

OCCUPATIONAL SAFETY
AND HEALTH STANDARDS BOARD
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TITLE 8. CALIFORNIA CODE OF REGULATIONS

ELEVATOR SAFETY ORDERS

Chapter 4, Subchapter 6

Amend: Group I. Administrative Regulations; Article 1, Section 3000; Article 2, Section 3001; Article 3, Section 3002; Article 4, Section 3003; Article 6, Section 3009; Group IV; Article 40; and Article 42, Section 3142.

Repeal: Article 40, Section 3140; and Article 41, Section 3141.1.

Adopt: Article 45; Article 46; Group V; Article 47; Article 47, Section 3147, Section 3147.100, Section 3147.101, Section 3147.102, Section 3147.103, Section 3147.104, Section 3147.200 and Section 3147.300.

REVISIONS TO THE ELEVATOR SAFETY ORDERS

NOTICE IS HEREBY GIVEN that the Occupational Safety and Health Standards Board (Board) proposes to adopt, amend or repeal the foregoing provisions of title 8 of the California Code of Regulations in the manner described in the Informative Digest, below.

PUBLIC HEARING

A public hearing has been scheduled at which time any interested party may present statements, orally or in writing, about this proposed regulatory action. The hearing will continue until all oral comments are received, and will be held as follows:

Date: June 18, 2026

Location: Hampton Inn & Suites Napa
945 Hartle Court
Napa, CA 94559

OR

Join via ZOOM

<https://tkoworks.zoom.us/j/87501250331> (Webinar ID: 875 0125 0331)

Call-in Number: (669) 444-9171

Conference ID: 875 0125 0331

Time:
10:00 AM

Pre-hearing registration will be conducted prior to the hearing. Those registered will be heard in order of their registration. Anyone else wishing to speak at the hearing will be afforded an opportunity after those registered have presented their oral comments. The time allowed for each

person to present oral comments may be limited if a substantial number of people wish to speak.

Individuals presenting oral comments are requested, but not required, to submit a written copy of their statements. The hearing will be adjourned immediately following the completion of the oral comments.

SUBMISSION OF WRITTEN COMMENTS

Any interested person, or their authorized representative, may submit written comments relevant to this proposed regulatory action. All written comments must be received by the Board no later than 5:00 PM on June 18, 2026, in order to be considered. Written comments may be submitted by mail or email, as follows:

By mail to: Department of Industrial Relations
Occupational Safety and Health Standards Board
2520 Venture Oaks Way, STE. 350
Sacramento, CA 95833

ATTN: ESO Group V – Ruth Ibarra, SSM I

By email to: oshsbrulemaking@dir.ca.gov

AUTHORITY AND REFERENCE

Labor Code (LC) section 142.3 establishes the Board as the only agency in the State authorized to adopt occupational safety and health standards. In addition, LC section 142.3 requires the adoption of occupational safety and health standards that are at least as effective as federal occupational safety and health standards. These proposed regulations will implement, interpret, and make specific LC section 142.3. LC section 7323 authorizes the Board to adopt regulations for the equipment (i.e., elevators, escalators, and other conveyances) covered by Chapter 2 of Part 3 of Division 5 of the LC.

INFORMATIVE DIGEST OF PROPOSED ACTION/POLICY STATEMENT OVERVIEW

Unsafe and defective conveyances — elevators, escalators, moving walks and similar devices — present the possibility of serious accidents that could injure or kill the public and workers. The best interests of the State of California are served when the public and employees are protected from these deadly hazards.

The conveyance standards included in this proposal are based on, and will maintain or increase, the level of safety of the current conveyance regulations in title 8¹ of the California Code of Regulations.

This rulemaking addresses the legislative mandate set forth in section 7323 of the LC, which specifically requires the Department of Industrial Relations, Division of Occupational Safety and Health (Division) to propose conveyance regulations to the Board for review and adoption. The

1

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

provisions of the Division's proposal must be at least as effective as the American Society of Mechanical Engineers (ASME) A17.1 (Safety Code for Elevators and Escalators), ASME A17.3 (Safety Code for Existing Elevators and Escalators), ASME A18.1 (Safety Standard for Platform Lifts and Stairway Chairlifts) and the American Society of Civil Engineers (ASCE) 21 (Automated People Movers).

LC section 7323 also requires the Division to propose rulemaking to the Board when these codes are revised. The Board's last rulemaking based on these codes was done in 2008 and was based in part on ASME A17.1-2004 and ASME A18.1-2003. ASME has revised A17.1 and 18.1 several times since 2004. Conveyance designs have changed since 2008 to include machine room-less (MRL) elevator configurations, alternate suspension systems and modern control system designs.

This proposal incorporates by reference:

- ASME A17.1-2019 (Safety Code for Elevators and Escalators) in part, as amended.
- ASME A18.1-2020 (Safety Standard for Platform Lifts and Stairway Chairlifts) as amended.
- ASME B20.1-2021 (Safety Standard for Conveyors and Related Equipment) in part, as amended.

These technical documents contain the most recent consensus conveyance standards for each type of conveyance regulated by the Division. These referenced standards, when adopted as amended by this proposal, will establish minimum requirements for persons installing, operating, maintaining and inspecting conveyances installed after a specified effective date (to be determined by the Office of Administrative Law following adoption of this proposal). The referenced standards, when adopted as amended by this proposal, will provide for the safe operation and maintenance of conveyances, and for the protection of employees and the riding public.

Consideration of A17.3 – 2020 and ASCE 21:

The Division reviewed ASME A17.3-2020 (Safety Code for Existing Elevators and Escalators), which is referred to in LC sections 7300.1 and 7323. The Division concluded the (ESO) are at least as effective as, or more protective than, the provisions of ASME A17.3-2020. Therefore, the Division believes incorporating ASME A17.3 by reference is unwarranted.

The Division is not proposing regulations relating to Automated People Movers and the related standard ASCE 21 (Automated People Mover Standards), as referenced in LC sections 7300 and 7323. The California Public Utilities Commission has safety and security regulatory authority over all rail transit agencies in California, including those operating as automated people movers, and works in cooperation with the Federal Transit Administration and the transit agencies to enhance public safety and security of these devices.

Naming of these regulations:

California was one of the first states to adopt comprehensive safety regulations for elevators. California's regulations governing conveyances (elevators, escalators, platform lifts, moving walkways and the like) have long been known by their original name — the "Elevator Safety Orders" — even

though the regulations have covered conveyances other than elevators for decades. For continuity's sake, this proposal retains the name, "Elevator Safety Orders."

Changes to administrative regulations for conveyances:

This proposal also includes amendments to the Group I Administrative Regulations. They apply to all conveyance installations covered by the ESO. This includes conveyances covered by Group II ESO (conveyance installations for which the installation contract was signed before October 25, 1998), Group III (conveyance installations for which the installation contract was signed on or after October 25, 1998, but before May 1, 2008), Group IV (conveyance installations for which the installation contract was signed on or after May 1, 2008) and will apply to conveyances installed under the proposed Group V adoption. These amendments are necessary to provide for the adoption of the proposed Group V regulation, update types of conveyances applicable to the regulation, clarify the permitting process, revise or develop certification requirements for inspectors, conveyance companies and conveyance mechanics in accordance with LC sections 7309.1, 7311.1, and 7311.2, and define certain terms for clarification.

The proposed regulations do not duplicate or conflict with any federal regulations. No federal regulations prescribe rules for the design, erection, construction, installation, material alteration, inspection, testing, maintenance, repair, service and operation of conveyances used by the general public.

Anticipated Benefits:

The primary objective of the proposed ESO is to reduce the likelihood of work-related injuries for elevator workers and decrease risks to the general public.

This proposal promotes safety in the work place by ensuring that the critical components of conveyance installations are readily and safely accessible to elevator workers and inspectors. Readily and safely accessible equipment is more likely to be adequately maintained which benefits building owners and managers, and the riding public.

Additional benefits of this proposal:

- Diminishes compliance issues in the planning stage of a conveyance to prevent costly late-stage changes and schedule delays.
- Requires the effective periodic testing of older hydraulic elevator jacks in lieu of their costly mandatory and immediate replacement.
- Provides for the provision of first responder emergency two-way radio coverage in elevator hoistways and cars.
- Requires elevator hoistways be provided with automatic and manually initiated workspace lighting throughout its height, to provide a safe work environment to elevator personnel.

Other revisions:

This proposed rulemaking action also includes nonsubstantive revisions such as editorial, grammatical and reformatting changes. This informative digest does not discuss all of these nonsubstantive revisions, but they are clearly indicated in the regulatory text in underline and strikeout format.

Subchapter 6. Elevator Safety Orders

The proposed Group V ESO update and replace the existing Group IV regulations for new and altered conveyance installations and includes provisions at least as effective as the most recent versions of the conveyance standards specified by LC section 7323.

Changes include new provisions for MRL elevator installations which will reduce permanent variance applications, provide for periodic testing for Group II conveyances which will improve safety for the riding public, provide for a reduction in the frequency of Firefighters' Emergency Operation (FEO) testing by a conveyance mechanic which will offset some of the cost for periodic testing of Group II conveyances and an allowance for additional non-mechanical maintenance be performed by authorized personnel.

The regulatory proposal is as follows:

Amend Group I. Administrative Regulations

To note California's title 8 regulations governing conveyances (elevators, escalators, platform lifts, moving walkways, etc.) have long been known by their original name, the "Elevator Safety Orders."

To add reference to Group IV and the proposed Group V regulation making the Group I Administrative Regulations applicable to all conveyances.

Amend subsection 3000(a) Application.

To remove the exemption for conveyances located in multiunit residential buildings. The LC requires these conveyances be inspected by the Division when they are initially installed and after any alteration.

Editorial changes.

Amend subsection 3000(b) Use and Precedence of Orders.

To clarify the applicability and code editions relevant to all new and existing conveyance installations.

To include a table indicating applicable code requirements by type of conveyance and installation or alteration contract date.

Editorial changes.

Amend subsection 3000(c) Conveyances Included.

To refer to conveyances by their contemporary classifications.

To include additional included conveyance classifications contained in the codes to be incorporated by reference.

Editorial changes.

Amend subsection 3000(d) Devices Excluded.

To include additional excluded conveyance classifications contained in the codes to be incorporated by reference. The LC sets forth the types of devices regulated by the Elevator Safety Orders.

Editorial changes.

Amend subsection 3000(e) Conveyances Prohibited.

To include additional prohibited conveyance classifications. These additional prohibited devices are exclusively hand-powered conveyances that are without a modern market and are exclusionary to persons with certain disabilities.

Repeal subsection 3000(f) Group III Installations.

The effective date and associated regulations for Group III conveyance installations are incorporated in subsection 3000(b)-Table 1.

Adopt new subsection 3000(f) Determining the Applicable Group of Elevator Safety Orders for a Conveyance Installation or Alteration.

This new subsection contains relevant inspection and permitting information for conveyances, to determine the applicability of these regulations for all new and altered conveyance installations.

Repeal subsection 3000(g) Group II Installations.

The effective date and associated regulations for Group II conveyance installations are incorporated in subsection 3000(b)-Table 1.

Re-letter subsection 3000(h) to subsection 3000(g) and amend re-lettered subsection 3000(g).

To alter the description to read "Maintenance, Repair, Replacement, Testing and Alterations of all existing subsection 3000(c) Conveyances." To update code references to the more recent editions incorporated by reference. To include requirements for the maintenance, repair, replacement and testing of all conveyances, in accordance with the requirements of the LC, and codes to be incorporated by reference. To update code references to the more recent editions. To include and update requirements for the alteration of all conveyances, in accordance with the requirements of the Labor Code and codes to be incorporated by reference. To include requirements for specific maintenance, repair, testing and alteration activities that are not addressed by the codes incorporated by reference.

Amend subsection 3001(a) Submittal of Plans and Notification of Intent to Install.

To give the Division the basis to require the submittal of information on new conveyance products, configurations and specific conveyance related construction and configuration elements. To clarify notification requirements when certain component replacement work is completed.

Amend subsection 3001(b) Inspections Required.

To align requirements of periodic inspections and testing with the obligations of the LC.

Amend subsection 3001(c) Permit to Operate Required.

Editorial changes.

Amend subsection 3001(d) Inspection Fees.

Editorial changes.

Repeal subsection 3001(e) Application Processing Time for Renewal of Permit.

This is legacy language. No application process for permit renewal has been developed or implemented.

Amend to re-number section 3002. Variances to 3002.0.

Editorial changes.

Amend subsection 3002.0.(a).

Editorial changes.

Amend subsection 3002.0.(b).

Editorial changes.

Amend Article 4. Qualifications for Certification.

Editorial changes.

Amend to re-number section 3003. Certified Competent Conveyance Inspectors (CCCI) to 3003.0.

Editorial changes.

Amend subsection 3003.0(a) Employment.

Editorial changes.

Amend subsection 3003.0(b) Experience.

Editorial changes.

Amend subsection 3003.0(c) Training.

Editorial changes.

Amend subsection 3003.0(d) Performance of Duties.

To update the character trait and ability requirements for inspectors.

Amend subsection 3003.0(e) Certification.

To set the active term of the certificate of competency for inspectors. To include the certificate of competency renewal requirements. To align the suspension and revocation hearings with applicable regulations.

Amend subsection 3003.0(f) Frequency of Inspection.

Editorial changes.

Amend Section 3003.0(g) Examination.

Editorial changes.

To fix the waiting period requirement to eliminate the current subjective waiting time determination by the Division.

Add subsection 3003.0(h) Fee.

To add relevant fee requirements of the LC.

Adopt new section 3003.1 Certified Qualified Conveyance Company (CQCC).

To add new section 3003.1 governing conveyance companies in accordance with the LC.

Adopt new subsection 3003.1(a) Qualifications.

To add qualification requirements for CQCCs in alignment with the LC.

Adopt new subsection 3003.1(b) Application Requirements for Certification.

To add application requirements for CQCCs in alignment with the LC.

Adopt new subsection 3003.1(c) Certification.

To add work exclusivity requirements in alignment with the LC.

To add certification term and certification renewal requirements.

To add the basis and requirements for the revocation and suspension of a CQCC certification and hearing requirements.

Adopt new subsection 3003.1(d) Fee.

To add relevant fee requirements of the LC.

Adopt new section 3003.2. Certified Competent Conveyance Mechanic (CCCM).

To add new section 3003.2 governing conveyance mechanics in accordance with the LC.

Adopt new subsection 3003.2(a) Qualifications.

To add qualification requirements for CCCMs in alignment with the LC.

Adopt new subsection 3003.2(b) Application Requirements for Certification.

To add application requirements for CCCMs in alignment with the LC.

Adopt new subsection 3003.2(c) Certification.

To add work exclusivity requirements in alignment with the LC. Adds certification term and certification renewal requirements. To add the basis and requirements for the revocation and suspension of a CCCM certification.

Adopt new subsection 3003.2(d) Fee.

To add relevant fee requirements of the LC.

Amend subsection 3009(b) List of Definitions.

To include two new defined terms: "Maintenance, Non-mechanical" and "Supervision", to clarify the type of maintenance work that is not required to be done by a CCCM, pursuant to the exemption in LC section 7300.4.

Amend Group IV. Conveyance Installations for Which the Installation Contract Was Signed on or After May 1, 2008, but before (insert OAL effective date here).

To include the effective end date for the Group IV regulations.

Amend Article 40.

Requirements under Article 40 are incorporated into the Group I Administrative Regulations. Article 40 is reserved.

Repeal section 3140 Application.

Requirements repealed are incorporated into the Group I Administrative Regulations.

Repeal section 3141.1 Maintenance, Repair, and Replacement.

Requirements repealed are incorporated into the Group I Administrative Regulations.

Amend section 3142 General Requirements.

Requirements deleted are incorporated into the Group I Administrative Regulations.

Adopt new Article 45 Reserved.

Editorial changes.

Adopt new Article 46 Reserved.

Editorial changes.

Adopt new Group V Conveyance Installations for Which the Installation Contract was Signed on or After (insert OAL effective date here).

New conveyance regulation proposal per LC section 7323.

Adopt new Article 47. Conveyances Installed under Group V.

New conveyance regulation proposal per LC section 7323.

Adopt new section 3147. Scope.

To set the scope of Article 47.

Adopt new section 3147.100. Conveyances Covered by ASME A17.1-2019 as amended by the Group V Elevator Safety Orders.

New section containing regulations for conveyances subject to ASME A17.1-2019.

Adopt new subsection 3147.100(a).

To incorporate by reference ASME A17.1-2019 Safety Code for Elevators and Escalators, in part, as amended.

Adopt new subsection 3147.100(b).

To exclude incorporation by reference ASME A17.7/CSA B44.7 Performance-Based Safety Code for Elevators and Escalators. The ASME A17.7/CSA B44.7 establishes a process to address designs and products unanticipated by published code. Through authority granted by California LC, the Board and the Division have enacted variance processes that have been effective in allowing the introduction and evaluation of new and innovative conveyance designs and products.

Adopt new section 3147.101. General Requirements.

New section containing general requirements for conveyances subject to ASME A17.1-2019.

Adopt new subsection 3147.101(a).

To require the key(s) necessary to gain access to machine/control rooms and machinery spaces be provided in a designated elevator pit.

Adopt new subsection 3147.101(b).

To recognize the applicable electrical code enforced in the State of California as the California Electrical Code (CEC). To affirm access and working space requirements shall be provided and maintained about electrical equipment.

Adopt new subsection 3147.101(c).

To recognize the applicable building code enforced in the State of California is the California Building Code.

Adopt new subsection 3147.101(d).

To require certain conveyance equipment be approved by the Division prior to its use. The specified devices are subject to engineering or type testing, and/or have critical design, factor of safety, material and performance criteria. An approval process that evaluates these devices to the requirements of the ESO ensures they are designed to perform their critical safety roles.

Adopt new subsection 3147.101(e).

To indicate the information required for the Division to effectively evaluate and approve suspension means.

Adopt new subsection 3147.101(f).

To require certain conveyance control equipment and devices be evaluated by the Division for code compliance prior to installation or use. Evaluating complex elevator control systems and connected devices at each inspection individually is inefficient and duplicative. Evaluating this equipment prior to its installation or use benefits the conveyance owner, the conveyance contractor and the Division.

To indicate the information required for the Division to effectively evaluate the specified devices and equipment.

Adopt new subsection 3147.101(g).

To prohibit passage through a machine or control room to gain access to equipment, systems and building areas unrelated to the conveyance(s). Machine/control rooms contain machinery and equipment that present hazards such as electrical shocks and rotating equipment. These rooms are secured to prevent malicious tampering and injury.

Adopt new subsection 3147.101(h).

To prohibit access to machine and control rooms through areas where a high degree of privacy, exclusivity and/or security is expected.

Adopt new subsection 3147.101(i).

To permit jails and penal institutions to eliminate elevator operations related to Firefighter's Emergency Operation.

Adopt new subsection 3147.101(j).

To prohibit the provision of scissor-type collapsible gates. The spaces between the bars and linkages present serious pinching and shearing hazards to hands and fingers, causing injuries to workers and the public.

Adopt new subsection 3147.101(k).

To prohibit arranging pull straps so they form a loop. Looped pull straps can cause injury to workers if their hand or arm becomes entrapped in the loop.

Adopt new subsection 3147.101(l).

To prohibit the use of aramid fiber suspension means. Aramid fiber ropes, while they have high tensile strength lack durability and are susceptible to abrasion and heat damage.

Adopt new subsection 3147.101(m).

To prohibit the provision of hoistway door unlocking devices. These devices can unlock the hoistway door from the landing side without the presence of the elevator car exposing a fall hazard. The hazards posed by these devices outweigh any utility they might provide.

Adopt new subsection 3147.101(n).

To prohibit the provision of access panels in hoistways and car enclosures for the purposes of cleaning transparent enclosure materials (glass). The cleaning of transparent elevator enclosures through openings in the car and/or hoistway can expose cleaning personnel to unfamiliar and undisclosed hazards.

Adopt new subsection 3147.101(o).

To prohibit the use of permanent ink markers for recording information on data tags and data plates. Permanent ink markers have proven to be an ineffective way of recording information that must remain legible for the life of the component and/or conveyance.

Adopt new subsection 3147.101(p).

To eliminate hazardous hoistway enclosure surface projections that could destabilize or injure elevator personnel, such as reinforcing rods, snap ties and screws that extend beyond the surface of the hoistway enclosure.

Adopt new subsection 3147.101(q).

To limit the top surface of horizontal projections, recesses and setbacks to two inches before mitigation measures must be taken. Exposed horizontal surfaces in elevator hoistways create a surface to set tools, equipment and supplies, or to allow workers to stand creating a fall hazard.

Adopt new subsection 3147.101(r).

To require a trained elevator mechanic provide authorized personnel safe access to the elevator water removal equipment located in the pit.

Adopt new subsection 3147.101(s).

To require guards between adjacent pits to prevent accidental contact with moving equipment. To require the guard to provide similar protection to persons positioned on pit ladders. To provide an exception to the guarding requirement if the moving equipment is guarded by distance.

Adopt new subsection 3147.101(t).

To prohibit the reduction of pit ladder rung, cleat or step width. To require the pit ladder be positioned as close as possible to the pit access door. To permit the hand clearance on each side of the ladder to be eliminated if the pit ladder rungs can effectively be used as handgrips. To prohibit the use of retractable pit ladders.

Adopt new subsection 3147.101(u).

To limit the size of the perforations permitted in counterweight guards. The size of the perforations in the guard in conjunction with the proximity of the moving counterweight could cause serious injury should elevator personnel grasp the guard using the perforations.

Adopt new subsection 3147.101(v).

To require the pit light switch be located so it can be easily activated prior to accessing the pit.

Adopt new subsection 3147.101(w).

To require a platform in the pit to safely access elevated serviceable equipment.

Adopt new subsection 3147.101(x).

To require the area outside of car top railings to have a minimum clearance above the car top at maximum upward movement of the elevator car. To allow an exception to the minimum vertical clearance.

Adopt new subsection 3147.101(y).

To provide safe occupiable spaces on the car top for elevator personnel when the elevator has reached its maximum upward movement. To require these occupiable spaces be provided within car top envelope and car top railings (if provided). To require these occupiable spaces be identified. To

allow for intrusions of minimal dimension into these occupiable spaces. To prohibit overlapping the two required occupiable spaces.

Adopt new subsection 3147.101(z).

To prohibit equipment from obstructing the work surface used to perform maintenance and inspection tasks from the car top. Equipment mounted to the car top can prevent elevator personnel from safely positioning themselves to perform maintenance and inspection tasks.

Adopt new subsection 3147.101(aa).

To prohibit the maximum clearance requirement between the elevator car and the hoistway enclosure or fascia from being increased or eliminated through the provision of a car door interlock. Persons trapped in an elevator car may be motivated to apply all available force and means to open the car door.

Adopt new subsection 3147.101(bb).

To provide clear access to serviceable equipment from all directions necessary to safely perform maintenance tasks.

Adopt new subsection 3147.101(cc).

To establish clear working areas and equipment work reach conditions for conducting inspections, maintenance, minor repairs, minor replacements, or testing that is required to be conducted from the elevator car top. To provide an unobstructed standing surface (work area) on the elevator car top for elevator personnel to safely access driving machines, motors, brakes and governors. To require serviceable equipment be situated so elevator personnel can safely and effectively perform work while positioned on the elevator top. To prohibit locating driving machines, motors, brakes, and governors so they require elevator personnel to affect inspections, maintenance, minor repairs, minor replacements, or testing from an adjacent hoistway.

Adopt new subsection 3147.101(dd).

To require stairs be provided to access overhead machinery spaces that contain driving machines. This type of equipment is routinely accessed for maintenance and troubleshooting purposes with tools and diagnostic equipment that would be difficult to safely carry up a ladder.

Adopt new subsection 3147.101(ee).

To require hoistway access switches on all elevators regardless of their rated speed. Hoistway access switches provide the safest means for elevator personnel to gain access to the elevator car top. Elevator rated speed is not a relevant safety metric for hoistway access switch exclusion.

Adopt new subsection 3147.101(ff).

To require the car top emergency exit to reside within the perimeter of the car top railings. To mitigate impediments to clear and safe passage through the emergency exit that may be caused by the location of the car top railings, while maintaining fall protections provided by the railing.

Adopt new subsection 3147.101(gg).

To prohibit car top emergency exits on elevators in partially enclosed hoistways, unless it is firmly secured, in the closed position, by bolts that cannot be removed from inside the car. Partially enclosed hoistways pose unique fall hazards to passengers who may attempt to pass through the emergency exit to gain access to the car top to self-evacuate.

Adopt new subsection 3147.101(hh).

To require a monitoring switch on spring-return oil buffers to ensure the buffer returns to its fully extended position. Spring-return oil buffers are permitted to be partially compressed during normal elevator operation. If the buffer does not return to its fully extended position the buffer will not perform as intended.

Adopt new subsection 3147.101(ii).

To require the means to prevent unexpected car movement when driving machines or governors are installed in the hoistway. To require the means to prevent unexpected car movement be designed to engage at any car position required to safely perform maintenance and inspections from the car top.

Adopt new subsection 3147.101(jj).

To require elevator motor controllers and motion controllers be installed in a dedicated machine room or control room. To require machine and control rooms be located near the elevator(s) they control. To require electrical clearances be maintained irrespective of machine/control room door position. To require an identifying sign on machine room and control room doors. To require signs indicating the location of elevator machine/control room on the elevator entrance jam.

Adopt new subsection 3147.101(kk).

To permit shunt trip equipment that is incorporated into the elevator's power disconnecting means to reside in machine rooms and control rooms.

Adopt new subsection 3147.101(ll).

To prohibit air conditioning equipment for machinery spaces and control spaces from being installed in the elevator hoistway. Maintenance of air conditioning equipment installed in a hoistway creates hazards to HVAC personnel who are unfamiliar with the hazards that exist in elevator hoistways.

Adopt new subsection 3147.101(mm).

To prohibit the provision of hoistway emergency doors. As these doors are permitted in public areas and spaces, someone could open an unlocked emergency door causing a running elevator to stop abruptly, possibly entrapping passengers, while exposing themselves to a fall hazard.

Adopt new subsection 3147.101(nn).

To limit the inset of the car top railing. To provide an exception when the area beyond the car top railing is physically guarded to prevent occupation of the area beyond the railing. Limiting the inset of the car top railing:

1. Discourages occupying the limited area outside the railing that would expose elevator personnel to the fall, crushing and shearing hazards present outside the railing.

2. Maximizes the car top working surface area within the car top railing so elevator personnel can position themselves to safely perform their work.
3. Minimizes the reach distance necessary to maintain serviceable equipment in the hoistway.

Adopt new subsection 3147.101(oo).

To provide warning signs to inform elevator personnel to not stand on or climb over car top railings or position themselves in areas beyond car top railings. Standing on or climbing over car top railings negates the fall hazard protections that the car top railings are intended to provide.

Adopt new subsection 3147.101(pp).

To address shearing and crushing hazards created between the car top railing and equipment the elevator passes as it moves upward in the hoistway. This requirement is necessary to protect elevator workers and inspectors from these hazards by providing a minimum clearance between the railing and converging objects in the hoistway.

Adopt new subsection 3147.101(qq).

To require device model designations be provided on selected equipment data plates. Device model identifications assist Division inspectors identify the devices used on a conveyance.

Adopt new subsection 3147.101(rr).

To permit the use of distinct car speed sensing devices as an acceptable alternative to a governor-mounted speed-reducing switch. The Division has asserted through the Board permanent variance process that a product meeting these requirements provides equivalent safety to governor-mounted speed-reducing switches.

Adopt new subsection 3147.101(ss).

To specify the published edition of ASME A17.6 applicable to this proposal.

Adopt new subsection 3147.101(tt).

To clarify the characteristics and capabilities required of residual-strength monitoring devices.

Adopt new subsection 3147.101(uu).

To restrict the location of inspection operation controls. Providing inspection operation controls in the pit allows a mechanic to lower the car down on themselves obstructing their means of egress from the pit, increasing the hazards associated with this confined space.

Adopt new subsection 3147.101(vv).

To provide protections to elevator personnel in the areas of the hoistway involving their convergence with the counterweight and overhead objects when moving up the hoistway on car top inspection operation. These hazards approach silently without warning from above.

Adopt new subsection 3147.101(ww).

To require the provision of a dedicated "emergency audible signaling device" (car alarm button). An audible signaling device, actuated by an "alarm" push button in the car, provides the riding public

with a familiar means of summoning assistance when needed. This device gives persons with certain disabilities or language barriers a means to communicate for assistance.

Adopt new subsection 3147.101(xx).

To prohibit access panels in the car enclosure, which when open, allow access to equipment outside the car enclosure. Access panels in the car enclosure to perform work on elevator machinery and control equipment inside the hoistway exposes elevator personnel to hazards (e.g. unintended car movement, reduced electrical clearances, shearing, etc.) Access panels within the car enclosure create an unnecessary opportunity for abuse and misuse by persons with malicious intent or attempting to self-evacuate due to entrapment.

Adopt new subsection 3147.101(yy).

To prohibit ladders and stairs in hoistways that are used to access equipment installed in hoistways, with certain exceptions. The use of ladders and stairs to access equipment in the hoistway could expose workers to fall hazards and diminishes the protections of railings provided on car tops.

Adopt new subsection 3147.101(zz).

To provide safe access for maintenance and inspection when equipment is installed at the top of the elevator hoistway (shaft). When equipment that requires maintenance or inspection is installed beyond a worker's reach, they may have to resort to less safe access methods to accomplish their tasks (e.g. stand on car top railing or the use of a portable ladder on the car top).

Adopt new subsection 3147.101(aaa).

To provide prescriptive requirements for the locating of lighting switches at the entry of workspaces. Having to enter and search a dark workspace containing active machinery and energized circuits for the work space lighting switch is hazardous to workers.

Adopt new subsection 3147.101(bbb).

To require hoistway fire alarm initiating devices be tested and maintained from outside the hoistway. Requiring fire alarm service personnel to enter the hoistway to maintain their equipment exposes them to dangerous and unfamiliar hazards.

Adopt new subsection 3147.101(ccc).

To provide guarding requirements for rotating and moving elements of conveyance equipment.

Adopt new subsection 3147.101(ddd).

To clarify how adjustable guide rail brackets are to be fixed in their final position.

Adopt new subsection 3147.101(eee).

To require safe alignments of car platform and landing sills. Sill misalignments present a serious tripping hazard to passengers as they transition between the elevator car and landing surfaces.

Adopt new subsection 3147.101(fff).

To prohibit driving and hydraulic machines in pit areas. Conveyance pit areas are hazardous due to the presence of the car above. Working on the equipment that supports the car while positioned under the car creates an unnecessary hazard.

Adopt new subsection 3147.101(ggg).

To prohibit the application of temporarily applied adhesive films to escalator and moving walk handrails. These adhesive films degrade with use and delaminate from the handrail surface over time. When this occurs the film can become entangled in handrail safety devices or cause the handrail to stall and destabilize the passengers.

Adopt new subsection 3147.101(hhh).

To permit the safe installation of Emergency Responder Radio Coverage (ERRC) antenna(s) in elevator hoistways. Current fire codes require emergency responder radios be provided with full strength signal coverage throughout the building, including the elevator car.

Adopt new subsection 3147.101(iii).

To require lighting throughout the hoistway in addition to the lighting provided in the pit and on the car top. Provides lighting for elevator and emergency personnel to survey the hoistway conditions.

Adopt new subsection 3147.101(jjj).

To require an electrical sensing device to detect a person on a pit access ladder. Injuries and fatalities have occurred while elevator personnel were on pit ladders.

Adopt new section 3147.102. Elevators Used for Construction.

New section containing regulation for elevators used for construction. These requirements provide for the safe use of elevators to provide worker access and material transport during a building's construction.

Adopt new subsection 3147.102(a).

To require trained personnel to operate the controls of the elevator. To require effective two-way communications. To require emergency plans and procedures. To require signage indicating the elevator is to be used for construction purposes only and may only be operated by an authorized person. To require signage at each landing with instructions on how to summon the elevator. To require the securing of the elevator after working hours.

Adopt new subsection 3147.102(b).

To require hoistway doors be provided with interlocks. A hoistway door that is not in the closed and locked position when the elevator is not present at the landing exposes workers to falling and crushing hazards.

Adopt new subsection 3147.102(c).

To permit elevator operation with the emergency exit open for purpose of carrying materials that do not fit inside the car enclosure.

Adopt new section 3147.103. Elevator Seismic Requirements.

New section containing seismic requirements for new elevator installations. To apply seismic requirements to all electric elevators with counterweights, and direct-acting or roped-hydraulic elevator installations.

Adopt new subsection 3147.103(a).

To affirm seismic requirements apply to all new electric elevators with counterweights, and direct-acting or roped-hydraulic elevator installations.

Adopt new subsection 3147.103(b).

To require guide rail size and guide rail bracket spacing information on layout drawings. To make information readily available that is necessary to determine elevator compliance with guide rail and supporting bracket seismic requirements.

Adopt new subsection 3147.103(c).

To require suspension member displacement detection means be provided on all electric elevators with counterweights. Operating an elevator with suspension members displaced from their normal operating position can lead to suspension member failure, equipment damage, erratic operation and passenger injury.

Adopt new subsection 3147.103(d).

To require elevator travelling cables be restrained near the midpoint of elevator travel. The Division has observed travelling cable failure and extensive damage to elevator equipment due to excessive swinging/sway of these cables during seismic events.

Adopt new subsection 3147.103(e).

To restrict the termination of earthquake mode to elevator personnel. Due to the wide range of serious conditions that could be present subsequent to a seismic event, trained elevator personnel should survey the elevator prior to it being returned to service.

Adopt new section 3147.104. Escalator and Moving Walk Seismic Requirements.

New section containing seismic requirements for new escalator and moving walk installations.

Adopt new subsection 3147.104(a).

To affirm seismic requirements apply to all new escalator and moving walk installations.

Adopt new subsection 3147.104(b).

To require information related to escalator or moving walk seismic design be submitted to the Division. This information is used by field inspectors to examine escalator and moving walk attachment to the building for required seismic movement and restraint, as determined by a California licensed engineer.

Adopt new subsection 3147.104(c).

To require balustrades withstand a minimum seismic force of 50 pounds per lineal foot along the exposed handrail. During a seismic event (ground motion) balustrades would see compounded lateral forces imposed by passengers trying to stabilizing themselves.

Adopt new subsection 3147.104(d).

To require escalator and moving walk intermediate supports to provide seismically necessary lateral movement. Freedom of movement at intermediate supports prevents damage to the truss structure when the ends of the escalator or moving walk move during a seismic event.

Adopt new section 3147.200. Conveyances Covered by ASME A18.1-2020 as amended by the Group V Elevator Safety Orders.

New section containing regulation for conveyances subject to ASME A18.1-2020.

Adopt new subsection 3147.200(a).

To incorporate by reference ASME A18.1-2020 Safety Standard for Platform Lifts and Stairway Chairlifts, as amended.

Adopt new subsection 3147.200.(b).

To recognize the applicable electrical code enforced in the State of California as the CEC.

Adopt new subsection 3147.200(c).

To permit locking of lifts. To require lifts to be unlocked during business hours. Allows lifts to be locked to prevent access to secured areas outside of business hours.

Adopt new subsection 3147.200(d).

To specify the minimum and maximum clearance between the platform enclosure and the machine housing. The dimensions specified permit the ability to safely grasp the top of the platform enclosure without impingement, yet limit the opening available for other extremities to become entrapped between a stationary and moving surface.

To require a battery backup power source if the bottom runway door is equipped with an electric strike lock. A battery backup power source will reduce passenger entrapment by permitting the electric strike lock to function as intended when normal electric power is not available.

Adopt new subsection 3147.200(e).

To require certain conveyance equipment be approved by the Division. The specified devices are subject to engineering or type testing, and/or have critical design, factor of safety, material and performance criteria. An approval process that evaluates these devices to the requirements of the ESO ensures they are designed to perform their critical safety roles.

Adopt new section 3147.300. Vertical and Inclined Reciprocating Conveyances Covered by ASME B20.1-2021 as amended by the Group V Elevator Safety Orders.

New section containing regulation for conveyances subject to ASME B20.1-2021.

Adopt new subsection 3147.300(a).

To incorporate by reference ASME B20.1-2021 Safety Standard for Conveyors and Related Equipment, in part, as amended.

Adopt new subsection 3147.300(b).

To exclude conveyors equipped with automated transfer devices or systems. These automated conveyor types are not subject to the ESO (see subsection 3000(d)(1)).

Adopt new subsection 3147.300(c).

To recognize the applicable electrical code enforced in the State of California as the CEC.

Adopt new subsection 3147.300(d).

To require permanent electrical lighting, capable of producing 5 foot-candles of light, in the hoistway, at each landing, and in the area of the controller and machine. Conveyors and conveyor equipment can be installed in areas of a building that are not well lit by natural or artificial illumination.

Adopt new subsection 3147.300(e).

To require sufficient guarding to protect from hazards related to shifting, projecting, or falling materials. To require arrival indicator for solid panel doors. Arrival indicators discourage attempts to open the landing door when the platform is not at the landing.

Adopt new subsection 3147.300(f).

To provide protection from moving equipment in machinery spaces. This work space may contain moving equipment creating a hazard to workers.

Adopt new subsection 3147.300(g).

To prohibit guarding exceptions. These conveyors can be operated by people untrained in the conveyor's operation and are unfamiliar with the hazards involved with its use. Warning means such as signs or warning lights, in lieu of physical guards, would not adequately address the hazard the moving equipment would pose.

Adopt new subsection 3147.300(h).

To limit the applicability requirement of ASME B20.1-2021, section 5.11.2(b) exclusively to conveyors not required to be loaded or unloaded by personnel. Equipment that is automatically or remotely activated poses risks to persons loading the conveyor platform.

Adopt new subsection 3147.300(i).

To require additional conveyor design characteristics be provided on a separate dataplate adjacent to the manufacturer's nameplate.

Adopt new subsection 3147.300(j).

To require the capacity of the conveyor be prominently posted in the conveyor platform carrier. This information is essential when loading the platform to reduce the chance of overloading the conveyor.

DOCUMENTS INCORPORATED BY REFERENCE

- American Society of Mechanical Engineers (ASME) A17.1-2019/Canadian Standards Association (CSA) B44:19 (except sections 1.2.1., 2.7.5.3, 2.7.5.4, 2.7.5.5, 2.8.6, 2.14.1.6.2, 4.3, 5.8, 5.9, 5.11, 5.12, 8.6.5.8), Safety Code for Elevators and Escalators.
- American Society of Mechanical Engineers (ASME) A18.1-2020, Safety Standard for Platform Lifts and Stairway Chairlifts.
- American Society of Mechanical Engineers (ASME) B20.1-2021 (Revision of ASME B20.1-2018) (except sections 6.1 through 6.5, 6.7 through 6.20, and 6.22 through 6.24), Safety Standard for Conveyors and Related Equipment.

These documents are too cumbersome or impractical to publish in title 8. Therefore, it is proposed to incorporate the documents by reference. Copies of these documents are open to public inspection BY APPOINTMENT Monday through Friday from 8:00 a.m. to 4:30 p.m. at the Standards Board Office located at 2520 Venture Oaks Way, Suite 350, Sacramento, California. Appointments can be scheduled via email at oshsbrulemaking@dir.ca.gov or by calling (916) 274-5721.

COST ESTIMATES OF PROPOSED ACTION

Mandate on Local Agencies or School Districts: None.

Costs or Savings to State Agencies:

It is estimated that state agencies will incur additional costs of \$8,815 and savings of \$20,371 in the first, and two subsequent, fiscal years as a consequence of the proposed action.

Significant Effect on Housing Costs:

The Board has made an initial determination that this proposal will not significantly affect housing costs.

Statewide Adverse Economic Impact Directly Affecting Businesses and Individuals Including the Ability of California Businesses to Compete:

The Board has made an initial determination that this proposal will not result in a significant, statewide adverse economic impact directly affecting businesses/individuals, including the ability of California businesses to compete with businesses in other states. This proposal affords building owners the opportunity to continue to purchase products that are currently offered in California absent extensive modification or expensive redesign.

Cost Impact on a Representative Private Person or Business:

The Board is not aware of any cost impacts that a representative private person would necessarily incur in reasonable compliance with the proposed action. There are 74,773 buildings in California that have conveyances covered by the proposal. Of these, 58,414 are private sector. Private sector is assumed to incur around 78% of the costs of compliance based on their share of covered conveyances, or \$8.6 million in initial and \$23.6 million in ongoing costs of shear guarding of new installations and firefighters' emergency operations (FFEO) testing. Cost estimates are based on

material costs, labor costs, and the estimated number of affected conveyances. Each typical business will incur \$147 in initial costs of compliance and \$404 in ongoing costs once the three-year phase in testing requirements are in effect.

Costs or Savings in Federal Funding to the State:

The proposal will not result in costs or savings in federal funding to the state.

Costs to any Local Government or School District which must be Reimbursed in Accordance with Government Code Sections 17500 through 17630: None.

Other Nondiscretionary Costs or Savings Imposed on Local Agencies:

This proposal does not impose nondiscretionary costs or savings on local agencies.

EFFECT ON SMALL BUSINESSES

The Board has determined that the proposed amendments do not significantly affect small businesses. Small businesses are not expected to incur different costs than typical businesses. It can be expected that for buildings that lease space, the compliance costs will be passed along to lessors.

RESULTS OF THE ECONOMIC IMPACT ASSESSMENT/ANALYSIS

The adoption of this proposal will neither create nor eliminate jobs in the State of California, nor result in the elimination of existing businesses or create or expand businesses in the State of California.

It is anticipated that CQCCs may cause some of the duties (labor hours) performed by their CCCMs to be transferred from the performance of monthly testing of FEO (this proposal reduces the frequency of FEO testing by a CCCM from monthly to quarterly) to performing periodic testing of Group II conveyances (this proposal creates new testing requirements for existing Group II conveyances). This transfer of duties (labor hours) makes this proposal labor neutral.

This proposal will have no effect on California's building construction industry. This proposal will not increase or decrease the number of conveyances installed or replaced in new or renovated buildings.

This proposal includes the periodic testing requirements contained in the ASME A17.1 standard. For the first time in the history of the state, conveyances installed prior to 1998 will have to undergo annual periodic testing. This periodic testing is by far the largest cost element of the proposal, costing private building owners an estimated \$15 million annually. Most of this cost will be a result of payments made to large and small CQCCs who will sell their testing services.

The ESO protect both workers and the riding public. The ESO proposal, modeled after the elevator industries voluntary standard allows for the use of all of the latest energy efficient equipment, including the creation of power through regenerative motor control.

BENEFITS OF THE PROPOSED ACTION

The primary objective of the proposed ESO is to reduce the likelihood of work-related injuries for elevator workers and decrease risks to the general public. These incidents impose economic costs on both the worker and the industry. Private benefits for the proposal total \$19.9 million. This includes

\$10.3 million in estimated initial cost avoidance and \$9.6 million in benefits associated with injury avoidance.

REASONABLE ALTERNATIVES CONSIDERED

In accordance with Government Code section 11346.5(a)(13), the Board must determine that no reasonable alternative considered by the Board or that has otherwise been identified and brought to the attention of the Board would be more effective in carrying out the purpose for which the action is proposed or would be as effective as and less burdensome to affected private persons than the proposed action or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law than the proposal described in this Notice.

The Board invites interested persons to present statements or arguments with respect to alternatives to this proposed regulation at the scheduled public hearing or during the written comment period.

CONTACT PERSONS

Inquiries regarding this proposed regulatory action may be directed to Ruth Ibarra, SSMI at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, CA 95833; (916) 274-5795.

AVAILABILITY OF STATEMENT OF REASONS, TEXTS OF THE PROPOSED REGULATIONS AND RULEMAKING FILE

The Board will have the entire rulemaking file available for inspection and copying throughout the rulemaking process BY APPOINTMENT Monday through Friday, from 8:00 a.m. to 4:30 p.m., at the Standards Board's office at 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833. Appointments can be scheduled via email at oshsbrulemaking@dir.ca.gov or by calling (916) 274-5795. As of the date this Notice of Proposed Action is published in the Notice Register, the rulemaking file consists of this Notice, the proposed text of the regulations, the Initial Statement of Reasons, supporting documents, or other information upon which the rulemaking is based. Copies may be obtained by contacting Ruth Ibarra, SSMI at the address or telephone number listed above.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After holding the hearing and considering all timely and relevant comments received, the Board may adopt the proposed regulations substantially as described in this Notice. If the Board makes modifications which are sufficiently related to the originally proposed text, it will make the modified text (with the changes clearly indicated) available to the public at least 15 days before the Board adopts the regulations as revised. Please request copies of any modified regulations by contacting Ruth Ibarra, SSMI at the address or telephone number listed above. The Board will accept written comments on the modified regulations for at least 15 days after the date on which they are made available.

AVAILABILITY OF THE FINAL STATEMENT OF REASONS

Upon its completion, copies of the Final Statement of Reasons may be obtained by contacting Ruth Ibarra, SSMI at the address or telephone number listed above or via the internet.

AVAILABILITY OF DOCUMENTS ON THE INTERNET

The Board will have rulemaking documents available for inspection throughout the rulemaking process on its website. Copies of the text of the regulations in an underline/strikeout format, the Notice of Proposed Action and the Initial Statement of Reasons can be accessed through the Board's website at <http://www.dir.ca.gov/oshsb>.