context leaves room for interpretation. However, this interpretation could mean the difference between one extra single-user facility at a minimum or an unknown number depending on the size of the employer.

1. <u>A Separate Designated Toilet Facility for Each 20 Employees or Fraction</u> Thereof of Each Sex.

Since the requirement of a separate designated toilet facility already exists for females under section 1526(a) where there are 20 employees of each sex, it is presumed the legislature distinguished those who are female from those who either 1) self-identify as female or 2) are nonbinary. In this instance, a minimum of one extra single-user toilet facility is required with the number of additional single-user toilet facility increasing per every 20 employees of each sex.

Compared to the small mom and pop business example above, the economic impact for large construction companies is also costly. It is unclear if the legislative intent was to create this economic burden even if no employees self-identify as female or nonbinary.

2. <u>A Separate Designated Toilet Facility When There are Less Than Five</u> Employees.

Under the exception to section 1526(a), when there are less than five employees, nongendered toilet facilities are not required. In this situation, because users must selfidentify and employers cannot ask, we must assume a minimum of one additional single-user toilet facility for those who self-identify as nonbinary. For the economic impact see section II(A)(2) discussion above.

C. The Legislative Analysis.

The last legislative analysis of this bill states AB-521 will resolve women's health issues resulting from construction jobsites' lack of separate facilities by requiring at least one

⁶ State agencies must conduct a Standardized Regulatory Impact Assessment (SRIA) when it estimates that a proposed regulation has an economic impact exceeding \$50 million. Major Regulations | Department of Finance

women's restroom at jobsites that already have two or more required water closets by 2025.

1. A Separate Designated Toilet Facility For Every 40 Male Employees.

Section 1526(a) states that a minimum of one separate toilet facility shall be provided for each 20 employees or fraction thereof of each sex. Thus, jobsites that already have two or more required toilet facilities would cover employers with forty or more male employees. Under this analysis, one single-user toilet facility designated for those who self-identify as women or nonbinary would be required for every 40 male employees.

2. This Analysis is Unsupported.

Although this scenario would have less of an impact on businesses, there is nothing in the record to suggest a separate designated toilet facility is required for every 40 male employees. It is unknown how this analysis was derived.

IV. Conclusion

Pursuant to Labor Code section 6722(a)(1), the Board may consider revising section 1526 to require at least one single-user toilet facility on all construction jobsites, designed⁸ for employees who self-identify as female or nonbinary. The Board may take into consideration the practical and feasibility challenges outlined above.

⁷ This language was not revised when the bill was amended to add "or nonbinary".

⁸ The Assembly Member's office confirmed the word "designed" is a typo, and the correct word is "designated."

AB-521: Construction Jobsites: Toilet Facilities - Possible Interpretations

Which Employers Does This Bill Apply To?

Interpretation of this bill is difficult due to inconsistent results when analyzing the literal wording, legislative intent, and analysis provided to legislative members via arguments in support of the bill.

Literal wording of the bill	The standards board, before December 1, 2025, shall draft a rulemaking proposal to consider revising Section 1526 of Title 8 of the California Code of Regulations to require at least one single-user toilet facility on all construction jobsites, designed for employees who self-identify as female or nonbinary.	Effect: Every employer regardless of number of employees must have at a minimum 2 single user toilet facilities total. • One for everyone else. • One for those that self-identify as female or nonbinary.
Legislative Intent	(a) The Legislature finds and declares all of the following: (1) Women and nonbinary individuals are underrepresented in the trades and also face numerous barriers on construction jobsites. (2) One of these many barriers is access to a clean and secure restroom. (3) Shared restrooms often pose sanitary as well as safety concerns for women and nonbinary individuals on construction jobsites. (b) In order to ensure the safety and security of women and nonbinary individuals on construction jobsites, the Legislature further finds and declares that it is necessary to take action to ensure that women and nonbinary individuals have access to at least one separate designated toilet facility at construction jobsites when other toilet facilities are also available for	Effect: The word "others" is not defined and leaves room for interpretation. It could either mean one separate single-user toilet facility for those who self-identify as female or nonbinary when there are 20 or more employees under section 1526(a). • A minimum of one separate toilet facility shall be provided for each 20 employees or fraction thereof of each sex. • Because users self-identify and employers cannot ask, we assume a minimum of one for those who self-identify as nonbinary. Or, under the exception to section 1526(a) it could mean one separate single-user

	others at the construction jobsite.	 toilet facility for those who self-identify as female or nonbinary when there are less than 5 employees. Where there are less than five (5) employees, one (1) single-user toilet facility designated for all-gender use is sufficient. Because users self-identify and employers cannot ask, we assume a minimum of one for those who self-identify as nonbinary.
Senate and Assembly Bill analysis: Arguments in Support of	On jobsites, women habitually share restrooms with their male coworkers who don't necessarily have the same issues with using the facilities. Consequently, women will opt out of using these shared facilities, resulting in health impacts such as infections and, in severe cases, permanent kidney damage. AB-521 resolves these issues by requiring OSHA to submit standards and consider requiring at least one women's restroom at jobsites that already have two or more required water closets by 2025. 10	Because users self-

⁹ This language was not revised when the bill was amended to add "or nonbinary". ¹⁰ 9/12/23 Assembly Floor Analysis. <u>Bill Analysis - AB-521 Occupational safety and health standards: construction jobsites: toilet facilities.</u>



CALIFORNIA LAW PROTECTS
TRANSGENDER AND GENDER
NONCONFORMING PEOPLE FROM
DISCRIMINATION, HARASSMENT,
AND RETALIATION AT WORK. THESE
PROTECTIONS ARE ENFORCED BY THE
CIVIL RIGHTS DEPARTMENT (CRD).

THINGS YOU NEED TO KNOW

1. Does California law protect transgender and gender nonconforming employees from employment discrimination?

Yes. All employees, job applicants, unpaid interns, volunteers, and contractors are protected from discrimination at work when based on a protected characteristic, such as their gender identity, gender expression, sexual orientation, race, or national origin. This means that private employers with five or more employees may not, for example, refuse to hire or promote someone because they identify as – or are perceived to identify as – transgender or non-binary, or because they express their gender in non-stereotypical ways.

Employment discrimination can occur at any time during the hiring or employment process. In addition to refusing to hire or promote someone, unlawful discrimination includes discharging an employee, subjecting them to worse working conditions, or unfairly modifying the terms of their employment because of their gender identity or gender expression.

2. Does California law protect transgender and gender nonconforming employees from harassment at work?

Yes. All employers are prohibited from harassing any employee, intern, volunteer, or contractor because of their gender identity or gender expression. For example, an employer can be liable if co-workers create a hostile work environment – whether in person or virtual – for an employee who is undergoing a gender transition. Similarly, an employer can be liable when customers or other third parties harass an employee because of their gender identity or expression, such as intentionally referring to a gender-nonconforming employee by the wrong pronouns or name.

3. Does California law protect employees who complain about discrimination or harassment in the workplace?

Yes. Employers are prohibited from retaliating against any employee who asserts their right under the law to be free from discrimination or harassment. For example, an employer commits unlawful retaliation when it responds to an employee making a discrimination complaint – to their supervisor, human resources staff, or CRD – by cutting their shifts.

4. If bathrooms, showers, and locker rooms are sex-segregated, can employees choose the one that is most appropriate for them?

Yes. All employees have a right to safe and appropriate restroom and locker room facilities. This includes the right to use a restroom or locker room that corresponds to the employee's gender identity, regardless of the employee's sex assigned at birth. In addition, where possible, an employer should provide an easily accessible, gender-neutral (or "all-gender"), single user facility for use by any employee. The use of single stall restrooms

THE RIGHTS OF EMPLOYEES WHO ARE TRANSGENDER OR GENDER NONCONFORMING Civil Rights Department STATE OF CALIFORNIA

and other facilities should always be a matter of choice. Employees should never be forced to use one, as a matter of policy or due to harassment.

5. Does an employee have the right to be addressed by the name and pronouns that correspond to their gender identity or gender expression, even if different from their legal name and gender?

Yes. Employees have the right to use and be addressed by the name and pronouns that correspond with their gender identity or gender expression. These are sometimes known as "chosen" or "preferred" names and pronouns. For example, an employee does not need to have legally changed their name or birth certificate. nor have undergone any type of gender transition (such as surgery), to use a name and/ or pronouns that correspond with their gender identity or gender expression. An employer may be legally obligated to use an employee's legal name in specific employment records, but when no legal obligation compels the use of a legal name, employers and co-workers must respect an employee's chosen name and pronouns. For example, some businesses utilize software for payroll and other administrative purposes, such as creating work schedules or generating virtual profiles. While it may be appropriate for the business to use a transgender employee's legal name for payroll purposes when legally required, refusing or failing to use that person's chosen name and pronouns, if different from their legal name, on a shift schedule, nametag, instant messaging account, or work ID card could be harassing or discriminatory. CRD recommends that employers take care to ensure that each employee's chosen name and pronouns are respected to the greatest extent allowed by law.

6. Does an employee have the right to dress in a way that corresponds with their gender identity and gender expression?

Yes. An employer who imposes a dress code must enforce it in a non-discriminatory manner. This means that each employee must be allowed

to dress in accordance with their gender identity and expression. While an employer may establish a dress code or grooming policy in accord with business necessity, all employees must be held to the same standard, regardless of their gender identity or expression.

7. Can an employer ask an applicant about their sex assigned at birth or gender identity in an interview?

No. Employers may ask non-discriminatory questions, such as inquiring about an applicant's employment history or asking for professional references. But an interviewer should not ask questions designed to detect a person's gender identity or gender transition history such as asking about why the person changed their name. Employers should also not ask questions about a person's body or whether they plan to have surgery.

8. Does California law protect transgender and gender nonconforming employees from hate violence?

Yes. Acts or threats of violence against a person because of their gender identity or gender expression is forbidden everywhere, including the workplace. A person targeted for hate violence can file a claim with CRD, and may be eligible for civil remedies, such as money damages and a restraining order. Also, contact the CA vs. Hate Resource Line and Network for information and support for people targeted by hate at stophate@calcivilrights.ca.gov or 833-8-NO-HATE.

9. Can my employer-provided health insurance plan exclude gender-affirming care?

No. Under California law, employer-provided health plans must cover medically necessary gender-affirming care.

COMMON TERMS

Gender expression means a person's gender-related appearance or behavior, such as their mannerisms, clothes, or hairstyle. How someone expresses their gender may or may not be stereotypically associated with their gender identity or the sex they were assigned at birth. For example, someone who identifies as male may express his gender in stereotypically feminine ways, such as having long hair, wearing make-up, or acting "sensitive."

Gender identity means each person's internal understanding of their gender, such as being male, female, a combination of male and female, neither male nor female, and/or nonbinary. A person may have a gender identity different from the sex the person was assigned at birth.

Gender nonconforming refers to people who do not follow societal norms or stereotypes about gender identity or gender expression. A person of any gender identity can be gender nonconforming, such as a female-identified person who wears clothes typically associated with men and who uses the pronouns "they/them" and "she/her."

Gender transition refers to a process that some people who are transgender or gender nonconforming go through to affirm their gender identity. This can, but does not necessarily, include transitioning socially and/or physically. A person does not need to complete any particular step in a gender transition in order to be protected by the law.

 Social transition is a process of socially aligning one's gender expression with the internal sense of self (e.g., changes in name and pronoun, bathroom facility usage, dress, speech, or appearance). Physical transition refers to medical treatments an individual may undergo to physically align their body with their gender identity (e.g., hormone therapies or surgical procedures).

Non-binary is a general term for any gender identity that falls outside the gender binary of strictly male or strictly female. California officially recognizes non-binary as a gender.

Sexual orientation refers to a person's sexual or romantic attraction to others and may – but does not necessarily – include identification with terms like straight, gay, lesbian, bisexual, or pansexual.

Transgender is a general term that refers to a person whose gender identity differs from the sex they were assigned at birth, such as someone who identifies as male but whose sex on their original birth certificate was marked female.

If you have been subjected to discrimination, harassment, or retaliation at work, please contact CRD.

TO FILE A COMPLAINT

Civil Rights Department

calcivilrights.ca.gov/complaintprocess
Toll Free: 800.884.1684
TTY: 800.700.2320

Have a disability that requires a reasonable accommodation? CRD can assist you with your complaint.

For translations of this guidance, visit: www.calcivilrights.ca.gov/posters/employment

Occupational Safety and Health Standards Board

Business Meeting Proposed Variance Decisions

CONSENT CALENDAR—PROPOSED VARIANCE DECISIONS FEBRUARY 20, 2025, MONTHLY BUSINESS MEETING OF THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED DECISIONS FOR BOARD CONSIDERATION, HEARD ON January 22, 2025

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
1. 22-V-270M1	601 Wilshire Owner LLC and Ideal 601 LLC	Elevator	GRANT
2. 22-V-517M1	Maudelle Shirek, L.P.	Elevator	GRANT
3. 23-V-294M1	ARE-SD Region No. 57, LLC	Elevator	GRANT
4. 23-V-491M1	Sunnydale Block 3A Housing Partners, L.P.	Elevator	GRANT
5. 23-V-492M1	Sunnydale Block 3B Housing Partners, L.P.	Elevator	GRANT
6. 23-V-619M1	1457 Main Owner LP	Elevator	GRANT
7. 24-V-486	Orange Medical Partners	Elevator	GRANT
8. 24-V-545	2015 vine street, llc	Elevator	GRANT
9. 24-V-546	Los Angeles County Metropolitan Transportation Authority	Escalator	GRANT
10. 24-V-547	ZARA USA, Inc.	Elevator	GRANT
11. 24-V-548	Los Angeles County Metropolitan Transportation Authority	Escalator	GRANT
12. 24-V-549	Los Angeles County Metropolitan Transportation Authority	Escalator	GRANT
13. 24-V-550	ZARA USA, Inc.	Escalator	GRANT
14. 24-V-551	10229 - 10233 Eton Avenue, LLC	Elevator	GRANT
15. 24-V-552	SJ MAIN ST, LLC	Elevator	GRANT
16. 24-V-553	Loma Linda Surgery Center, LLC	Elevator	GRANT
17. 24-V-554	Sunnydale Block 9 Housing Partners, L.P.	Elevator	GRANT
18. 24-V-555	The Irvine Company	Elevator	GRANT
19. 24-V-556	AvalonBay Communities, Inc	Elevator	GRANT

Docket Number	Applicant Name	Safety Order(s) at Issue	Proposed Decision Recommendation
20. 24-V-557	RMG HVMB BROADWAY, LP	Elevator	GRANT
21. 24-V-558	RMG FEE CORONADO, LP	Elevator	GRANT
22. 24-V-559	RMG BAME, LP	Elevator	GRANT
23. 24-V-560	Matticus Hospitality Group Inc.	Elevator	GRANT
24. 24-V-561	Guasti SPV, LLC	Elevator	GRANT
25. 24-V-562	ARE-SD Region No.57, LLC	Elevator	GRANT
26. 24-V-563	Sharp Healthcare	Elevator	GRANT
27. 24-V-564	Jefferson Ocean Creek, LLC	Elevator	GRANT
28. 24-V-565	JPI California Construction	Elevator	GRANT
29. 24-V-566	Jefferson Ocean Creek, LLC	Elevator	GRANT
30. 24-V-567	Jefferson Ocean Creek, LLC	Elevator	GRANT
31. 24-V-568	Jefferson Ocean Creek, LLC	Elevator	GRANT
32. 24-V-569	Avelaide Melrose, LLC	Elevator	GRANT
33. 24-V-570	Sacramento Madison Avenue LP	Elevator	GRANT
34. 24-V-571	Oversalted, Inc	Elevator	GRANT
35. 24-V-572	Buckler Family Vineyards, LLC	Elevator	GRANT
36. 24-V-573	River LLC	Elevator	GRANT
37. 24-V-574	San Diego Unified School District	Elevator	GRANT

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-270M1 Proposed Decision Dated: January 24, 2025
601 Wilshire Owner LLC and Ideal 601 LLC	DECISION
The Occupational Safety and Health S PROPOSED DECISION by Kelly Chau, Hearing	standards Board hereby adopts the attached Officer.

OCCUPATIONAL SAFETY AND HEALTH JOSEPH M. ALIOTO JR., Chairman STANDARDS BOARD Date of Adoption: February 20, 2025 KATHLEEN CRAWFORD, Member THE FOREGOING VARIANCE DECISION WAS ADOPTED ON THE DATE INDICATED ABOVE. DAVID HARRISON, Member IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE NOLA KENNEDY, Member STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST CHRIS LASZCZ-DAVIS, Member **FULLY COMPLY WITH THE REQUIREMENTS** OF CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTIONS 427, 427.1 AND 427.2. DAVID THOMAS, Member Note: A copy of this Decision must be posted for the Applicant's employees to DEREK URWIN, Member read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

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:

601 Wilshire Owner LLC and Ideal 601 LLC

Permanent Variance No.: 22-V-270M1

PROPOSED DECISION

Hearing Date: January 22, 2025

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 Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
22-V-270	601 Wilshire LLC and Ideal 601 LLC	601 Wilshire Blvd. Los Angeles, 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 January 22, 2025, 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, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

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 January 22, 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 address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-270.
- 2. Application section 3, 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 22-V-270 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- 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. 22V-270.
- 4. The Board finds the above subpart D.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 22-V-270 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-270, to be:

601 Wilshire Blvd. Santa Monica, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 22-V-270M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-270, and 22-V-270M1, shall have the following address designation:

601 Wilshire Blvd. Santa Monica, CA

2. Permanent Variance No. 22-V-270, 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. 22-V-270M1.

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

Dated: January 24, 2025

Kelly Chau, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 22-V-517M1 Proposed Decision Dated: January 24, 2025
Maudelle Shirek, L.P	DECISION
The Occupational Safety and Health PROPOSED DECISION by Kelly Chau, Hearing	Standards Board hereby adopts the attached g Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: February 20, 2025 THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DEREK URWIN, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

In the Matter of Application to Modify
Permanent Variance by:

Maudelle Shirek, L.P.

Permanent Variance No.: 22-V-517M1

PROPOSED DECISION

Hearing Date: January 22, 2025
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 Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
22.1/ 547	Man della Chinal II D	Maudelle Miller Shirek Community
22-V-517	Maudelle Shirek, L.P.	2001 Ashby Ave. Berkeley, 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 January 22, 2025, 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, appeared on behalf of the Applicant, Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

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 January 22, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 22-V-517.
- 2. Application section 3, 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 22-V-517 is in effect, in fact is more completely, and correctly the different combination of addresses specified in below subsection D.5.
- 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. 22V-517.
- 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 22-V-517 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 22-V-517, to be:

2925 Adeline St. Berkeley, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 22-V-517M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator being the subject of Permanent Variance Nos. 22-V-517, and 22-V-517M1, shall have the following address designation:

2925 Adeline St. Berkeley, CA

2. Permanent Variance No. 22-V-517, 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. 22-V-517M1.

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

Dated: January 24, 2025

Kelly Chau, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 23-V-294M1 Proposed Decision Dated: January 24, 2025
ARE-SD Region No. 57, LLC	DECISION
The Occupational Safety and Health PROPOSED DECISION by Kelly Chau, Hearing	Standards Board hereby adopts the attached g Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON Momber	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
,	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
DEDEK LIDWIN Mombor	posted for the Applicant's employees to
DEREK URWIN, Member	

read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

In the Matter of Application to Modify Permanent Variance by:	OSHSB File No.: 23-V-294M1
ARE-SD Region No. 57, LLC	PROPOSED DECISION
	Hearing Date: January 22, 2025 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 Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Address of Record	Preexisting Number of Elevators
23-V-294	ARE-SD Region No. 57, LLC	4150 Campus Point Court San Diego, 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. <u>Procedural Matters</u>

- 1. This hearing was held on January 22, 2025 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, Fuei Saetern, with KONE, Inc. appeared on behalf of the Applicant and Mark Wickens and Jose Ceja 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:

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

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 January 22, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings and Basis

- 1. The Applicant requests modification as to the quantity of elevators being the subject of previously granted Permanent Variance No. 23-V-294.
- 2. Application 23-V-294M1, declared to be wholly truthful under penalty of perjury by Applicant signatory declares:

Standard Board File# <u>23-V-294</u> adopted on September 21, 2023 was granted for the following Location & Elevators:

4150 Campus Point Court San Diego, CA 92121

Elevator ID	Capacity (lbs.)	Rated Speed (fpm)	#of Suspension Ropes	#of Landings
North EL-1	3500	200	8	8
South EL-1	3500	200	7	7
South EL-2	5000	200	8	8

However, effective <u>11/20/2024</u>, a new address was assigned to South EL-1 and South E2. Thus, we request removing South EL1 and South EL2 from Adopted Variance 23-V-294.

- Cal/OSHA has evaluated the immediate request for modification of variance, 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 File 23-V-294
 excluding stricken text related to the number of elevators.
- 4. The Board finds the Section C2, declaration of the Applicant Signatory to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 23-V-294, reducing the quantity of subject elevators from three (3) to one (1), to be of no bearing as to the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 23-V-294 was, in part, based.

D. Decision and Order

1. Application for Modification of Permanent Variance No. 23-V-294M1, is conditionally GRANTED, thereby modifying Board records, such that the elevator being the subject of Permanent Variance Nos. 23-V-294 and 23-V-294M1, shall have the following conditions as stated in Permanent Variance 23-V-294, excluding stricken text, related to the number of elevators:

Monospace 500 Suspension Appendix 1 Table.

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)
23-V-294	North EL-1	8	200	13,207
23-V-29 4	South EL-1	7	200	11,556
23-V-294	South EL-2	8	200	13,207

- 2. Permanent Variance No. 23-V-294, being only modified as to the subject quantity of elevators 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 23-V-294M1.
- 3. 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.
- 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 for its issuance.

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

Dated: January 24, 2025

Kelly Chau, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 23-V-491M1 Proposed Decision Dated: January 24, 2025
Sunnydale Block 3A Housing Partners, L.P.	DECISION
The Occupational Safety and Health PROPOSED DECISION by Kelly Chau, Hearing	Standards Board hereby adopts the attached g Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
NOLA KENNEDY, Member	MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20)
Web (NEW 201), Web and a	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	Note: A copy of this Decision must be posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	provided to the employees Admonzed

Representatives.

In the Matter of Application to Modify

Permanent Variance No.: 23-V-491M1

Permanent Variance by:

PROPOSED DECISION

Sunnydale Block 3A Housing Partners, L.P.

Hearing Date: January 22, 2025

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 Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Preexisting Variance Address of Record
23-V-491	Sunnydale Block 3A Housing Partners, L.P.	1545 Sunnydale Ave. San Francisco, 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 January 22, 2025, 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 Fuei Saetern KONE Inc., 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:

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

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 January 22, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings of Fact

- The Applicant requests modification of the address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 23-V-491.
- 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 23-V-491 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-491.
- 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-491 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 23-V-491, to be:

1529 Sunnydale Avenue San Francisco, CA

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 23-V-491M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator

being the subject of Permanent Variance Nos. 23-V-491, and 23-V-491M1, shall have the following address designation:

1529 Sunnydale Avenue San Francisco, CA

2. Permanent Variance No. 23-V-491, 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-491M1.

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

Dated: January 24, 2025

Kelly Chau, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 23-V-492M1 Proposed Decision Dated: January 24, 2025
Sunnydale Block 3B Housing Partners, L.P.	DECISION
The Occupational Safety and Health PROPOSED DECISION by Kelly Chau, Hearing	Standards Board hereby adopts the attached g Officer.
	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	bate of Adoption Teordary 20, 2023
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
NOLA KENNEDY, Member	MAY BE FILED BY ANY PARTY WITH THE
NOLA KLINIEDT, WEITISCI	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID ITIOWAS, Weitibei	
	Note: A copy of this Decision must be
DEREK URWIN, Member	posted for the Applicant's employees to
	read, and/or a copy thereof must be
	provided to the employees' Authorized

Representatives.

In the Matter of Application to Modify

Permanent Variance No.: 23-V-492M1

Permanent Variance by:

PROPOSED DECISION

Sunnydale Block 3B Housing Partners, L.P.

Hearing Date: January 22, 2025

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 Regulations¹, as follows:

Permanent	Applicant Name	Preexisting Variance
Variance No.	Аррисант Name	Address of Record
23-V-492	Sunnydale Block 3B Housing Partners,	1555 Sunnydale Ave.
25-V-492	L.P.	San Francisco, 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 January 22, 2025, 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 Fuei Saetern KONE Inc., 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:

¹ Unless otherwise noted, references are to the California Code fo Regulations, title 8.

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 January 22, 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 address of the unchanging variance location specified within Board records for each elevator the subject of previously granted Permanent Variance 23-V-492.
- 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 23-V-492 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-492.
- 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-492 was, in part, based.
- 5. The Board finds the correct address by which to designate the location of each elevator the subject of Permanent Variance No. 23-V-492, to be:

1533 Sunnydale Avenue San Francisco, CA 94134

D. <u>Decision and Order</u>

1. Permanent Variance Application No. 23-V-492M1 is conditionally GRANTED, thereby modifying Board records, such that, without change in variance location, each elevator

being the subject of Permanent Variance Nos. 23-V-492, and 23-V-492M1, shall have the following address designation:

1533 Sunnydale Avenue San Francisco, CA 94134

2. Permanent Variance No. 23-V-492, 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-492M1.

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

Dated: January 24, 2025

Kelly Cha⁄u, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application to Modify Permanent Variance by:	Permanent Variance No.: 23-V-619M1 Proposed Decision Dated: January 24, 2025
1457 Main Owner LP	DECISION
The Occupational Safety and Health PROPOSED DECISION by Kelly Chau, Hearin	Standards Board hereby adopts the attached g Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: February 20, 2025 THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION. YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DEREK URWIN, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized Representatives.

In the Matter of Application to Modify Permanent Variance by:	OSHSB File No.: 23-V-619M1
1457 Main Owner LP	PROPOSED DECISION
	Hearing Date: January 22, 2025 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 Regulations¹, as follows:

Preexisting OSHSB File No.	Applicant Name	Variance Address of Record	Preexisting Number of Elevators
23-V-619	1457 Main Owner LP	1457 N. Main 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. <u>Procedural</u>

1. This hearing was held on January 22, 2025 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, Jennifer Linares appeared on behalf of the Applicants' representative, the Schindler Elevator Corporation; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

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	Permanent variance applications 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 taken of the Board's files, records, recordings and decisions concerning the Elevator Safety Order requirements from which variance shall issue. On January 22, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

C. Findings and Basis

- 1. The Applicant requests modification of the quantity of elevators the subject of previously granted Permanent Variance No. 23-V-619, to increase the quantity of elevators from two (2) to three(3).
- 2. Application section 3, declared to be wholly truthful under penalty of perjury by the Applicant signatory, states facts upon which to reasonably find that additional requested subject elevator is to be of the same manufacturer model type and material technical characteristics and specifications, as the existing elevator the subject of Permanent Variance No. 23-V-619.
- Cal/OSHA has evaluated the immediate request for modification of variance, 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 OSHSB Permanent Variance File No. 23-V-619.
- 4. The Board finds the section 2 referenced declaration to be credible, uncontroverted, and consistent with available, sufficient facts, and finds modification of Permanent Variance 23-V-619, increasing the quantity of subject elevators from two (2) to three (3), to be of no bearing upon the finding of equivalent occupational health and safety upon which Grant of preexisting Permanent Variance 23-V-619 was, in part, based.

D. <u>Decision and Order</u>

1. Application for Modification of Permanent Variance, No. 23-V-619M1, is conditionally GRANTED, as specified below, such that a total of three(3) elevators are the subject of Permanent Variance No. 23-V-619, as hereby modified.

- 2. Permanent Variance No. 23-V-619, being only modified as to the subject quantity of elevators specified in above Decision and Order section 1, is otherwise unchanged and remaining in full force and effect, as hereby incorporated by reference into Modification of Permanent Variance No. 23-V-619M1.
- 3. 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 California Code of Regulations, title 8, 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 for its issuance.

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

Dated: January 24, 2025

Kelly Chay, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:	Permanent Variance No.: see section A.1 table of
Arrow Lift Symmetry Vertical Platform Lift	Proposed Decision Dated: January 24, 2025
	DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	THE FOREGOING WARRIANGE REGISTRATION
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	,,,,
	Note: A copy of this Decision must be
DEDEK LIDVAKINI. A 4 - 1-1-1-1	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	nepresentatives.

In the Matter of Application for Permanent Variance Regarding:

table below

Permanent Variance No.: see section A.1

1

Arrow Lift Symmetry Vertical Platform Lift

PROPOSED DECISION

Hearing Date: January 22, 2025

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 Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-486	Orange Medical Partners	501 N. Orange St. Glendale, 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. <u>Procedural</u>

- 1. This hearing was held on January 22, 2025 via videoconference, by the Occupational Safety and Health Standards Board ("Board") with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit in accordance with section 426.
- 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 per section A.1 table

¹ Unless otherwise noted, rerferences are to the california Code of Regulations, title 8.

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 January 22, 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 vertical platform (wheelchair) lift(s) in the quantity, at the location, specified per the above section A.1 table.
- 2. The subject vertical lift is proposed to be a Symmetry Model VPL/VPC SLH-168, with a vertical travel range of approximately 150 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, subdivision (e)(1)(c) and 3141.7, subdivision (b) subject of the following conditions:

- a. 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.
- b. 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.
- c. 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.
- d. 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:
 - i. Platform driving means examination;
 - ii. Platform examination;
 - iii. Suspension means examination;
 - iv. Platform alignment;
 - v. Vibration examination;
 - vi. Door/gate electrical; and
 - vii. Mechanical lock examination.
- e. 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.
- f. 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.

- g. The Applicant shall notify the CQCC if the lift shuts down for any reason. The lift shall only be restarted by the CQCC.
- h. 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.
- i. 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.
- j. Any CQCC performing inspections, maintenance, servicing or testing of the elevators shall be provided a copy of this variance decision.
- k. 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.
- I. 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.
- m. 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 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: January 24, 2025

Kelly Chau, Hearing Officer

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance regarding:

Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
 _	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS Mambar	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	
	Note: A copy of this Decision must be
DEREK URWIN, Member	posted for the Applicant's employees to
DEREK OKWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance No: See section A.1 table below
Schindler 3300 with SIL-Rated Drive to De-energize Drive Motor (Group IV)	PROPOSED DECISION Hearing Date: January 22, 2025 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 Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-545	2015 vine street, Ilc	965 Mercedes Ln. El Dorado Hills, CA	2
24-V-547	ZARA USA, Inc.	Unit 2002A - 1065 Brea Mall Brea, CA	1
24-V-552	SJ MAIN ST, LLC	1316 S Main Street Milpitas, CA	1

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

B. <u>Procedural</u>

- 1. This hearing was held on January 22, 2025 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, Jennifer Linares 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").

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

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 per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Review of variance application
PD-4	Review Draft-1 of 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 January 22, 2025, the hearing and record closed, and the matter was taken under submission by the Hearing Officer.

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, 2.20.9.5.4, 2.26.1.4.4(a), 8.4.10.1.1(a)(2)(B), 2.14.1.7.1, and 2.26.9.6.1]. The relevant language of those sections are below.

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.

Inspection Transfer Switch

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[.]

Seismic Reset Switch

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

Car-top Railings

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.

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.

C. Findings of Fact

- 1. Each Applicant intends to utilize Schindler model 3300 MRL elevator cars, in the quantity, at the locations, specified per the above Section A.1 table.
- 2. The installation contract for these 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. The Schindler model 3300 MRL elevator cars are not supported by circular steel wire ropes, as required by the Elevator Safety Orders (ESO). 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. The driving machine and governor are positioned in the hoistway and restrict the required overhead clearance to the elevator car top.
- 7. Applicant proposes to insert the car-top railings at the perimeter of the car top.

8. Applicant intends to use an elevator control system, model CO NX100NA, 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.

C. Conclusive Findings

A preponderence 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.

D. <u>Decision and Order</u>

Each permanent variance application being 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 to 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);
- 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 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.

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.
- 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 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 SIL-3 rated Regenerative, Variable Voltage Variable Frequency (VVVF) motor drive unit, model VAF013 or VAF023, 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.
- 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 that the Applicant was required to notify them of the docketed application for permanent variance per 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 the Applicant, affected employee(s), Cal/OSHA, or by the Board on its own motion, in the procedural manner prescribed.

DATED: January 24, 2025	telly chau
	Kelly Chau, Hearing Officer

of adoption.

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

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 NO. 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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for
Permanent Variance by:

Los Angeles County Metropolitan Transportation Authority Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	representatives.

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

In the Matter of Application for Permanent Variance by:

Permanent Variance Nos.: See section A.1

table below

Los Angeles County Metropolitan
Transportation Authority

PROPOSED DECISION

Hearing Date: January 22, 2025

Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
24-V-546	Los Angeles County Metropolitan	10971 W. Wilshire Blvd.	12
	Transportation Authority	Los Angeles, CA	(UCLA 1-12)

- 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.
- 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, and section 3141.2 incorprated ASME A17.1-2004, sections 8.7.6.1.1 [8.7.1.1] and 8.7.6.1.6.

B. Procedural

- 1. This hearing was held on January 22, 2025, 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, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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 per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews 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 January 22, 2025, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Based upon the record of this proceeding, the Board finds the following: Applicant proposes to perform alterations to twelve(12) existing 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, For this reason, the Applicant requires a permanent variance from the provisions of California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring.
- 2. ASME A17.1-2004, section 8.7.8.1.6 states:

8.7.8.1.6 Handrails. Any alteration to the handrails or handrail system shall require conformance with 6.1.3.2.2, 6.1.3.4.1 through 6.1.3.4.4, 6.1.3.4.6, 6.1.6.3.12, and 6.1.6.4.

- 3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 13-V-153). 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/sec².
- 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 referend 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. ASME A17.1-2004, section 8.7.6.1.1 states:

- 8.7.6.1.1. General Requirements. Any alteration to an escalator shall comply with 6.1.6.1, 6.1.6.1.1, 6.1.6.2.1, 6.1.6.3.1, 6.1.6.3.5, 6.1.6.7, 8.7.1.1, and 8.7.1.2.
- 10. Cal/OSHA has applied ASME A17.1-2004 section 8.7.6.1.1 (reference to section 8.7.1.1) to the prohibition of intentionally varying the travel speed under section 6.1.4.1.
- 11. 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.
- 12. 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/sec²).
- (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."
- 13. 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."

14. 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.

- 15. The Applicant intents to disable the handrail speed monitoring during sleep mode operation.
- 16. 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.
- 17. 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.

18. 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. <u>Conclusive Findings</u>

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. <u>Decision and Order</u>

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, shall have permanent variance from Applicant requires a permanent variance from the provisions of section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring, 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/s² (1 ft/sec²) 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/sec²).
 - (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. 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.
- 3. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.
- 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. 4 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: January 24, 2025

Kelly Chau, Hearing Officer

APPENDIX 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) 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

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Elevator 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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for
Permanent Variance by:

Los Angeles County Metropolitan Transportation Authority Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	representatives.

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

In the Matter of Application for Permanent Variance by:

table below

Los Angeles County Metropolitan
Transportation Authority

PROPOSED DECISION

Hearing Date: January 22, 2025

Permanent Variance Nos.: See section A.1

Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
24-V-548	Los Angeles County Metropolitan Transportation Authority	962 S Bonsall Ave. Los Angeles, CA	8 (VA Station 1-8)

- 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.
- 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, and section 3141.2 incorprated ASME A17.1-2004, sections 8.7.6.1.1 [8.7.1.1] and 8.7.6.1.6.

B. Procedural

- 1. This hearing was held on January 22, 2025, 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, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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 per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews 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 January 22, 2025, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Based upon the record of this proceeding, the Board finds the following: Applicant proposes to perform alterations to eight(8) existing 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, For this reason, the Applicant requires a permanent variance from the provisions of California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring.
- 2. ASME A17.1-2004, section 8.7.8.1.6 states:

8.7.8.1.6 Handrails. Any alteration to the handrails or handrail system shall require conformance with 6.1.3.2.2, 6.1.3.4.1 through 6.1.3.4.4, 6.1.3.4.6, 6.1.6.3.12, and 6.1.6.4.

- 3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 13-V-153). 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/sec².
- 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 referend 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. ASME A17.1-2004, section 8.7.6.1.1 states:

- 8.7.6.1.1. General Requirements. Any alteration to an escalator shall comply with 6.1.6.1, 6.1.6.1.1, 6.1.6.2.1, 6.1.6.3.1, 6.1.6.3.5, 6.1.6.7, 8.7.1.1, and 8.7.1.2.
- 10. Cal/OSHA has applied ASME A17.1-2004 section 8.7.6.1.1 (reference to section 8.7.1.1) to the prohibition of intentionally varying the travel speed under section 6.1.4.1.
- 11. 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.
- 12. 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/sec²).
- (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."
- 13. 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."

14. 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.

- 15. The Applicant intents to disable the handrail speed monitoring during sleep mode operation.
- 16. 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.
- 17. 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.

18. 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. <u>Conclusive Findings</u>

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. <u>Decision and Order</u>

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, shall have permanent variance from Applicant requires a permanent variance from the provisions of section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring, 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/s² (1 ft/sec²) 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/sec²).
 - (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. 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.
- 3. The Applicant shall have the controller schematic diagrams available in the control space together with a written explanation of the operation of the controller.
- 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. 4 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: January 24, 2025

Kelly Chau, Hearing Officer

APPENDIX 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) 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

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Elevator 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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for
Permanent Variance by:

Los Angeles County Metropolitan Transportation Authority Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	representatives.

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

In the Matter of Application for Permanent Variance by:

table below

Los Angeles County Metropolitan
Transportation Authority

PROPOSED DECISION

Hearing Date: January 22, 2025

Permanent Variance Nos.: See section A.1

Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variance from the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Escalators
24-V-549	Los Angeles County Metropolitan Transportation Authority	904 Bonsall Ave. Los Angeles, CA	1 (Escalator 9)

- 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.
- 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, and section 3141.2 incorprated ASME A17.1-2004, sections 8.7.6.1.1 [8.7.1.1] and 8.7.6.1.6.

B. Procedural

- 1. This hearing was held on January 22, 2025, 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, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

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 per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews 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 January 22, 2025, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Based upon the record of this proceeding, the Board finds the following: Applicant proposes to perform alterations to one(1) existing 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, For this reason, the Applicant requires a permanent variance from the provisions of California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring.
- 2. ASME A17.1-2004, section 8.7.8.1.6 states:

8.7.8.1.6 Handrails. Any alteration to the handrails or handrail system shall require conformance with 6.1.3.2.2, 6.1.3.4.1 through 6.1.3.4.4, 6.1.3.4.6, 6.1.6.3.12, and 6.1.6.4.

- 3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 13-V-153). 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/sec².
- 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 referend 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. ASME A17.1-2004, section 8.7.6.1.1 states:

- 8.7.6.1.1. General Requirements. Any alteration to an escalator shall comply with 6.1.6.1, 6.1.6.1.1, 6.1.6.2.1, 6.1.6.3.1, 6.1.6.3.5, 6.1.6.7, 8.7.1.1, and 8.7.1.2.
- 10. Cal/OSHA has applied ASME A17.1-2004 section 8.7.6.1.1 (reference to section 8.7.1.1) to the prohibition of intentionally varying the travel speed under section 6.1.4.1.
- 11. 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.
- 12. 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/sec²).
- (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."
- 13. 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."

14. 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.

- 15. The Applicant intents to disable the handrail speed monitoring during sleep mode operation.
- 16. 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.
- 17. 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.

18. 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. <u>Decision and Order</u>

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, shall have permanent variance from Applicant requires a permanent variance from the provisions of section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring, 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/s² (1 ft/sec²) 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/sec²).
 - (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. 4 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 s	ubmitted to	the Board	d for consideration
of adoption.			

DATED: January 24, 2025

Kelly Chau, Hearing Officer

APPENDIX 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) 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

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Elevator 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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

	<u></u>
In the Matter of Application for Permanent Variance by: ZARA USA, Inc.	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: January 24, 2025
	DECISION
The Occupational Safety and Healt PROPOSED DECISION by Kelly Chau, Heari	h Standards Board hereby adopts the attached ng Officer.
JOSEPH M. ALIOTO JR., Chairman	OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD
KATHLEEN CRAWFORD, Member	Date of Adoption: February 20, 2025 THE FOREGOING VARIANCE DECISION WAS
DAVID HARRISON, Member	ADOPTED ON THE DATE INDICATED ABOVE. IF YOU ARE DISSATISFIED WITH THE DECISION, A PETITION FOR REHEARING
NOLA KENNEDY, Member	MAY BE FILED BY ANY PARTY WITH THE STANDARDS BOARD WITHIN TWENTY (20) DAYS AFTER SERVICE OF THE DECISION.
CHRIS LASZCZ-DAVIS, Member	YOUR PETITION FOR REHEARING MUST FULLY COMPLY WITH THE REQUIREMENTS OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DEREK URWIN, Member	Note: A copy of this Decision must be posted for the Applicant's employees to read, and/or a copy thereof must be provided to the employees' Authorized

Representatives.

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

In the Matter of Application for Permanent Variance by:	Permanent Variance Nos.: See section A.1 table below
ZARA USA, Inc.	PROPOSED DECISION
	Hearing Date: January 22, 2025 Location: Zoom

A. <u>Subject Matter</u>

1. Each applicant ("Applicant") below has applied for permanent variance from provisions of the Elevator Safety Orders, found at title 8, of the California Code of Regulations¹ as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Escalators	
24-V-550	ZARA USA, Inc.	Unit 2002A - 1065 Brea Mall Brea, 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.
- 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, and section 3141.2 incorprated ASME A17.1-2004, sections 8.7.6.1.1 [8.7.1.1] and 8.7.6.1.6.

B. Procedural

- 1. This hearing was held on January 22, 2025, 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, Jennifer Linares, with Schindler Elevator Corporation, appeared on behalf of the Applicants; 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 per section A.1 table
PD-2	OSHSB Notice of Hearing
PD-3	Cal/OSHA Reviews 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 January 22, 2025, the hearing and record was closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Based upon the record of this proceeding, the Board finds the following: Applicant proposes to perform alterations to two(2) existing 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, For this reason, the Applicant requires a permanent variance from the provisions of California Code of Regulations, Title 8, Elevator Safety Orders, Group IV, Section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring.
- 2. ASME A17.1-2004, section 8.7.8.1.6 states:

8.7.8.1.6 Handrails. Any alteration to the handrails or handrail system shall require conformance with 6.1.3.2.2, 6.1.3.4.1 through 6.1.3.4.4, 6.1.3.4.6, 6.1.6.3.12, and 6.1.6.4.

- 3. The Applicant's proposed "sleep mode" function is similar to other installations for which a permanent variance has been granted (Permanent Variance No. 13-V-153). 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/sec².
- 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 referend 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. ASME A17.1-2004, section 8.7.6.1.1 states:

- 8.7.6.1.1. General Requirements. Any alteration to an escalator shall comply with 6.1.6.1, 6.1.6.1.1, 6.1.6.2.1, 6.1.6.3.1, 6.1.6.3.5, 6.1.6.7, 8.7.1.1, and 8.7.1.2.
- 10. Cal/OSHA has applied ASME A17.1-2004 section 8.7.6.1.1 (reference to section 8.7.1.1) to the prohibition of intentionally varying the travel speed under section 6.1.4.1.
- 11. 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.
- 12. 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/sec²).
- (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."
- 13. 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."

14. 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.

- 15. The Applicant intents to disable the handrail speed monitoring during sleep mode operation.
- 16. 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.
- 17. 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.

18. 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. <u>Conclusive Findings</u>

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. <u>Decision and Order</u>

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, shall have permanent variance from Applicant requires a permanent variance from the provisions of section 3141.2 [ASME A17.1-2004 sections 8.7.6.1.1 (8.7.1.1) and 8.7.6.1.6] with the relevant code sections being ASME A17.1-2004, sections 6.1.4.1 and 6.1.6.4, regarding the variation of escalator speed and handrail speed monitoring, 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/s² (1 ft/sec²) 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/sec²).
 - (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. 4 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: January 24, 2025

Kelly Chau, Hearing Officer

APPENDIX 1

Detection Distance Sleep Mode Operation

Acceleration Rate (ft./sec²) 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

$$d = (V_f - V_S) \times \frac{V_w}{a}$$

d Detection distance (ft.)

V_f Elevator 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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Schindler Model 3300 Elevators, W/Variant Governor Ropes and Sheaves (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
DEDEK LIDVAKINI. Marrish	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.

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

In the Matter of Application for Permanent Variance regarding:	Permanent Variance No.: See section A.1 table below
Schindler Model 3300 Elevators, W/Variant Governor Ropes and Sheaves (Group IV)	PROPOSED DECISION
	Hearing Date: January 22, 2025
	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 Regulations¹, as follows:

Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-551	10229 - 10233 Eton Avenue, LLC	10233 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 January 22, 2025, 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, Jennifer Linares, with the Schindler 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. Oral evidence was received at the hearing, and by stipulation of all parties, documents were admitted into evidence:

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

Exhibit Number	Description of Exhibit
PD-1	Permanent variance applications per table
	in Jurisdictional and Procedural Matters
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 January 22, 2025, the hearing and record was closed, and the matter 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

- 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.
- 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. <u>Decision and Order</u>

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.
- 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:	January 24, 202 <u>5</u>	telly chau
		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.
 - 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 AI7.I-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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Otis Medical Emergency Elevator Car Dimensions (Group IV) Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	• • • •
	provided to the employees' Authorized
	Representatives.

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

In the Matter of Application for Permanent Variance regarding:	Permanent Variance No.: See section A.1 table below
Otis Medical Emergency Elevator Car Dimensions (Group IV)	PROPOSED DECISION
	Hearing Date: January 22, 2025
	Location: Zoom

A. Subject Matter

 Each below listed applicant ("Applicant") has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows

Permanent Variance No.	Applicant Name	Variance Location Address
24-V-553	Loma Linda Surgery Center, LLC	25258 Redlands Blvd. Loma Linda, CA
24-V-570	Sacramento Madison Avenue LP	4317 Madison Ave. Sacramento, CA
24-V-574	San Diego Unified School District	Kavod Charter School 6991 Balboa Ave. San Diego, 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.
- 3. This hearing was held on January 22, 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, in accordance with section 426.
- 4. At the hearing, Dan Leacox of Leacox & Associates, appeared on behalf of each Applicant; Jose Ceja and Mark Wickens appeared on behalf of the Division of Occupational Safety and Health ("Cal/OSHA").

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

5. 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 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

 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 January 22, 2025, the hearing and record closed, and the matter taken under submission by the Hearing Officer.

B. 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.

C. 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.

D. <u>Decision and Order</u>

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: January 24, 2025

Kelly Chau, Hearing Officer

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:

Otis Gen2S/Gen3Edge/Gen3Core Elevator & Medical Emergency Elevator Car Dimensions (Group IV)

Permanent Variance No.: see section A.1

table of

Proposed Decision Dated: January 24, 2025

DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS, Member	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
	Note: A copy of this Decision must be
DEDEK LIDVAKINI. Marahar	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.

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

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See section A.1 table below
Otis Gen2S/Gen3Edge/Gen3Core Elevator & Medical Emergency Elevator Car Dimensions	PROPOSED DECISION
(Group IV)	Hearing Date: January 22, 2025
	Location: Zoom

A. Subject Matter

1. Each applicant ("Applicant") below has applied for permanent variances from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-554	Sunnydale Block 9 Housing Partners, L.P.	1652 Sunnydale Ave. San Francisco, CA	2
24-V-555	The Irvine Company	Los Olivos II Phase 6 - Building 10 10100 Encanto Irvine, CA	3
24-V-556	AvalonBay Communities, Inc	Kanso Hillcrest 3900 Cleveland Ave. San Diego, CA	2
24-V-569	Avelaide Melrose, LLC	8451 Melrose Ave. West Hollywood, CA	1
24-V-571	Oversalted, Inc	836 W. 42nd Pl. Los Angeles, CA	1
24-V-572	Buckler Family Vineyards, LLC	1 C St. Petaluma, CA	1
24-V-573	River LLC	44439 17th St. W Lancaster, CA	1

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 $^{^{\}rm 1}$ Unless otherwise noted, all references are to title 8, California Code of Regulations.

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. <u>Procedural</u>

- 1. This hearing was held on January 22, 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, Dan Leacox of Leacox & Associates, 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 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 January 22, 2025, the hearing and record closed, and the matter taken under submission by the Hearing Officer.

C. Findings of Fact

- 1. Each Applicant intends to utilize Otis Gen3 Edge/Gen2S elevators at the locations and in the numbers stated in the above section A.1 table.
- 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. <u>Conclusive Findings</u>

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:

- <u>Car top railing</u>: sections 2.14.1.7.1 (to permit an inset car top railing, if, in fact, the car top railing is inset);
- <u>Speed governor over-speed switch</u>: 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);
- <u>Pitch diameter</u>: 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.]);
- <u>Suspension means</u>: 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;

- <u>Inspection transfer switch</u>: 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
- <u>Seismic reset switch</u>: 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).
- <u>Minimum Inside Car Platform Dimensions</u>: 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).

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

Dated: January 24, 2025

, , , ,

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

<u>Suspension Means – Replacement Reporting Condition</u>

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:

- 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.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance No.: see section A.1 table of
KONE Monospace 500 Elevators (Group IV)	Proposed Decision Dated: January 24, 2025
	DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
DAVID THOMAS Marshar	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	
	Note: A copy of this Decision must be
DEDEK LIDWIN Mambar	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	-1-,

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

In the Matter of Application for Permanent Variance Regarding:	Permanent Variance Nos.: See Section A.1 Table Below
KONE Monospace 500 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: January 22, 2025 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 Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-557	RMG HVMB BROADWAY, LP	259 W. 85th Street Los Angeles, CA	1
24-V-558	RMG FEE CORONADO, LP	668 S. Coronado St. Los Angeles, CA	2
24-V-559	RMG BAME, LP	7924 S. Western Ave. Los Angeles, CA	1
24-V-560	Matticus Hospitality Group Inc.	180 W. Esplanade Drive Oxnard, CA	2
24-V-562	ARE-SD Region No.57, LLC	4160 Campus Point Court San Diego, CA	2
24-V-563	Sharp Healthcare	(Bldg B) 8985 Balboa Ave. San Diego, 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.

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

B. Procedural

- 1. This hearing was held on January 22, 2025, 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, Fuei Saetern, with KONE, Inc., 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	
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 January 22, 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 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 the afore cited requirement 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, section 2.20.3—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 to Cal/OSHA approval).
- 8. In addition, each Applicant has proposed to utilize 6 mm diameter governor ropes in variance from 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 Elevator Safety Order 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 Elevator Safety Orders, 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 Elevator Safety Orders 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 safety engineers have scrutinized the material and structural specifications, and performance testing data, of this particular proposed rope, and conclude 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:

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

 $W = (S \times N)/f$

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 submissions to the record (Exhibits PD-3 and PD-4 respectively), and stated positions 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 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. <u>Decision and Order</u>

Each permaent variance application 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. 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 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: January 24, 2025

Kelly Chau, Hearing Officer

Appendix 1

Monospace 500 Suspension Appendix 1 Table.

Variance Number	Elevator ID	Minimum	Maximum Speed	Maximum
		Quantity of Ropes	in Feet per Minute	Suspended Load
		(per Condition 3)	(per Condition 6)	(per Condition 7)
24-V-557	Elevator 1	7	150	12247
24-V-558	Elevator 1	7	150	12247
24-V-558	Elevator 2	6	150	10497
24-V-559	Elevator 1	7	150	12247
24-V-560	Elev. 1	7	150	12247
24-V-560	Elev. 2	6	150	10497
24-V-562	South EL-2	7	200	11556
24-V-562	South EL-3	8	200	13207
24-V-563	2	8	200	13207

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:

- 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 above Appendix 2, section 2, Subsection (a), above.

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

2520 Venture Oaks Way, Suite 350 Sacramento, California 95833 (916) 274-5721

In the Matter of Application for Permanent Variance Regarding: KONE Monospace 300 Elevators (Group IV)	Permanent Variance No.: see section A.1 table of Proposed Decision Dated: January 24, 2025
	DECISION

The Occupational Safety and Health Standards Board hereby adopts the attached PROPOSED DECISION by Kelly Chau, Hearing Officer.

	OCCUPATIONAL SAFETY AND HEALTH
JOSEPH M. ALIOTO JR., Chairman	STANDARDS BOARD
	Date of Adoption: February 20, 2025
KATHLEEN CRAWFORD, Member	
	THE FOREGOING VARIANCE DECISION WAS
	ADOPTED ON THE DATE INDICATED ABOVE
DAVID HARRISON, Member	IF YOU ARE DISSATISFIED WITH THE
	DECISION, A PETITION FOR REHEARING
	MAY BE FILED BY ANY PARTY WITH THE
NOLA KENNEDY, Member	STANDARDS BOARD WITHIN TWENTY (20)
	DAYS AFTER SERVICE OF THE DECISION.
	YOUR PETITION FOR REHEARING MUST
CHRIS LASZCZ-DAVIS, Member	FULLY COMPLY WITH THE REQUIREMENTS
	OF CALIFORNIA CODE OF REGULATIONS,
	TITLE 8, SECTIONS 427, 427.1 AND 427.2.
DAVID THOMAS, Member	,
	Note: A copy of this Decision must be
DEDEK LIDIA (IALAA L	posted for the Applicant's employees to
DEREK URWIN, Member	read, and/or a copy thereof must be
	provided to the employees' Authorized
	Representatives.
	nepresentatives.

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

In the Matter of Application for Permanent Variance Regarding:	Permaent Variance Nos.: See section A.1 table below
KONE Monospace 300 Elevators (Group IV)	PROPOSED DECISION
	Hearing Date: January 22, 2025 Location: Zoom

A. Subject Matter

1. The Applicants ("Applicant") below have applied for a permanent variance from provisions of the Elevator Safety Orders, found at title 8 of the California Code of Regulations¹, as follows:

Permanent Variance No.	Applicant Name	Variance Location Address	No. of Elevators
24-V-561	Guasti SPV, LLC	535 N. Turner Avenue Ontario, CA	1
24-V-564	Jefferson Ocean Creek, LLC	Building 1 - 1999 S. Oceanside Blvd. Oceanside, CA	1
24-V-565	JPI California Construction	Building 2 - 1919 S. Oceanside Blvd. Oceanside, CA	1
24-V-566	Jefferson Ocean Creek, LLC	Building 3 - 1939 S. Oceanside Blvd. Oceanside, CA	1
24-V-567	Jefferson Ocean Creek, LLC	Building 4 - 1959 S. Oceanside Blvd. Oceanside, CA	1
24-V-568	Jefferson Ocean Creek, LLC	Building 5 - 1979 S. Oceanside Blvd. Oceanside, CA	1

2. The safety order requirements are set out within section 3141 incorporated ASME A17.1-2004, sections 2.18.5.1 and 2.20.4.

B. <u>Procedural</u>

-

¹ Unless otherwise noted, references are to the California Code of Regulations, title 8.

- 1. This hearing was held on January 22, 2025, via videoconference, by the Occupational Safety and Health Standards Board ("Board"), with Hearing Officer Kelly Chau, both presiding and hearing the matter on its merit, in accordance with section 426.
- 2. At the hearing, Fuei Saetern, with KONE, Inc., 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
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 January 22, 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, section 2.20.3—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:

 $W = (S \times N)/f$

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 PD-3), 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. <u>Decision and Order</u>

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: January 24, 2025

Kelly Chau. Hearing Officer

Appendix 1

Monospace 300 Suspension Ropes Appendix 1 Table

Variance Number	Elevator ID	Minimum	Maximum Speed	Maximum
		Quantity of Ropes	in Feet per Minute	Suspended Load
		(per Condition 3)	(per Condition 6)	(per Condition 7)
24-V-561	1	7	150	12247
24-V-561	2	5	150	8748
24-V-564	Elevator 1	7	150	12247
24-V-565	Elevator 1	7	150	12247
24-V-566	Elevator 1	7	150	12247
24-V-567	Elevator 1	7	150	12247
24-V-568	Elevator 1	7	150	12247

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 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 above Appendix 2, section 2, Subsection (a), above.

Occupational Safety and Health Standards Board

Business Meeting
Executive Officer's Report

Occupational Safety and Health Standards Board

Business Meeting Legislative Report

SB-20 Occupational safety: fabrication activities on stone slab products. (2025-2026) - UPDATE

SB-20 Occupational safety: fabrication activities on stone slab products. **(2025-2026)**

(Menjivar)

Date	Action
01/29/25	Referred to Coms. on L., P.E. & R. and HEALTH.
12/03/24	From printer. May be acted upon on or after January 2.
12/02/24	Introduced. Read first time. To Com. on RLS. for assignment. To print.

Summary:

SB 20, as introduced, Menjivar. Occupational safety: fabrication activities on stone slab products.

SB-20

Existing law establishes the Occupational Safety and Health Standards Board within the Department of Industrial Relations to promulgate and enforce 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. A violation of these standards and regulations under specific circumstances is a crime.

This bill would impose restrictions on specified fabrication activities on certain stone slab products that are used for countertop installation or customization. Specifically, a person or entity engaged in those fabrication activities would be prohibited from using dry methods, and would be required to use effective wet methods, as specified. The bill would make a violation of these provisions grounds for, among other disciplinary action, an immediate order by the Division of Occupational Safety and Health prohibiting continued fabrication activities on those stone slab products.

Existing law establishes the State Department of Public Health, which is led by the State Public Health Officer, within the California Health and Human Services Agency. Existing law vests the department with certain duties, powers, functions, jurisdiction, and responsibilities over specified public health programs.

The bill would require, on or before July 1, 2026, the State Department of Public Health to consult with representatives of approved apprenticeship programs to adopt a training curriculum regarding the safe performance of fabrication activities on stone slab products that meets specified requirements, including classroom instruction, and to certify an individual who has completed that curriculum. Beginning July 1, 2027, the bill would require certain individuals, including an owner or operator of a stone slab product fabrication shop, to be enrolled in or have completed the training curriculum, except as specified, before fabrication activity or employment begins, as described.

The bill would require, on or before January 1, 2027, the department to develop an application and certification process for fabrication shops to lawfully engage in stone slab product fabrication activities. The bill would authorize fabrication shops to engage in those fabrication activities during the pendency of the application development and licensing 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. The bill would require the department to create a statewide tracking system to track the number of fabrication shops that have submitted a deposit subject to specified requirements, including that the statewide tracking system is posted on the department's internet website and is made available to the public.

The bill would require, beginning January 1, 2027, 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 of Occupational Safety and Health, to track and keep a record of specified information on fabrication shops, including the number of violations issued to any of the fabrication shops for failure to comply with any temporary or future standards relating to respirable crystalline silica, as specified. The bill would prohibit a person or entity, or an employee thereof, from engaging in fabrication activities on stone slab products unless the person or entity has a certification.

The bill would prohibit, beginning January 1, 2027, a person from supplying a slab solid surface product directly to a person or entity engaged in fabrication activities on those products if the person or entity does not have a valid certification. The bill

would require a person that, among other things, supplies a slab solid surface product to a person or entity engaged in fabrication activities on those products to verify the person or entity has a certification, as specified. The bill would require a person that supplies a slab solid surface product to a person or entity 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 specify that a violation of any of the above-described provisions may be grounds for disciplinary action, as specified, but is not a crime. The bill would establish the Slab Fabrication Activity Account in the Occupational Safety and Health Fund in the State Treasury, and require all fees, penalties, or other moneys collected by the department under the above-described provisions to be deposited into the account. The bill would authorize moneys in the account to be expended by the department for the purposes of administering the above-described provisions, and would make that authorization contingent on an appropriation of funds for that express purpose.

The bill would require, beginning January 1, 2027, the State Public Health Officer to maintain a publicly accessible database on the department's internet website that includes, among other things, information on any active orders issued by the department in the prior 12 months prohibiting an activity at a fabrication shop, as specified.

The bill would define various terms for these purposes. The bill would make findings and declarations related to these provisions.

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.

H.R. 86 **NOSHA Act**. (2025-2026) - **UPDATE**

H.R. 86 NOSHA Act.	(2025-2026)
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(Biggs)

Date	Action
01/0/25	Referred to the House Committee on Education and Workforce.
01/03/25	Introduced in House

H.R. 86

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.