

HAWAII ADMINISTRATIVE RULES

TITLE 12

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

SUBTITLE 8

DIVISION OF OCCUPATIONAL SAFETY AND HEALTH

PART 11

ELEVATORS AND RELATED SYSTEMS

CHAPTER 230.1

ELEVATORS, ESCALATORS, DUMBWAITERS, MOVING WALKS, AND
MATERIAL LIFTS AND DUMBWAITERS WITH
AUTOMATIC TRANSFER DEVICES

- \$12-230.1-1 Applicability
- \$12-230.1-2 General requirements
- \$12-230.1-3 Requirements for the installation of new
elevators and kindred equipment and/or
the relocation of existing equipment
- \$12-230.1-4 Requirements for existing elevators,
escalators, dumbwaiters, moving walks,
and material lifts and dumbwaiters with
automatic transfer devices

Historical Note: Chapter 230.1 is based on chapter 230 of
title 12 of the Hawaii Occupational Safety and Health
Standards, Rules and Regulations. [Eff. 7/12/82; am 12/19/83;
am 12/8/86; am, ren, and comp 12/6/90; am 11/5/93; am 7/6/98;
R JUN 30 2014]

\$12-230.1-1 Applicability. The requirements of this
chapter shall be applicable to the design, construction,
installation, plans review, testing, inspection, certification

operation, use, maintenance, repair, alteration and relocation of, and investigation of accidents involving elevators and kindred equipment subject to chapter 397, Hawaii Revised Statutes, including elevators, escalators, dumbwaiters, moving walks, and material lifts and dumbwaiters with automatic transfer devices. [Eff **JUN 30 2014**] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-230.1-2 General requirements. (a) All new and existing installations of elevators and kindred equipment shall be reasonably safe to persons and property and in conformity with the provisions of this chapter.

(b) Conditions found not in conformity with the provisions of this chapter for which the director had not previously issued a discrepancy letter may be regarded as discrepancies. All discrepancies shall be satisfactorily resolved as soon as possible or within the time specified by the director. Failure to correct discrepancies or failure to abate an unsafe condition within the time specified shall be deemed a violation.

(c) All passenger elevators shall have a clearly legible "Smoking Prohibited by Law" or "No Smoking" sign installed inside of the cab. The letters on the sign shall not be less than one inch in height. The sign shall be posted in elevators in buildings open to the public, including elevators in apartments and other multi-unit residential buildings. The international no-smoking symbol may be posted in lieu of the sign provided that the diameter of the circle is not less than four inches. [Eff **JUN 30 2014**] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-230.1-3 Requirements for the installation of new elevators and kindred equipment and/or the relocation of existing equipment. (a) The design, construction, installation, operation, inspection, testing, maintenance, alteration, and repair of elevators, escalators, dumbwaiters, moving walks, and material lifts and dumbwaiters with automatic transfer devices, and its associated parts, shall conform to

the rules in this chapter and the American Society of Mechanical Engineers A17.1-2010, which is adopted by reference and made a part of this chapter with the following amendments:

- (1) Section 5.2 of the American Society of Mechanical Engineers A17.1, Limited-Use/Limited-Application Elevators, is amended to read: "Limited-use/limited-application elevators (see 1.3) are not permitted to be installed or used, unless:
 - (A) The building is required to be accessible in accordance with the Department of Justice's ADA Standards for Accessible Design (2010), or in accordance with section 103-50, Hawaii Revised Statutes;
 - (B) The building is also on the National or Hawaii Register of Historic Places; and
 - (C) Accessibility cannot otherwise be achieved without adversely altering the historically protected features of the structure".
- (2) Section 8.6.1.2.1(c) of the American Society of Mechanical Engineers A17.1 is amended to read: "A written Maintenance Control Program in electronic or paper form created for the equipment is the property of the equipment owner, and shall be made available to the department and be located on site".
- (3) Section 8.9.2 of the American Society of Mechanical Engineers A17.1 is amended to read: "The data plate shall be in plain view and securely attached to the controller door. An additional data plate shall be installed in the vicinity of the top key operated starting switch on the exterior of escalators and moving walks".
 - (b) A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of eight inches (two hundred mm) or more and no ramp or runway is provided.
 - (c) International Building Code, 2012 edition, chapter 30, Elevators and Conveying Systems, is adopted by reference and made a part of this chapter, and shall apply to all new elevators and kindred equipment.
 - (d) International Code Council A117.1-2009, Accessible and Usable Buildings and Facilities, sections 407, 410, and related portions of sections 106, 302, 308, 309, 703, and 705

are adopted by reference and made a part of this chapter, and shall apply to all new installations.

(e) Chapter 21 of the National Fire Protection Association 72 National Fire Alarm and Signaling Code, 2010 edition, and its related annexes and provisions are adopted by reference and made a part of this chapter, and shall apply to all new elevators.

(f) Article 620 of the National Fire Protection Association 70, National Electric Code, 2011 edition, and its related provisions are adopted by reference and made a part of this chapter, and shall apply to all new elevators.

(g) Paragraph 8.15.5, of National Fire Protection Association 13, Standard for the Installation of Sprinkler Systems, 2010 edition, is adopted by reference and made a part of this chapter, and shall apply to all new elevators and escalators. The annexes A.8.15.5.1 to A.8.15.5.4, D.1.1.9.2, D.1.1.10.2, D.2.23.2.2, and D.2.24.2.2, are explanatory and informational only.

(h) In each machine room, control room, machinery space, control space, and hoistway pit, there shall be provided at least one 125 volt, single phase, 15- or 20-ampere ground fault circuit interrupter (GFCI) duplex receptacle.

(i) A machine room light bulb shall be externally guarded if the bulb is ten feet or lower from the floor.

(j) Section 2.27.8 (switch keys) of American Society of Mechanical Engineers A17.1 is amended to read: "The key switches required by 2.27.2 through 2.27.5 for all elevators in a building shall be operable by the "FEO-K1" key. The keys shall be Group 3 Security (see 8.1). A separate key shall be provided for each switch. These keys shall be kept inside the firefighter's lockbox. The firefighter's lockbox shall be located 6 feet above the floor on the left hand side of the elevator wall when facing the elevator and 6 feet above the floor on the left hand side of the left elevator when facing the elevators for a group of elevators. The fire key switch shall be located adjacent to the firefighter's lockbox. This key shall be of a tubular, 7 pin, style 137 construction and shall have a bitting code of 6143521 starting at the tab sequenced clockwise as viewed from the barrel end of the key. The key shall be coded "FEO-K1". The possession of the "FEO-K1" key shall be limited to elevator personnel, emergency personnel, elevator equipment manufacturers, and authorized

personnel during checking of the Firefighters' Emergency Operation (see 8.1 and 8.6.11.1)". [Eff JUN 30 2014]
 (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-230.1-4 Requirements for existing elevators, escalators, dumbwaiters, moving walks, and material lifts and dumbwaiters with automatic transfer devices. (a) All existing elevators, escalators, moving walks, and dumbwaiters and material lifts without automatic transfer devices shall comply with the code in effect at the time of installation or alteration. If the installation or alteration permit was issued after 1997, then the elevator or kindred equipment shall comply with American Society of Mechanical Engineers A17.3-2011, which is adopted by reference and made a part of this chapter with the following amendments:

- (1) Nonmandatory Appendix C of American Society of Mechanical Engineers A17.3 is mandatory.
- (2) Rule 211.3 of American Society of Mechanical Engineers A17.3 Nonmandatory Appendix C, Firefighter's Service - Automatic Elevators, is amended to read: "All automatic (nondesignated attendant) operation elevators shall conform to the requirements of this rule".

(b) The following provisions of American Society of Mechanical Engineers A17.1-2010 are adopted by reference and shall apply to existing elevators and kindred equipment as stated:

- (1) Part 1, General, shall apply to all existing elevators, escalators, moving walks, dumbwaiters, and material lifts;
- (2) Section 5.10, Elevators Used for Construction, shall apply to all existing elevators used for construction;
- (3) Section 8.1, Security, shall apply to all existing elevators, escalators, and moving walks;
- (4) Section 8.6, Maintenance, Repair, Replacement and Testing, shall apply to all existing elevators, escalators and moving walks, and dumbwaiters and material lifts with automatic transfer devices with the following amendment: Section 8.6.1.2.1(c) of

the American Society of Mechanical Engineers A17.1 is amended to read: "The written Maintenance Control Program in electronic or paper form created for the equipment is the property of the equipment owner, and shall be made available to the department and be located on site".

- (5) Section 8.7, Alterations, shall apply to all existing elevators, escalators, moving walks, and material lifts and dumbwaiters with automatic transfer devices.
- (6) Section 8.8, Welding, shall apply to all existing elevators, escalators, moving walks, and material lifts and dumbwaiters with automatic transfer devices.
- (7) Section 8.9, Code Data Plate, shall apply to all existing elevators, escalators, moving walks, and material lifts and dumbwaiters with automatic transfer devices, except section 8.9.2 is amended to read: "The data plate shall be in plain view and securely attached to the controller door. An additional data plate shall be installed in the vicinity of the top key operated starting switch on the exterior of escalators and moving walks".
- (8) Section 8.10, Acceptance Inspections and Tests, shall apply to all existing elevators, escalators, moving walks, and material lifts and dumbwaiters with automatic transfer devices.
- (9) Section 8.11, Flood Resistances, shall apply to all existing elevators, escalators, moving walks, and material lifts and dumbwaiters with automatic transfer devices.

(c) Chapter 12-240 shall apply to all elevators where the installation application was received by the department after December 6, 1990.

(d) American Society of Mechanical Engineers 17.6 shall apply to existing elevators with other types of suspension means and steel cables less than three-eighths of an inch in diameter. [Eff JUN 30 2014]

(Auth: HRS §397-4) (Imp: HRS §397-4)