Table 2-L

Oregon Amendments
American Society of Mechanical Engineers (ASME) A17.1

Table 2-L shows the adopted amendments to the 2019 ASME A17.1 as referenced in OAR 918-400-0455(1)(a).

The amendments are denoted as follows:

- Added language to the 2019 ASME A17.1 is shown in underline
- Deleted language to the 2019 ASME A17.1 is shown in ~~strikethrough~~

ASME A17.1 Section	Amendment language
Section 2.1.1	Hoistway enclosures shall conform to 2.1.1.1, 2.1.1.2, or 2.1.1.3. The interior surface of all hoistway enclosures shall be substantially smooth, without sharp edges or protrusions (e.g., screws, nails, sheet metal edges, and open framework). Drywall screws or similar fastenings that penetrate the inside hoistway wall to maintain structural integrity shall be guarded in such a manner as to prevent personal injury. In all other cases, the screws or similar fastenings shall be flush with the interior surface of the hoistway enclosure.
Section 2.1.4	When required by the building code, hoistways shall be provided with means to prevent the accumulation of smoke and hot gases. Where hoistway pressurization is provided, it shall be designed, installed, and maintained so as not to impede elevator operation. NOTE (2.1.4): Excessive pressurization could prevent doors, complying with 2.13.4, from closing. Air introduced into the hoistway could cause erratic operation by impingement of traveling cables, selector tapes, governor ropes, compensating ropes, and other components sensitive to excessive movement or deflection. Where smoke-doors are installed directly in front of hoistway entrance they shall not: *(a)* Be mechanically fastened to the entrance frames; or *(b)* Prevent egress from or access to the elevator car.
Section 2.2.3.1	Where there is ~~a difference in level between the floors of~~ an adjacent pit~~s~~, a metal guard, unperforated or perforated with openings that will reject a ball 50 mm (2 in.) in diameter, shall be installed for separating such pits. Guards shall extend not less than 2 000 mm (79 in.) above the level of the higher pit floor, and a self-closing access door shall be permitted.
Section 2.7.2.1	A clear path of not less than ~~450 mm (18 in.)~~ 600 mm (24 in.) shall be provided to all components that require maintenance.
Section 2.7.2.3	A clearance of not less than ~~450 mm (18 in.)~~ 600 mm (24 in.) shall be provided in the direction required for maintenance access.
Section 2.7.3.2.2	Where the passage is over a roof having a slope exceeding 15 deg from the horizontal, or over a roof where there is no parapet or guardrail at least 1070 mm (42 in.) high around the roof or passageway, a permanent, unobstructed, and substantial walkway not less than 600 mm (24 in.) wide, equipped on each side with a railing conforming to 2.10.2, shall be provided from the building exit door at the roof level to the means of access. Access routes shall be adequately illuminated so as to clearly indicate the access route to the machine room, machinery space, control room, or control space.
Section 2.7.3.3	The means of access to the following shall conform to 2.7.3.3.1 through 2.7.3.3.6: *(a) through (c) remain unchanged.* *(d)* Means of access need to comply with Oregon OSHA standards. See Appendix A.
Section 2.7.3.3.7	**Exceptions to Stairways.** Vertical ladders with handgrips may be used in lieu of stairs under the following conditions: *(a)* Access to an overhead machinery space is less than 2440 mm (96 in.) from floor level and access to the overhead machinery space is from within the machine room; or *(b)* In existing buildings where installation of a stair would require alterations to structural elements or the stair would obstruct an egress corridor. Fixed ladders, when installed, shall be provided with a means for safely transporting tools and maintenance materials to and from the upper machinery level. The means shall be operable from the top and bottom of the ladder. Where the access door or panel is through the side of the machinery space, the ladder shall terminate at a landing conforming to Oregon OSHA standards for fixed ladders.

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Section 2.7.3.4.8	**Machine Room Door Sign.** Each elevator machine room, machinery space, control room, or control space not located within the machine room shall have a sign posted on the outside of the access door. The sign shall read: AUTHORIZED PERSONNEL ONLY STORAGE OR INSTALLATION OF EQUIPMENT NOT PERTAINING TO THE ELEVATOR IS PROHIBITED. Signs, frame mountings, and window inserts, if provided, shall be of a durable, non-breakable material.
Section 2.7.9.1.1	The illumination shall be reasonably distributed over the entire floor area where access to equipment is required.
Section 2.8.1	Only machinery and equipment used directly in connection with the elevator shall be permitted in elevator hoistways, machinery spaces, machine rooms, control spaces, and control rooms, unless approved by the Building Codes Division. **2.8.1.1** Drains shall not be installed in elevator machine rooms, machinery spaces, control rooms or control spaces. **2.8.1.2** Security interface panels and relays used only in conjunction with elevator control may be installed in elevator machine rooms, machine spaces, control rooms or control spaces. No other part of the security system is permitted to be installed in these spaces.
Section 2.14.7.1.4	…The light switch shall be accessible from the landing when accessing the car top. Where portable work lights are provided, an additional stationary light fixture shall be provided.
Section 2.27.1.1.3	The communications means within the car shall comply with the following requirements:… *(a) and (b) remain unchanged.* *(c)* On the same panel as the phone push button, a message ~~shall~~ may be displayed that is activated by authorized personnel to acknowledge that communications are established. The message ~~shall~~ may be permitted to be extinguished where necessary to display a new message [see (d) and (e)] or when the communication link are terminated. *(d)* On the same panel as the phone push button, messages ~~shall~~ may be displayed that permit authorized personnel to communicate with and obtain responses from a trapped passenger(s), including a passenger(s) who cannot verbally communicate or hear. *(e)* On the same panel as the phone push button, a message ~~shall~~ may be displayed that is activated by the authorized personnel to indicate when help is on the way. The message shall continue to be displayed until a new message is displayed [see 2.27.1.1.4(c)] or the communications are terminated. *(f) through (j) remain unchanged.* *(k)* A means to display video to observe passengers at any location on the car floor, to authorized personnel for entrapment assessment, ~~shall~~ may be provided. *(l)* Telephone lines, where provided, are not required to be dedicated. However, the failure or use of any single device, including other elevator communication devices, connected to the same telephone line shall not render any remaining elevator telephone inoperative.
Section 2.27.3.2.1	In jurisdictions not enforcing the NBCC, smoke detectors or other automatic fire detectors in environments not suitable for smoke detectors (fire alarm initiating devices) used to initiate Phase I Emergency Recall Operation shall be installed in conformance with the requirements of NFPA 72 and shall be located *(a)* at each elevator lobby served by the elevator, except as provided in Section 2.27.3.2.8 (Oregon amendment); *(b)* in the associated elevator machine room, a machinery space containing a motor controller or driving machine, a control space, or a control room; and *(c)* in the elevator hoistway, when sprinklers are located in those hoistways

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Section 2.27.3.2.8	*(a)* Fire alarm initiating devices are not required in elevator lobbies exposed directly to the outside atmosphere. Where provided, they must operate as required by 2.27.3. *(b)* Where an elevator has fire alarm initiating devices located only in the elevator machine room, hoistway, or both locations, and the building is not provided with a fire alarm control panel, the fire alarm control unit shall be permitted to be omitted, providing the elevator operation defaults to Phase I Emergency Recall Operation if either fire alarm initiating device or its related circuit fails. *(c)* Fire alarm panels, annunciators and associated wiring shall not be installed in elevator machine rooms or control spaces. Only panels and relays necessary to directly interface with the elevator control shall be permitted to be installed in elevator machine rooms or control spaces, unless approved by the Building Codes Division. *(d)* In existing buildings with an existing fire alarm control system that is not capable of supervising detectors used for elevator recall, fire alarm initiating devices specific to elevator recall shall be permitted to be connected to a separate control unit. *(e)* Annunciator panels used to supervise fire alarm initiating devices used for elevator recall are required to be located in an area of the building where the panel can be readily seen and heard.
Section 4.3	**Section 4.3, Hand Elevators, in its entirety is not adopted**
Section 5.2	This Section applies to only limited-use/limited-application elevators in churches, fraternal organizations, and in restricted school settings (see Section 1.3).
Section 5.3.3	**Private Residence Elevators- Machine and Control Rooms.** **5.3.3.1** Separate machine rooms are not required for residential elevator installations. Where provided, they shall comply with the following: *(a)* The enclosure shall be large enough to provide electrical and working clearances as required by the Oregon Electrical Specialty Code. *(b)* Permanent electrical lighting shall be provided in the room to clearly illuminate all equipment within the room. *(c)* The room shall be provided with a door that is capable of being locked when the room is not occupied. **5.3.3.2** Elevator machines and controllers installed in hoistways shall comply with the following, unless otherwise approved by the Building Codes Division: *(a)* A means of access from outside the hoistway shall be provided for maintenance and repairs. *(b)* The size and location of the access panel(s) shall be sufficient to permit maintenance and repairs to the equipment without requiring complete bodily entry into the hoistway. *(c)* Access panels shall not be located in the ceiling of the hoistway. *(d)* The access panel(s) shall be provided with an electric contact that prevents operation of the elevator unless all panels are closed and locked.
Section 5.4.16	**Private Residence Inclined Elevators—Machine and Control Rooms.** Machine and control rooms and machinery and control spaces shall comply with 5.3.3 (Oregon amendment), as applicable.
Section 5.9	**Section 5.9, Mine Elevators, in its entirety is not adopted.**
Section 5.11	**Section 5.11, Wind Turbine Tower Elevators, in its entirety is not adopted.**
Section 5.13 **Section 5.13.1**	**Correction Facility Elevators.** **Scope.** Elevators governed under this section of the code are intended to be used in correctional facilities for the transport of inmates. These elevators are under sole control by the correctional facility staff and as such, are allowed to modify certain requirements where security and personnel safety are necessary. These minimum safety standards must be approved by the Building Codes Division before implementation. Correctional facility elevators shall comply with the applicable requirements of ASME A17.1 except as modified herein.

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Section 5.13.2	**Operation and Control.** **5.13.2.1** In-car emergency stop switches as required by 2.26.2 may be omitted when the elevator car is: *(a)* Continually monitored by audio-visual equipment; and *(b)* Remotely controlled from a single location. **5.13.2.2 Emergency Signaling Devices.** Emergency signaling devices are not required where the elevator complies with 5.13.2. **5.13.2.3 Fire Service Operation.** Except as modified by Section 5.13, fire service operation shall be provided as required by 2.27.3. *(a)* Phase I Emergency Recall Operation shall comply with 2.27.3.1. *(b)* Phase II Emergency In-Car Operation may be controlled from a remote location provided that the elevator complies with 5.13.2.1. In all other aspects the elevator shall operate as required by 2.27.3.3.
Section 5.13.3	**Pit and Machinery Space Access.** *(a)* Pit access shall comply with 2.2.4, except that: *(1)* Access to pits and machinery spaces shall be provided with a positive key-locking device on the pit door; *(2)* The locking device must be designed so the door cannot be closed from the inside if the lock is engaged; *(3)* The pit doors shall be kept closed and locked when not in use; and *(4)* Pits shall only be accessible by elevator personnel. *(b)* Where pits are only accessible from the lowest landing, pit access shall comply with 2.2.4.
Section 5.13.4	**Hoistway Access.** Hoistway doors are not required to allow manual opening from inside the elevator car at the landing if: *(a)* The door operation is controlled at a single location; and *(b)* The elevator car position is indicated at the monitoring station.
Section 5.13.5	**Emergency Door.** Notwithstanding 2.11.6, emergency doors are not required if the elevator is located in a high security area.
Section 7.1.7.4	Requirement 2.7.3.1 does not apply. A means of access to dumbwaiter machine rooms and overhead machinery spaces shall be provided, from outside the hoist way, for elevator personnel. A permanent stair or ladder is required when the machinery is located within the hoist way and the uppermost part of the access panel is located 2440 mm (96 in.) or more above a landing. Design and installation of fixed ladders shall comply with Oregon OSHA standards for fixed ladders. Where provided, stairs shall comply with 2.7.3.3.4.
Section 8.6	Requirement 8.6 applies to maintenance, repairs, replacements and testing. NOTES: (1) See 8.7 for alteration requirements. (2) See General in Preface for assignment of responsibilities. (3) It is the intent of this section to ensure that the original design and safe operation of the equipment are preserved through a regimen of periodic maintenance, testing and repair. Where equipment indicates a deviation from the original design or operation, corrections shall be made to restore the equipment to comply with the applicable safety standards at the time of installation or alteration.
Section 8.6.1.2.4	Unless otherwise specified in this code, all areas governed by this rule shall be kept clean.
Section 8.6.14.3	**Safety Test Logs.** All maintenance and test logs shall be posted in plain view in the elevator machine room. Logs shall indicate the individual or licensed elevator contractor performing the tests and the most recent month and year of such tests.

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Section 8.6.1.6.2	**Lubrication.** All parts of the machinery and equipment requiring lubrication shall be lubricated with lubricants equivalent to the type and grade recommended by the manufacturer. Alternative lubricants shall be permitted when intended lubrication effects are achieved. All excess lubricant shall be cleaned from the equipment. Containers used to catch leakage shall not be allowed to overflow. Rags or other materials not specifically designed for oil absorption shall not be left in or under gear-reduction-unit drip pans, machines, pits, or other areas where oil may potentially accumulate. Once saturated, materials specifically designed for oil absorption shall be properly discarded and shall be permitted to be renewed as necessary.
Section 8.6.1.6.3	**Controllers and Wiring.** *(a)* through *(e) remain unchanged.* *(f)* Disconnected wires shall be properly insulated from any point of electrical contact and identified by their previous controller connection designation. Wires or control components not intended for future use or rendered unnecessary due to circuit modifications shall be completely removed from the control circuit.
Section 8.6.3.1.1	**Replacements Necessitated by Obsolescence.** Repairs of existing equipment requiring materials or parts of a different design, due to obsolescence of direct replacement parts, shall not be considered an alteration unless the repair involves a change of an entire certified, listed, or structural assembly (e.g., controller, machine and drive motor, door and door frame, car or counterweight frame). New electrical parts must be properly listed or certified as required by ASME A17.1 and related codes.
Section 8.6.4.19.11	**Ascending Car Overspeed Protection and Unintended Car Movement Devices, and Emergency Brake** *(a)* through *(c) remain unchanged.* *(d) Rope Brakes*. Rope brakes shall be tested annually and tagged by the licensed elevator contractor performing the test. The tag shall indicate the name of the contractor or qualified technician performing the test and the most recent month and year of the test. Rope brakes shall be tested using the manufacturer's instructions as the minimum requirements.
Section 8.6.5.8	**Safety Bulk.** Hydraulic cylinders installed below ground shall conform to 3.18.3.4, or the elevator shall conform to 8.6.5.8(a), ~~or 8.6.5.8~~(b), or (c): *(a)* the elevator shall be provided with car safeties conforming to 3.17.1 and guide rails, guide-rail supports, and fastenings conforming to 3.23.1; or *(b)* the elevator shall be provided with a plunger gripper conforming to 3.17.3. The plunger gripper shall grip the plunger when the applicable maximum governor tripping speed in Table 2.18.2.1 is achieved; or *(c)* the elevator's jack assembly shall be replaced upon upgrade; until that time, monthly monitoring of oil loss is required.
Section 8.6.5.13.1	**Seismic Valves.** Seismic valves shall be re-tested and sealed whenever the seal has been removed or broken. Seismic valves shall have the adjusting means sealed and tagged. The tag shall indicate the date of the most recent test and the licensed elevator contractor performing such tests. Any readjustment shall cause the seal to break or will give visual indication that the adjustment has been altered.
Section 8.6.5.17	**Additional Requirements—Drip Pans.** Hydraulic machine drip pans shall be kept clean and dry. Minor accumulation is allowed between regularly scheduled maintenance visits but in no case shall the drip pan be allowed to overflow.
Section 8.6.8.13	**Cleaning.** The interior of escalators, moving walks, and their components shall be cleaned to prevent an accumulation of oil, grease, lint, dirt, and refuse. ~~The frequency of the cleanings will depend on service and conditions, but an examination to determine if cleaning is necessary shall be required at least once a year~~ Internal cleanings shall occur at least once every two years. The maintenance contractor must provide the area inspector with one week's advance notice to allow the inspector to schedule an internal inspection that coincides with the cleaning.
Section 8.7.2.14.6	**Car Operating Fixtures.** Where an alteration involving fire service operation is performed and the car operating fixtures are not altered, 2.27.3.3.7 and 2.27.3.3.8 are not required. All other fire service operation requirements must comply with the Section 2.27.3.

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Section 8.7.2.29	**Emergency Responder Communication Coverage (ERCC) Equipment Inside Hoistways and Cars.** **8.7.2.29.1** The alteration or addition of Emergency Responder Communication Coverage (ERCC) equipment inside the hoistway is an alteration and must meet the requirements of 2.8.7. **8.7.2.29.2** The alteration or addition of Emergency Responder Communication Coverage (ERCC) equipment inside the car is an alteration and must meet the requirements of 2.7.12.
Section 8.7.3.23.1	**Hydraulic Jack.** Where a hydraulic jack is installed, altered, or replaced, it shall conform to 3.18 and 8.4.11.9.
Section 8.7.3.23.8	**Installation of New Hydraulic Power Unit.** Where the alteration involves the installation of a new hydraulic power unit, it shall also conform to the requirements of 8.4.11.2, 8.4.11.3, and 8.4.11.6.
Section 8.7.3.31.14	**Emergency Responder Communication Coverage (ERCC) Equipment Inside Hoistways and Cars.** *(a)* The alteration or addition of Emergency Responder Communication Coverage (ERCC) equipment inside the hoistway is an alteration and must meet the requirements of 2.8.7. *(b)* The alteration or addition of Emergency Responder Communication Coverage (ERCC) equipment inside the car is an alteration and must meet the requirements of 2.7.12.
Section 8.10.1.8	**Test Weights.** Unless otherwise specified in this code, all tests for new or altered equipment shall require the use of test weights to verify design lifting capacity, pressure relief settings, capabilities of car safety mechanisms, and structural integrity.
Section 8.11.1.1.2	**Periodic Tests.** *(a)* Periodic tests as required in Section 8.6 shall be ~~performed by elevator personnel that are qualified to perform such tests. These tests shall be~~ witnessed by an inspector, when deemed necessary ~~(see 8.11.1.1) employed by the authority having jurisdiction or by persons authorized~~ by the authority having jurisdiction. *(b) remains unchanged*
Section 8.11.2.1.2	**Machine Rooms, Machinery Spaces, and Control Rooms/Spaces.** *(a) through (oo) remain unchanged.* *(pp)* Seismic Devices. The following shall be tested a minimum of once in each 12 months from date of installation and shall not exceed manufacturer's instructions: *(1)* Seismic switch; *(2)* Counterweight derailment switch; *(3)* Elevator operation in response to the activation of a seismic sensing device as required by 8.4.10.1.1. The results of tests shall be kept in a log located in the elevator machine room and posted in plain view. The log shall show, as a minimum, the most recent date the test was performed and name of the licensed elevator contractor or qualified individual performing the tests.
Section 8.11.2.1.6	**Firefighters' Emergency**. Items 6.3 through 6.5, as applicable. Firefighters' emergency operation shall be tested at least once each calendar quarter (i.e., once every three months). Fire alarm initiating devices associated with Phase I Emergency Recall Operation shall be tested at least once each calendar year in conjunction with one of the quarterly tests. The quarterly test shall include response to the Phase I key operation and at least a one floor run to determine if Phase II is operating properly. Fire alarm initiating device testing shall be performed to determine if the elevator(s) will still properly respond to a detector activation. A record of findings shall be available to elevator personnel and the authority having jurisdiction.
Appendix A	Appendix A-See Oregon Administrative Rules chapter 437, division 2: http://www.sos.state.or.us/archives/rules/OARS_437/437_tofc.html For additional Oregon OSHA requirements: http://www.cbs.state.or.us/osha