

CHAPTER 373
CONVEYANCES INSTALLED PRIOR TO JANUARY 1, 1975

[Prior to 9/24/86, Labor, Bureau of [530]]

[Prior to 10/21/98, see 347—Ch 73]

[Prior to 7/9/25, see Labor Services Division[875] Ch 73]

Chapter rescission date pursuant to Iowa Code section 17A.7: 2/12/30

481—373.1(89A) Scope, definitions, and schedule.

373.1(1) This chapter establishes minimum safety standards for all conveyances installed prior to January 1, 1975, except material lift elevators. Conveyances installed on or after January 1, 1975, shall conform with the requirements set forth in 481—Chapter 372. Material lift elevators installed prior to January 1, 1975, are not subject to regulation pursuant to Iowa Code section 89A.2.

373.1(2) The definitions contained in American National Standard Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, A17.1 (1971), are applicable as used in this chapter to the extent that they do not conflict with the definitions contained in Iowa Code chapter 89A or 481—Chapter 371.

373.1(3) Except as noted in this rule, the American Society of Mechanical Engineers Safety Code for Existing Elevators and Escalators, A17.3 (2011), is adopted by reference with an enforcement date of May 1, 2021.

a. If a code provision that is more restrictive than A17.3 (2011) applied to a conveyance when the conveyance was installed, the more restrictive provision remains in effect.

b. A17.3 (2011) Part X applies to handicapped restricted use elevators without regard to the scope of provisions set forth in A17.3 (2011) Part X.

c. Provisions of A17.3 (2011) that require installation of a new controller to implement Phase 1 and Phase 2 fire service or car top operation are not adopted by reference and will not be enforced in Iowa.

d. A17.3 (2011), Rule 2.3.2, is intended to prevent the accumulation of sewer gas in an elevator pit and does not require the addition of a drain pipe in an existing pit. An air gap in an existing drain pipe is adequate compliance.

e. The following substitutes for the final sentence of A17.3 (2011), Rule 2.1.5(b): “Previously installed 60-inch chains are deemed to be in compliance.”

f. An elevator that was legally installed with guide rails made of materials other than steel is not required to replace the guide rails due to the adoption of A17.3 (2011).

g. Electrical protective devices required by A17.3, requirement 3.10.4, shall cause the electric power to be removed from the elevator driving-machine motor and brake.

h. Control panels that are designed with a door or cover and lock shall be locked when service is not being performed if equipment unrelated to the elevator is in the machine room. Group 1 security as set forth in A17.1, section 8.1, shall be utilized.

i. A car top emergency exit pursuant to A17.3 (2011), requirement 3.4.4.1(a), is not required for a hydraulic elevator if the elevator has manual lowering and it is not equipped with a plunger gripper or safety as described in ASME A17.1 (2013), requirement 8.6.5.8.

373.1(4) The American Society of Mechanical Engineers Safety Code for Elevators and Escalators, A17.1-2013/CSA B44-13 (2013), Rule 2.14.7.1.4, concerning car top lighting and car top electrical outlets, is adopted by reference with an effective date of May 1, 2021. However, if a car top already has a single outlet, installation of a duplex outlet will not be required.

[ARC 8777C, IAB 1/8/25, effective 2/12/25; Editorial change: IAC Supplement 7/9/25]

481—373.2(89A) Electrical protective devices. All electrical equipment pertaining to the elevator shall conform to ANSI C1-1975 (NFPA 70-1975).

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481—373.3(89A) Maintenance, repair and alteration requirements.

373.3(1) General. Except as set forth in this rule, all maintenance, repairs and alterations comply with the edition of ASME A17.1, Part 8, currently adopted for new conveyances or ASME A17.7-2007/CSA B44-07, as applicable. Alterations that require that the entire conveyance be brought into compliance with the most current code are described in 481—Chapter 371.

373.3(2) Exemption for button numbering. All maintenance, repairs and alterations to devices covered by ANSI A117.1 comply with ANSI A117.1 (2017), except for requirement 407.4.7.1.2.

373.3(3) Sump pump exemption. The provisions of ASME A17.1 that require a pit sump or drain do not apply to an elevator alteration when all of the following criteria are met:

- a. No other code or rule requires that the pit be excavated or lowered.
- b. The alteration plans do not include the excavation or lowering of the pit floor for any other reason.
- c. There is evidence that groundwater has not entered the pit previously.
- d. The location and geology of the building indicate a likelihood that groundwater would enter the pit if the foundation or pit floor were breached to install the pit sump or drain.
- e. A description of alternative means to maintain the pit in a dry condition is provided to the director with the alteration permit application.
- f. The director approves the alternative means to maintain the pit in a dry condition.
- g. The alternative means to maintain the pit in a dry condition are installed or implemented as described in the alteration permit application.

373.3(4) Pit excavation exemption. The full length of the platform guard set forth in ASME A17.1, Rule 2.15.9.2(a), is not required if all of the following criteria are met:

- a. No other code or rule requires that the pit be excavated or lowered.
- b. The alteration plans do not include the excavation or lowering of the pit floor for any other reason.
- c. A full-length platform guard would strike the pit floor when the elevator is on its fully compressed buffer.
- d. The clearance between the bottom of the platform guard and the pit floor is 2.5 centimeters (1 inch) when the elevator is on its fully compressed buffer.

373.3(5) Sprinkler retrofits and shunt trip breakers. When a sprinkler is added to a hoistway or machine room, the conveyance shall comply with the following:

- a. For installations, the applicable version of ASME A17.1, Rule 2.8.3.3.
- b. For elevator controls, the phase I fire recall provisions of the applicable version of ASME A17.1, Rule 2.27.3.
- c. The applicable version of ASME A17.1 is determined by reference to rule 481—372.1(89A). For purposes of this subrule, the relevant subrule of rule 481—372.1(89A) applies based on the date the sprinkler is installed instead of the date the conveyance was installed.

373.3(6) Safety bulkheads. Documentation from the manufacturer establishing that a safety bulkhead was installed shall establish compliance with ASME A17.1, Rule 8.6.5.8.

373.3(7) Alterations of handicapped restricted use elevators. A component of a handicapped restricted use elevator being altered complies with the portions of ASME A17.1, section 5.3, applicable to the component. The edition of ASME A17.1 adopted by reference in rule 481—372.1(89A) is applied.

373.3(8) Hoistway lighting. If the controller for an elevator is being replaced, permanent lighting is installed in the hoistway of the elevator. Three-way switches to control the hoistway lighting are installed at the pit access door and the top landing access door. The lighting shall be sufficient to provide 10 foot-candles of light to the center of the elevator path measured when the car top lights are off. Engineering calculations that prove 10 foot-candles of light are provided to the center of the elevator path may be substituted for light meter measurements under circumstances such as a glass back car where use of a light meter is not practical.

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481—373.4(89A) Existing hand elevators. A sign reading “Danger—Elevator Hoistway—Keep Closed” shall be mounted on each hoistway door with letters at least 2 inches high.

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481—373.5(89A) Dumbwaiters. All dumbwaiters whether electric or hand powered conform to ANSI A17.1 (1971), section 700. Exceptions: Required rules for hoistway construction as set forth in ANSI A17.1 (1971), do not apply to existing installations.

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481—373.6(89A) Child entrapment safeguard requirements. This rule applies to a passenger elevator unless it has a car door consisting of a solid panel.

373.6(1) For purposes of this rule, “distance with deflection between the doors or gates” means the distance between the closed car door or gate and the closed hoistway door or gate measured at the greatest perpendicular distance with deflection.

373.6(2) For purposes of this rule, measurements of door or gate deflection are made in the manner described by ASME A17.1, section 2.14.4.6.

373.6(3) Door or gate deflection do not exceed .75 inch.

373.6(4) If the distance with deflection between the doors or gates exceeds 5 inches, a means will be provided to disable the elevator if a person is in the space between the closed doors or gates.

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481—373.7(89A) Elevators in broadcast towers. This rule applies to special purpose elevators located in broadcast towers.

373.7(1) Anchorages. Anchorages shall be attached inside the car and on the car top.

373.7(2) Emergency stop switch. An emergency stop switch compliant with ASME A17.1, sections 2.26.2.8 and 5.7.19, shall be installed on the car top.

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481—373.8(89A) Handicapped restricted use elevator requirements. All handicapped restricted use elevators must meet ANSI A17.1 (1981), Part V. Additionally, the elevators will comply with the following limitations:

1. The elevator is used only by a maximum of one disabled person and one attendant at a time. Where a disabled individual cannot operate the elevator in a manner that will ensure access to all operating controls and safety features, an attendant accompanies the disabled individual.

2. The elevator is key-operated and not capable of being called by buttons or switches but may be called by a key operator.

3. Keys to operate the elevator are in the control of the disabled person, the attendant or persons in positions of responsibility at the location.

4. A list is maintained at the location indicating the persons holding keys for the operation of the elevator.

5. Each landing and the elevator car will be posted to indicate that the elevator is only for the use of disabled persons.

6. The travel distance of the elevator will not exceed 50 feet.

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