

ARTICLE IX. ELEVATORS AND CONVEYING SYSTEMS

Sec. 18-159. Adoption of the American Society of Mechanical Engineers Safety Code for Elevators and Escalators; amendments.

The American Society of Mechanical Engineers Safety Code for Elevators and Escalators, ASME A17.1-1996, is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of this section. Provisions of this article are in addition to the provisions of ASME A17.1-1996. The following provisions coinciding with the provisions of ASME A17.1-1996 supersede, or delete, when indicated, the corresponding provisions of ASME A17.1-1996.

All references within the model codes to any building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building code shall be construed to be a reference to the respective building, electrical, gas, mechanical, plumbing, sewage disposal, elevator, energy conservation, or existing building code specifically adopted by reference in articles II through XIV of this code.

(Ord. No. 040477, 8-12-04)

Rule 1000.1 Inspections and Tests.

Rule 1000.1a Routine inspection and tests. Routine inspections and test shall be made by an inspector employed by the enforcing authority, or by a person authorized by the enforcing authority.

Rule 1000.1b Periodic inspection and test. Periodic inspections and tests shall be witnessed by and inspector employed by the enforcing authority. The owner or the owner's authorized agent shall have all of the tests required by section 1002, 1005, 1008 and 1010 made by a registered elevator contractor, as defined in Article XII of Chapter 18 of the Code of Ordinances.

Exception: The enforcing authority may authorize a qualified person to witness the inspection and tests on its behalf. Immediately after the inspection and tests, the inspector shall submit to the enforcing authority a statement certifying that the inspection and test have been performed, and a report on the results thereof.

Rule 1000.1c Acceptance inspection and tests. The acceptance inspection shall be witnessed by an inspector employed by the enforcing authority. The owner or the owner's authorized agent shall have all of the tests required by section 1003, 1006, 1009 and 1010 made by a registered elevator contractor, as defined in Article XII of Chapter 18 of the Code of Ordinance.

Exception: The enforcing authority may authorize a qualified person to witness the inspection and tests on its behalf. Immediately after the inspection and tests, the inspector shall submit to the enforcing authority a statement certifying that the inspection and test have been performed and a report on the results thereof.

Rule 1001.1 is deleted.

Rule 1004.1 is deleted.

Rule 1005.3 is deleted.

Rule 1007.1 is deleted.

Rule 1010.1 Sidewalk Elevator.

Sidewalk elevators shall be subject to the applicable acceptance inspections and tests specified in section 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part IV. Any additional requirements for this equipment shall also be checked during these inspections and test.

Rule 1010.2 Private Residence Elevators and Lifts.

Private residence elevators and lifts shall be subject to acceptance inspections and tests specified in sections 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part V or Part XXI. Any additional requirements for this equipment should also be checked during these inspections and tests.

Before an inclined elevator is put into service, a test of the car safety shall be made with rated load in the car. Governor operation of instantaneous-type safeties shall be tested at rated speed by tripping the governor by hand. Where speed governors are located on the car or chassis, testing shall be performed by obtaining sufficient slack rope to cause the safety to function.

Rule 1010.3 is deleted.

Rule 1010.4 Dumbwaiters.

Dumbwaiters shall be subject to the applicable acceptance inspections and tests specified in section 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part VII. Any additional requirements for this equipment shall also be checked during these inspections and tests.

On winding drum machines, the slack-rope devices required by Rule 210.2a shall be tested as specified in item 2.18 of the ASME A17.2.1, Inspectors Manual for Electrical Elevators. The driving-machine brake shall be tested to determine conformance with Rule 701.9.

Rule 1010.5 Material Lifts and Dumbwaiters with Automatic Transfer Devices.

Material lifts and dumbwaiters with automatic transfer devices shall be subject to the applicable acceptance inspections and tests specified in section 1000 through 1006.

The inspection and test requirement shall apply to the corresponding requirements in Part XIV. Any additional requirements for this equipment shall also be checked during these inspections and tests.

Rule 1010.6 Special Purpose Personnel Elevators.

Special-purpose personnel elevators shall be subject to the applicable periodic and acceptance inspections and tests specified in section 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XV. Any additional requirements for this equipment shall also be checked during these inspection and tests.

Rule 1010.7 Inclined Elevators

Inclined elevators shall be subject to the applicable acceptance inspections and tests specified in sections 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XVII. Any additional requirements for this equipment shall also be checked during these inspections and test.

Rule 1010.8 is deleted.

Rule 1010.9 Screw Column Elevators.

Screw column elevators shall be subject to the applicable acceptance inspections and tests specified in section 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XVIII. Any additional requirements for this equipment shall also be checked during these inspections and test.

Rule 1010.10 Wheelchair Lifts.

Vertical wheelchair lifts, inclined wheelchair lifts, and inclined stairway chair lifts shall be subject to the applicable periodic and acceptance inspections and tests specified in section 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XX. Any additional requirements for this equipment shall also be checked during these inspections and test.

Rule 1010.11 Rooftop Elevators.

Rooftop elevators shall be subject to the applicable acceptance inspections and tests specified in sections 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XXIII. Any additional requirements for this equipment shall also be checked during these inspections and test.

Rule 1010.12 Rack and Pinion Elevators.

Rack and pinion elevators shall be subject to the applicable acceptance inspections and tests specified in sections 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XVI. Any additional requirements for this equipment shall also be checked during these inspections and test.

Rule 1010.13 Limited-Use/Limited-Application Elevators.

Limited-Use/Limited Application elevators shall be subject to the applicable periodic and acceptance inspections and tests specified in sections 1000 through 1006.

The inspection and test requirements shall apply to the corresponding requirements in Part XXV. Any additional requirements for this equipment shall also be checked during these inspections and test.

(Code of Gen. Ords. 1967, § 9.5(1).1; Ord. No. 52722, 5-8-81; Ord. No. 61386, 8-10-89; Ord. No. 911125, 4-23-92; Ord. No. 010783, 8-23-01)

Secs. 18-160—18-175. Reserved

Sec. 18-176. Adoption of the American Society of Mechanical Engineers Safety Code for Existing Elevators and Escalators; amendments.

The American Society of Mechanical Engineers Safety Code for Existing Elevators and Escalators, ASME A17.3-1996, is adopted and incorporated in this article by reference as if fully set forth,

except as it is amended by the following provisions of this section. Provisions of this article are in addition to the provisions of ASME A17.3-1996. The following provisions coinciding with provisions of ASME A17.3-1996 supersede, or delete, when indicated, the corresponding provisions of ASME A17.3-1996:

1.1.2 Equipment Not Covered by This Code.

(dd) Electric freight elevators installed before 1960 and meeting the following criteria shall be exempt from specific requirements as specified in this code:

- (1) Speed no greater than 100 feet per minute.
- (2) Travel distance not greater than ten levels.
- (3) Inspected quarterly by a registered elevator service company.
- (4) Operated and ridden by employees only.
- (5) Constant pressure switch.

2.1.3 Projections in Hoistway.

Hoistway enclosures shall have substantially flush surfaces on the hoistway sides used for loading and unloading, subject to the following:

- (a) Landing sills, hoistway doors, door tracks and hangers may project into the general line of the hoistway.
- (b) Landing sills, except for elevators equipped with vertically sliding biparting counterbalanced doors or with vertically sliding counterweighted doors which slide down to open, shall be guarded on the underside with guard plates of smooth metal of not less than 0.0598 inches (1.519 mm) in thickness extending not less than the full width of the car entrance and securely fastened in place as follows:

- (1) Where a car-leveling device is provided and the hoistway edge of the sill is either flush with or projects into the hoistway, the guard shall have a straight vertical face extending below the sill not less than the depth of the leveling zone plus three inches (76 mm).

Where the sill projects inward from the general line of the hoistway, the bottom of the guard shall also be beveled at an angle of not less than 60 degrees and not more than 75 degrees from the horizontal or the guard shall be extended from the hoistway edge of the landing sill to the top of the door hanger pocket of the next entrance below.

The guard is not required for freight elevators with sills not projected inward from the general line of the hoistway.

- (2) Where no car-leveling device is provided and the sill projects inward from the general line of the hoistway, the guard shall be either beveled at an angle of not less than 60 degrees and not more than 75 degrees from the horizontal, or it may have a straight vertical face extending from the hoistway edge of the landing sill to the top of the door hanger pocket of the next entrance below.

Exception: Freight elevators identified in section 1.1.2 (dd).

2.1.4 is deleted.

2.6.1 Doors or Gates Required.

(b) *Freight elevators.* Hoistway-landing openings for freight elevators shall be provided with entrances which guard the full width of the opening, and guard the height to a minimum of 66 inches (1.56m) above the landing sill. When the requirements of section 2.1.1 allow non-fire-resistive hoistway enclosures, a gate may be used. The door or gate may have a maximum one-inch (25 mm) vertical opening between the landing sill and the door or gate. Openings in gates shall reject a ball two inches (51 mm) in diameter.

A gate made in two or more sections which overlap that slides or telescopes may be used provided that the openings shall reject a ball three-eighths inch (9.5 mm) in diameter.

3.3.5 Exception: Freight elevators identified in section 1.1.2 (dd) are exempted from protection of platforms against fire.

3.4.1 Car Enclosures.

(a) *Passenger elevators.* Car enclosures shall be solid, without perforations. Openings or hinged or removable panels in an enclosure, other than as required for signal, operating or communication equipment, entrances, vision panels, emergency exists and ventilation, are prohibited.

(b) *Freight elevators.* Car enclosures may be perforated; however, the enclosure in front of and extending six inches (152 mm) on each side of the counterweight runway shall be unperforated. These perforations shall reject a 1 1/2-inch (38 mm) diameter ball.

Exception: Freight elevators identified in section 1.1.2 (dd) may be enclosed to a height of 66 inches, without perforations, except the portion of the enclosure in front and extending six inches on each side of the counterweights shall be without perforations and extend to the full height of the car crosshead or not less than eight feet if there is no crosshead.

(c) *Car tops.* The car top shall be of sufficient strength to sustain a load of 300 pounds (136.2 kg) applied on any square area two feet (0.61 m) on a side and 100 pounds (45.4 kg) applied at any point, except the hinged sections next to the care entrance. Simultaneous application of these loads is not required.

Exception: Freight elevators identified in section 1.1.2 (dd) are exempt from the structural design requirements for car tops.

3.5.1 Car Safety Required.

The car of every elevator that is suspended by wire ropes shall be provided with a car safety device capable of stopping and sustaining the car with its full rated load from governor tripping speed. Existing car safety devices shall be maintained on all cars for which safeties are provided.

Exception: Freight elevators identified in section 1.1.2 (dd) employing corner suspension or having multiple guides may be exempt from the above requirements, provided that the elevator equipment was not originally equipped with safety devices.

3.5.6 is deleted.

3.6.2 is deleted.

3.10.3 Top-of-Car Operating Devices.

All elevators except those which are identified in section 1.1.2 (dd) shall conform to the following:

(a) Elevators with automatic or continuous-pressure operation shall have a continuous-pressure button-operating switch mounted on the top of the car for the purpose of operating the car solely from the top of the car. The device shall operate the car at a speed not exceeding 150 feet per minute (0.76 m/s).

(b) The means for transferring the control of the elevator to the top-of-car operating device shall be on the car top and located between the car crosshead and the side of the car nearest the hoistway entrance normally used for access to the car top.

3.10.10 is deleted.

3.11.1 Car Emergency Signaling Devices.

All elevators except those freight elevators identified in section 1.1.2 (dd), shall conform to the following requirements:

(a) *All buildings.* In all buildings, elevators shall be provided with an audible signaling device, operable from the emergency stop switch (when provided) and from a switch marked "ALARM" which are located in or adjacent to each car operating panel. The signaling device shall be located inside the building and audible inside the car and outside the hoistway. One signaling device may be used for a group of elevators.

(b) *Unattended buildings.* In buildings in which a building attendant, building employee or watchman is not continuously available to take action when the required emergency signal is operated, the elevators shall be provided with one of the following additional emergency signaling devices:

(1) A telephone connected to a central telephone exchange system;

(2) A weatherproof audible signaling device with a minimum sound rating of 80 dBA operated from the alarm switch and the emergency stop switch inside the car and identified "ELEVATOR EMERGENCY-CALL POLICE," in letters not less than two inches (51 mm) high. The device shall be mounted on the outside of the building near the main entrance and located so that the sign can be read from the entrance sidewalk. Only one outside signal is required if operable from all cars of all elevators of the type specified in the building.

3.11.3 is deleted.

4.5.1 (b) is deleted.

4.5.2 (d) is deleted.

4.5.2 (f) is deleted.

PART VI DUMBWAITERS is deleted.

PART VII HAND ELEVATORS is deleted.

PART VIII SIDEWALK ELEVATORS is deleted.

(Code of Gen. Ords. 1967, § 9.5(2).1; Ord. No. 911125, 4-23-92; Ord. No. 010783, 8-23-01)

Sec. 18-177—18-192. Reserved.

Sec. 18-193. Adoption of American National Standard Safety Requirements for Personnel Hoists.

The American National Standard Safety requirements for Personnel Hoists, ANSI A10.4-1990, published by American National Standards Institute, is adopted and incorporated in this article by reference as if fully set forth.

(Code of Gen. Ords. 1967, § 9.5(3).1; Ord. No. 52722, 5-8-81; Ord. No. 61386, 8-10-89; Ord. No. 911125, 4-23-93; Ord. No. 010783, 8-23-01)

Sec. 18-194—18-209. Reserved.