STANDARDS PRESENTATION TO

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD, TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 4. Construction Safety Orders
Article 18. Access and Egress

§1630. Elevators for Hoisting Workers.

(a) Definitions. For the purposes of this section, the following definitions apply:

<u>Ground level – The level of the primary construction entrance to the building, structure or excavation.</u>

Operating – For the purposes of this section, 'operating' means that the CPE is capable of transporting employees and actively servicing the required landings in accordance with section 1604.26(c)(1).

<u>Primary construction entrance – For the purposes of this section, the 'primary construction entrance' is the access location where a majority of employees enter a building, structure or excavation. Structures include any temporary or permanent stairs or ramps used for access to buildings or other structures.</u>

- (ab) In addition to the stairways required in Section 1629, a at least one construction passenger elevator for hoisting workers shall be installed and in operation on or in any building, or structure, designed to be 60 feet or more in height above or 48 feet or more in depth below ground level when completed. The elevator shall be installed and operational when the building or structure reaches 36 feet in height. The building or structure height shall be determined by measuring from ground level to the highest structural level including the parapet walls, mechanical rooms, stair towers and elevator penthouse structures but excluding antennas, smokestacks, flag poles and other similar attachments.
- (1) The elevator shall be installed and operating before any employees work at a height over 36 feet.
- (2) Determining the building or structure height or depth:
- (A) The building or structure height shall be determined by measuring from ground level to the highest structural level including the parapet walls, mechanical rooms, stair towers and

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<u>elevator penthouse structures, but excluding antennas, smokestacks, mechanical screens, flag poles or similar attachments.</u>

- (B) The building or structure depth shall be determined by measuring from ground level to the lowest floor level excluding local depression such as sumps and elevator pits.
- (C) When computing the height of the building or structure, the depth shall not be considered; when computing the depth of the building or structure, the height shall not be considered. If the height is at 60 feet or more above, or the depth is at 48 feet or more below ground level, at least one construction elevator shall be installed to serve both locations.
- (3) In excavations, the elevator shall be installed and operational as soon as practicable after any portion of the excavation has reached its total depth.

The building or structure depth shall be determined by measuring from ground level to the lowest floor level excluding local depression such as sumps and elevator pits.

Ground level, for the purposes of this section, is defined as the level of the primary construction entrance to the building or structure.

When computing the height, the depth shall not be considered; and when computing the depth of the building or structure, the height shall not be considered. If the height is at 60 feet or more above or at 48 feet or more below ground level, a construction elevator(s) shall be installed to serve both locations.

EXCEPTIONS to subsection 1630(b):

- (1) Scaffolds and falsework not including slip and climbing forms.
- (2) At work locations where unusual site conditions or unusual structure configurations exist, alternate means of access in conformance with Section 1630(c) shall be permitted.
- (2) Work locations with unusual site conditions or unusual structure configurations where alternate means of access are provided in accordance with subsection (d).
- (3) Structures, such as parking structures, where the design allows vehicles to be driven to the upmost working level, and

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- (A) All shoring has been removed and a clear path of travel to the highest working level is maintained, or;
- (B) There is more than one ramp and one ramp has a clear path of travel maintained to the highest working level, and;
- (C) 1. At least two powered personnel carts or vehicles are provided and operated.
- 2. A sufficient number of designated personnel are trained to operate the carts or vehicles and are readily available to perform such duties during all working hours.
- 3. The cart or vehicle is designed to allow for transportation of injured personnel to the ground level if needed.
- 4. Designated locations with call boxes or equivalent are established at each level to allow workers to access the powered carts or vehicles.
- 5. Daily written inspections are performed to ensure clear, unobstructed and safe access for carts or vehicles at all times.
- 6. Two temporary stair towers or equivalent are available.
- (4) A permanent passenger or freight elevator meeting the requirements of article 14, section 1604.4 provides service to all required landings and the uppermost level the elevator is designed to service.

NOTE: For the purposes of this Section, unusual site conditions and structure configurations are considered to exist at those work locations where the installation of a construction passenger elevator is not feasible.

EXAMPLES:

Unusual site conditions or structure configurations are bridges, steel tank erection, dams, water towers, antennas, cooling towers, refinery towers, stacks, prefabricated parking structures, tower cranes, etc.

- (<u>bc</u>) Construction passenger elevators shall be installed, operated and maintained in compliance with <u>Aarticle 14</u> of the Construction Safety Orders.
- (c) At unusual site conditions or structure configurations, the Division shall permit alternate means of access, consisting of one or more, but not limited to, the following:

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- (1) Use of personnel platforms designed, constructed, and operated as specified by Section 5004 of the General Industry Safety Orders, and only under the conditions permitted by the general requirements of that section.
- (2) Use of suspended power driven scaffolds where employees are protected by safety belts secured to independent safety lines by means of a descent control device acceptable to the Division.
- (3) Use of appropriate vehicle-mounted elevating and rotating work platforms.
- (4) Use of other means, such as inclined elevators, etc. acceptable to the Division, presented in written form and acceptance granted prior to use.
- (d) Prior to use, the employer shall substantiate in written form alternate means of access acceptable to the Division for unusual site conditions or structure configurations. For the purposes of this section, unusual site conditions and structure configurations are considered to exist at those work locations where the installation or use of a construction passenger elevator is not feasible.
- NOTE: Examples of unusual site conditions or structure configurations include bridges, steel tank erection, dams, water towers, antennas, cooling towers, refinery towers, stacks, prefabricated parking structures, tower cranes, etc.
- (de) Landings. shall be provided for the passenger elevator on or in buildings or structures at the upper-most floor and at intervals not to exceed 3 floors or 36 feet.
- (1) Landings shall provide access to the working level. The least dimension of a landing shall not be less than 15 feet. Landings shall be secured to the building or structure.
- (2) Landings shall be serviced by a passenger elevator on or in buildings or structures at the upper-most floor and at intervals not to exceed 3 floors or 36 feet, whichever is less.
- NOTE: Other landing locations acceptable to the Division may be substituted where the design of the building or structure make the above impractical.
- (3) No work shall be performed above 3 floors or 36 feet, whichever is less, from the uppermost accessible landing of the CPH.

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- (4) In excavations, the first landings to be installed shall be at the top and bottom of the excavation. Additional landings shall be installed as soon as practicable when additional working levels are established.
- (5) Landings are not required at any level of a building or structure where no working level exists.
- (6) For buildings, the distance between the elevator landing and the employee work location shall not exceed one-quarter mile.
- (7) A landing is required at the roof until a permanent passenger (or freight) elevator meeting the requirements of article 14, section 1604.4 provides service to all required landings and the uppermost level the elevator is designed to service.

EXCEPTIONS to subsection 1630(e):

- (1) Landings are not required at roofs of mechanical rooms, elevator penthouses and similar rooms located on the roof of a building or structure, nor on buildings with a roof pitch 4:12 or greater, barrel roofs or terra cotta tile roofs, cement tile roofs, mansard roofs or configurations that will not allow for a landing due to structural or functional limitations.
- (2) On cast-in-place concrete structures, the installation of landings may be delayed until the concrete reaches sufficient strength for the formwork to be removed.

NOTE: Other landing locations acceptable to the Division may be substituted where the design of the building or structure make the above impractical.

Note: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.