CHAPTER 1307
DEPARTMENT OF LABOR AND INDUSTRY
ELEVATORS AND RELATED DEVICES

1307.0005 TITLE.

This chapter is known and may be cited as the "Elevators and Related Devices Code." As used in this chapter, "the code" and "this code" refer to this chapter.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *23 SR 2051*

1307.0010 PURPOSE AND SCOPE.

The provisions of parts 1307.0010 to 1307.0110 are to safeguard life, limb, property, and public welfare by establishing minimum requirements relating to the design, construction, installation, alteration, repair, removal, and operation and maintenance of passenger elevators, freight elevators, handpowered elevators, dumbwaiters, escalators, moving walks, vertical reciprocating conveyors, stage and orchestra lifts, endless belt lifts, wheelchair lifts, and other related devices. The requirements for the enforcement of these provisions are established by this chapter, and by municipal option, according to Minnesota Statutes, section 16B.747, subdivision 3.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *15 SR 70; 23 SR 2051; 31 SR 935*

1307.0015 [Repealed, 23 SR 2051]

1307.0020 CODES ADOPTED BY REFERENCE.

Subpart 1. **Incorporation by reference.** The following are incorporated by reference, are not subject to frequent change, and are made part of the Minnesota State Building Code as amended in this chapter: Chapter 30 of the 2006 International Building Code, published by the International Codes Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041; ASME A17.1–2004 with 2005 A17.1A Addenda and the Supplement ASME A17.1S–2005 Safety Code for Elevators and Escalators; ASME A17.3–2002 Safety Code for Existing Elevators and Escalators; ASME A17.5–2004 Elevator and Escalator Electrical Equipment; ASME A18.1–2005 Safety Standard for Platform Lifts and Stairway Chairlifts; ASME A90.1–2003 Safety Standard for Belt Manlifts; ASME B20.1–2003 Safety Standard for Conveyors and Related Equipment as published by the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, New York 10017. These are available in the office of the commissioner of labor and industry. Portions of this chapter reproduce text and tables from Chapter 30 of the 2006 International Building Code. The International Building Code is copyright 2006 by the International Code Council, Inc. All rights reserved.

Subp. 2. [Repealed, 23 SR 2051]

Subp. 3. **Emergency personnel.** ASME A17.4–1999 Guide for Emergency Personnel is the reference document for emergency personnel.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *15 SR 70; 23 SR 2051; 31 SR 935*

1307.0025 [Repealed, 31 SR 935]

1307.0027 DEFINITIONS.

Subpart 1. **Scope.** The definitions in this part apply to parts 1307.0010 to 1307.0110.

Subp. 2. **ASME A17.1–2004.** "ASME A17.1–2004" means the ASME A17.1–2004 with 2005 A17.1A Addenda and the Supplement ASME A17.1S–2005, Safety Code for Elevators and Escalators.

Subp. 3. **ASME A17.3–2002.** "ASME A17.3–2002" means the ASME A17.3–2002 Safety Code for Existing Elevators and Escalators (and related equipment).

Subp. 4. **ASME A17.5–2004.** "ASME A17.5–2004" means the ASME A17.5–2004 Elevators and Escalators Electrical Equipment.

Subp. 5. **ASME A18.1–2005.** "ASME A18.1–2005" means the ASME A18.1–2005 Safety Standard for Platform Lifts and Stairway Chairlifts.

Subp. 6. **ASME A90.1–2003.** "ASME A90.1–2003" means the ASME A90.1–2003 Safety Standard for Belt Manlifts.

Subp. 7. **ASME B20.1–2003.** "ASME B20.1–2003" means the ASME B20.1–2003 Safety Standard for Conveyors and Related Equipment.

Subp. 8. **ASME Code.** "ASME Code" means the ASME Codes incorporated by reference in part 1307.0020, subpart 1.

Subp. 9. **Authority having jurisdiction.** "Authority having jurisdiction" means the Department of Labor and Industry pursuant to Minnesota Statutes, section 16B.61, or a unit of local government pursuant to Minnesota Statutes, sections 16B.61 and 16B.747.

Subp. 10. **Bank of elevators.** "Bank of elevators" means a group of elevators or a single elevator controlled by a common operating system. Specifically, all elevators that respond to a single call button constitute a bank of elevators. There is no limit to the number of cars that may be in a bank.

Subp. 11. **Conditioned space.** "Conditioned space" means space within a building which is conditioned either directly or indirectly by an energy–using system and is capable of maintaining at least 65 degrees Fahrenheit at winter design conditions or less than 78 degrees Fahrenheit at summer design conditions required by the Minnesota Energy Code.

Subp. 12. **Dormant elevator, dormant dumbwaiter, or dormant escalator.** "Dormant elevator," "dormant dumbwaiter," or "dormant escalator" means an installation placed out of service as specified in ASME A17.1–2004, 8.11.1.4.

Subp. 13. **Endless belt lift.** "Endless belt lift" means belt manlifts and is governed by ASME A90.1–2003 Safety Standard for Belt Manlifts.

Subp. 14. **Existing installation.** "Existing installation" means one for which, before January 29, 2007:

A. all work of installation was completed; or

B. the plans and specifications were filed with the authority having jurisdiction, all required permits were obtained, all permit and inspection fees were paid, and work was begun not later than 12 months after approval of the plans and specifications and issuance of the required permits.

Subp. 15. **International Building Code or IBC.** "International Building Code" or "IBC" means the International Building Code, as promulgated by the International Codes Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, and as adopted by reference in part 1305.0011.

Subp. 16. **Private residence.** "Private residence" means a dwelling unit or sleeping unit that is occupied by the members of a single–family dwelling or no more than six unrelated persons.

Subp. 17. **Temporarily dormant elevator, temporarily dormant dumbwaiter, or temporarily dormant escalator.** "Temporarily dormant elevator," "temporarily dormant dumbwaiter," or "temporarily dormant escalator" means an installation whose:

A. power supply has been disconnected by removing fuses (where applicable) and placing a padlock on the mainline disconnect switch in the "OFF" position;

B. car is parked and the hoistway doors are in the closed and latched position; and

C. wire seal or notification or both is installed on the mainline disconnect switch by the authority having jurisdiction or their authorized elevator inspector.

Subp. 18. **Vertical reciprocating conveyor.** "Vertical reciprocating conveyor" means a vertical device for moving material only that is not designed to carry passengers or an operator, and that is governed by ASME B20.1–2003, Safety Standard for Conveyors and Related Equipment.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748*

History: *31 SR 935*

1307.0030 PERMITS.

Subpart 1. **Permits required.** It is unlawful for any person, firm, or corporation to hereafter install any new passenger elevators, freight elevators, handpowered elevators, moving walks, escalators, dumbwaiters, wheelchair lifts, endless belt lifts, vertical reciprocating conveyors, stage and orchestra lifts, or any other related device, or make alterations or repairs to or remove any existing of the same without having first obtained a permit for the work from the authority having jurisdiction. Alterations, modifications, and practical difficulties will be done in keeping with the rules of the Department of Labor and Industry.

Permits for repairs are required by the Department of Labor and Industry for the following ASME A17.1–2004 sections: 8.6.2.3 repair of speed governors; 8.6.2.4 repair of releasing carrier; 8.6.3.3.2 rope fastenings and hitch plates; 8.6.3.4 replacement of governor rope; 8.6.3.6 replacement of speed governor; 8.6.3.10 replacement of releasing carrier; and 8.6.3.9 replacement of hydraulic jack plunger; cylinder, tanks, valve, and anticreep leveling device.

Subp. 2. **Application for permit.** Application for a permit to install, alter, repair, or remove must be made on forms provided by the authority having jurisdiction.

Subp. 3. **Plans and specifications.** For elevators under the Department of Labor and Industry's jurisdiction, plans and specifications describing the extent of the work involved must be submitted with the application for a permit. The authority having jurisdiction may require that such plans and specifications for work associated with the installation of equipment by this chapter be prepared by an architect or engineer licensed to practice in Minnesota. A permit will be issued to the applicant when the plans and specifications have been approved and the appropriate permit fee specified in this code has been paid by the applicant.

Subp. 4. **Certificate of operation required.** It is unlawful to operate equipment governed by ASME A17.1–2004, ASME A17.3–2002, and ASME A90.1–2003 without a current Certificate of Operation issued by the authority having jurisdiction. The certificate will be issued upon payment of prescribed fees and the presentation of a valid inspection report indicating that the conveyance is safe and that the inspections and tests have been performed according to this code. A certificate will not be issued when the conveyance is posted as unsafe.

Subp. 5. **Application for certificate of operation.** Application for a certificate of operation must be made by the owner, or an authorized representative, for equipment governed by ASME A17.1–2004, ASME A17.3–2002, and ASME A90.1–2003. The application must be accompanied by an inspection report. Fees for the Certificate of Operation must be as specified by the administrative authority.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *15 SR 70; 23 SR 2051; 31 SR 935*

1307.0032 FEES.

Subpart 1. **Jurisdiction.** Fees for the installation, alteration, repair, or removal of devices or for routine or periodic inspections covered in this part are as set forth in the fee schedule adopted by the jurisdiction or, in cases under permit issuance by the Department of Labor and Industry, as established in this part.

Subp. 2. **Establishment.** The Department of Labor and Industry's fees for a permit to install, alter, or remove devices within the scope of this code are:

A. A permit fee to install, alter, or remove an elevator is $100, and $500 if work that requires a permit is begun without a permit.

B. Inspection fees for installation and alteration of permitted elevator work are 1–1/2 percent of the total cost of the permitted work for labor and materials including related electrical and mechanical equipment. The total inspection fee shall not exceed $1,000 per permit. The inspection fee covers two inspections. Additional inspections shall cost $45 per hour, in accordance with part 1302.0600. The cost of special decorative fixtures in the permitted work may be deducted from the cost of the permitted elevator work up to a maximum of five percent of the total cost of the permitted work upon approval of the commissioner.

C. An elevator that passes Department of Labor and Industry's inspection will be issued an operating permit by the department.

Subp. 3. **Inspection fees.** The fees for a requested inspection of existing elevators by the Department of Labor and Industry are:

A. two stop elevators, $50;

B. three stop elevators, $75;

C. four stop elevators, $100;

D. five stop elevators, $125;

E. six or more stop elevators, $150; and

F. escalators and moving walks, $100.

Subp. 4. **Vertical reciprocating conveyor inspection fees.** Vertical reciprocating conveyors (ASME Standard B20.1) are subject to filing and inspection fees for new and altered installations, but are exempt from routine inspections by an elevator inspector.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *23 SR 2051; 31 SR 935*

1307.0035 INSPECTION, TESTS, AND APPROVALS.

Subpart 1. **Approval of plans.** Any person, firm, or corporation desiring to install, relocate, alter, or remove any installation covered by this chapter must obtain approval for doing so from the authority having jurisdiction. Two sets of drawings and/or specifications showing the installation, relocation, alteration, or removal must be submitted as required by the authority having jurisdiction. corporation desiring to install, relocate, alter, or remove any installation covered by this chapter must obtain approval for doing so from the authority having jurisdiction. Two sets of drawings and/or specifications showing the installation, relocation, alteration, or removal must be submitted as required by the authority having jurisdiction.

Subp. 2. **Inspections and tests.** No person, firm, or corporation may put into service any installation covered by parts 1307.0010 to 1307.0100 whether the installation is newly installed, relocated, or altered materially, without the installation being inspected and approved by the authority having jurisdiction. The installer of any equipment included in this chapter must request inspections by notifying the authority having jurisdiction to schedule a date and time for inspection. The authority having jurisdiction shall require tests as described in the applicable ASME Code to prove the safe operation of the installation.

Subp. 3. **Approval.** A certificate or letter of approval must be issued by the authority having jurisdiction for equipment governed by ASME A17.1–2004, ASME A17.3–2002, ASME A90.1–2003, and ASME B20.1–2003 when the entire installation is completed in conformity with this code.

Subp. 4. **Limited use approval.** When a building or structure is equipped with one or more elevators, at least one of the elevators may be approved for limited use before completion of the building or structure. The limited use approval must specify the class of service permitted and the conditions of approval.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *15 SR 70; 23 SR 2051; 31 SR 935*

1307.0040 ACCIDENTS.

Subpart 1. **To be reported.** The owner or person in control of an elevator or other installation covered by this code shall notify the authority having jurisdiction of any accident involving personal injury or damage to equipment covered in this chapter to a person or apparatus on, about, or in connection with an elevator or other installation, and shall allow the authority having jurisdiction reasonable access to the equipment and the opportunity to take statements from employees and agents of the owner or person in control for investigating the accident and the resultant damage. Notification may be given to the authority having jurisdiction by telephone or verbally. The notification must also be confirmed in writing. Notification must be made within one working day of the accident. Failure to provide the proper notification may be considered a violation as described in Minnesota Statutes, section 16B.745.

Subp. 2. **Investigation.** The authority having jurisdiction must make or cause to be made an investigation of the accident, and the report of the investigation must be placed on file in its office. The report must give in detail the cause or causes, so far as can be determined, and the report must be available for public inspection subject to the requirements of the Minnesota Government Data Practices Act, Minnesota Statutes, chapter 13.

Subp. 3. **Operation discontinued.** When an accident involves the failure or destruction of a part of the installation or the operating mechanism, the elevator or other installation must be taken out of service and may not be used again until it has been made safe and the reuse approved by the authority having jurisdiction. The authority having jurisdiction may, when necessary, order the discontinuance of operation of any such elevator or installation until a new certificate of operation has been issued.

Subp. 4. **Removal of parts restricted.** No part of the damaged installation, construction, or operating mechanism may be removed from the premises until permission is granted by the authority having jurisdiction.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *15 SR 70; 23 SR 2051*

1307.0045 [Repealed, 31 SR 935]

1307.0047 SPECIAL PROVISIONS.

Subpart 1. **Scope.** The special provisions in this part apply to the design, construction, and installation of equipment governed by ASME A17.1–2004 and ASME A17.3–2002.

Subp. 2. **Chairlifts.** Inclined stairway chairlifts shall only be installed within a private residence or as approved in accordance with Minnesota Statutes, section 471.471. The installation shall be in accordance with ASME A18.1–2005.

Subp. 3. **Attendant–operated lifts.** Attendant–operated lifts shall only be installed in owner–occupied private residences.

Subp. 4. **Rooftop elevators.** Passenger and freight elevators are permitted at rooftops when conditioned space or rooftop elevators meeting ASME A17.1–2004 5.6 are provided.

Subp. 5. **Winding drum machines.** Except as permitted in the ASME Code for private residence elevators, chairlifts, and wheelchair platform lifts, winding drum machines are not permitted on new elevator installations, as replacements on existing installations, or on elevators undergoing a use conversion or classification change.

Subp. 6. **Horizontal swing doors.** Horizontal swing doors of single–section or center–opening two–section design are not permitted as hoistway doors on new elevator installations or as replacement hoistway doors on existing installations, except for private residential elevators, or when the authority having jurisdiction approves their installation or replacement when conditions make it impossible to install approved types of doors.

Subp. 7. **Elevator equipment room signage.** Elevator equipment rooms shall have a permanent sign attached to the equipment room door or adjacent to the equipment room door. The sign shall read in no less than 0.5–inch letters "Elevator Equipment Room." On elevators with remote equipment rooms, signs reading in no less than 0.5–inch letters "Elevator

Equipment Room Access" shall be provided on or adjacent to doors leading to the machine room.

Exception: Elevator equipment room access signage is not required if the building is staffed with a 24–hour security guard or 24–hour maintenance personnel able to assist emergency personnel to the location of the elevator equipment room.

Subp. 8. **All work required for compliance with ASME A17.1–2004 8.6.5.8 Safety Bulkhead.** All work required for compliance with ASME A17.1–2004 8.6.5.8 must be completed within 60 months of January 29, 2007. Failure to complete the work within the required time period will result in the elevator being removed from service until such work has been completed.

Starting 12 months after January 29, 2007, until the elevator complies with ASME A17.1–2004 8.6.5.8, the owner or owner's agent must annually submit a notarized statement that an oil usage log is being properly utilized by the owner or owner's agent or elevator maintenance company and that the elevator has successfully passed the annual tests required by ASME A17.1–2004 8.11.3.2.1 and 8.11.3.2.2. A copy of the test report shall be included with the statement.

Subp. 9. **All work required for compliance with ASME A17.1–2004 8.6.5.8 Bulkhead Material Transfer Device.** Elevators shall not be converted to a material transfer device (vertical reciprocating conveyor) without meeting the requirements of ASME A17.1–2004 8.6.5.8, Safety Bulkhead. A material transfer device shall comply with ASME B20.1–2003.

Subp. 10. **All work required for compliance with ASME A17.3–2002 2.7.4 Restricted Opening of Hoistway Doors and Car Doors on Passenger Elevators.** All work required for compliance with ASME A17.3–2002 2.7.4 must be completed within 60 months of January 29, 2007. Failure to complete the work within the required time period will result in the elevator being removed from service until such work has been completed.

Subp. 11. **All work required for compliance with ASME A17.3–2002 3.11.3 Firefighter's Service.** All work required for compliance with ASME A17.3–2002 3.11.3 must be completed within 60 months of January 29, 2007. Failure to complete the work within the required time period will result in the elevator being removed from service until such work has been completed.

Exception: Existing elevators with phase one emergency recall installed without phase two firefighters service on the original installation may remain in operation without the addition of phase two fire service where there is travel from the designated level of less than 35 feet. For such elevators with a travel of more than 25 feet from the designated level, to be exempt from the requirement for phase two fire service, recall of the elevator shall be from the smoke detector at each elevator landing, the elevator equipment room, and the elevator key switch at the designated landing.

Subp. 12. **All work required for compliance with ASME A17.3–2002 4.3.3 Hydraulic Elevators.** All work required for compliance with ASME A17.3–2002 4.3.3 must be completed within 60 months of January 29, 2007. Failure to complete the work within the required time period will result in the elevator being removed from service until such work has been completed.

Starting 12 months after January 29, 2007, until the elevator complies with ASME A17.3–2002 4.3.3, the owner or owner's agent must submit annually on a notarized statement that an oil usage log is being properly utilized by the owner or owner's agent or elevator maintenance company and that the elevator has successfully passed annual tests required by ASME A17.1–2004 8.11.3.2.1 and 8.11.3.2.2. A copy of the test report shall be included with the statement.

Subp. 13. **ASME A17.1–2004 8.10.4.1.1(p)(5) Clearance between step and skirt (load gap) and ASME A17.1–2004. 8.10.4.1.1(t) step/skirt index.** Where an existing escalator or moving walk requires alteration to comply with ASME A17.1–2004 6.1.3.3.7 and ASME A17.1–2004 8.6.8.3, all work must be completed within 36 months of January 29, 2007. This 36–month period to achieve compliance only applies to those escalators that fail

to meet the test requirements of the referenced rule. Failure to complete the required work within the applicable time period will result in the escalators being removed from service until such work has been completed.

Subp. 14. **ASME A17.3–2002 5.1.11 Step/skirt performance index.** Where an existing escalator requires alteration to comply with ASME A17.3–2002 5.1.11, all work must be completed within 36 months of January 29, 2007. This 36–month period to achieve compliance only applies to those escalators that fail to meet the test requirements of the referenced rule. Failure to complete the required work within the applicable time period will result in the escalators being removed from service until such work has been completed.

Subp. 15. **ASME A17.3–2002 2.2.4 Temperature control.** Machine rooms shall be provided with natural or mechanical means to avoid overheating of the electrical equipment and to ensure safe and normal operation of the elevator.

Subp. 16. **Newly constructed parking ramps or new construction in an existing parking ramp.** Elevators installed in newly constructed parking ramps or new construction in an existing parking ramp shall be installed so safe operating temperature for people and elevator equipment is maintained.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748*

History: *31 SR 935*

1307.0050 [Repealed, 23 SR 2051]

1307.0055 [Repealed, 23 SR 2051]

1307.0060 [Repealed, 23 SR 2051]

1307.0065 [Repealed, 31 SR 935]

1307.0067 AMENDMENTS TO ASME A17.1–2004.

Subpart 1. **ASME A17.1–2004 2.2.2.4.** ASME A17.1–2004 2.2.2.4 is amended by adding a paragraph to read as follows:

An elevator pit drain must discharge to the sanitary sewer using an indirect connection that precludes the possibility of sewage backup into the pit. If a sump is used, it must be located outside the pit with a dry pan drain flowing to it. The sump for the elevator pit drain must not be located in the elevator machine room.

Subp. 2. **ASME A17.1–2004 2.5.1.1 Between car and hoistway enclosures.** ASME A17.1–2004 2.5.1.1 is amended to read as follows:

2.5.1.1. Between car and hoistway enclosures. The clearance between the car and the hoistway enclosures shall not be less than 0.8 inches (20 mm), except on the sides used for loading and unloading. The distance between the car and the hydraulic piping, hydraulic fittings, electrical piping, electrical boxes, steam or hot water piping where permitted, sprinkler piping, where permitted, or any other item not by elevator design shall not be less than 0.8 inches (20 mm).

Subp. 3. **ASME A17.1–2004 2.7.3.1 General requirements.** ASME A17.1–2004 2.7.3.1 is amended by adding a sentence at the end of the section as follows:

Access to elevator equipment space shall not be through any toilet room.

Subp. 4. **ASME A17.1–2004 2.7.4.1.** ASME A17.1–2004 2.7.4.1 is amended by adding a sentence to the end of the section as follows:

Raised surfaces intended as working space surrounding equipment shall have 72 inches clear headroom measured from the working surface.

Subp. 5. **ASME A17.1–2004 2.12.6.2.5.** ASME A17.1–2004 2.12.6.2.5 is amended to read as follows:

The unlocking–device keyway and locked panel (see ASME A17.1–2004 2.12.6.2.3) if provided, shall be located at a height not greater than 83 inches (2100 mm) above the landing and all keyways, with the exception of the keyway at the bottom landing and all private residence elevator keyways, shall have keyed plugs installed with the key for those plugs kept in the key box as defined in subpart 9.

Subp. 6. **ASME A17.1–2004 2.12.7.1.** ASME A17.1–2004 2.12.7.1 is amended to read as follows:

2.12.7.1.1 Hoistway access switches shall be provided when the rate of speed is greater than 30 ft./min. at:

A. the lowest landing for access to the pit, when a separate access door is not provided; and

B. the top landing for access to the top of the car.

Subp. 7. **ASME A17.1–2004 2.12.7.1.2.** ASME A17.1–2004 2.12.7.1.2 is deleted in its entirety.

Subp. 8. **ASME A17.1–2004 2.14.7.1.4.** ASME A17.1–2004 2.14.7.1.4 is amended to read as follows:

Each elevator shall be provided with an electric light that includes an OSHA–approved guard and a GFCI convenience outlet fixture on both the car top and the bottom of the car.

Subp. 9. **ASME A17.1–2004 2.27 Emergency operation and signaling devices.** ASME A17.1–2004 2.27 is amended by adding the following language at the beginning of section 2.27.8:

2.27.8 Switch keys. The key switches required by ASME A17.1–2004 2.27.2 through 2.27.5 for elevators in a building shall be operable by the same key. The keys shall be a Group 3 Security (see Section 8.1). There shall be a key for each switch provided. Keys shall be painted or marked red.

These keys shall be kept on premises, in a key box labeled "Fire Dept" approved by the authority having jurisdiction. The key box shall be located in the elevator lobby, on the main egress floor or in the fire command room. When there is not a fire command room and site conditions prohibit installation at the elevator lobby, the authority having jurisdiction shall specify the location of the Fire Dept key box. Keys for emergency access doors (2.11.1.2) and hoistway door unlocking device (2.12.6.2.4) of Group 1 shall be accessible to emergency personnel and a set shall be included in the elevator emergency key box.

Where applicable, Groups 1, 2, and 3 (see Section 8.1) security shall be provided in a separate black trimmed key box approved by the authority having jurisdiction. The key box shall be labeled "Elevator Personnel Only" located in the elevator machine room or location specified by the authority having jurisdiction. Keys shall be tagged and labeled. The locked cylinder shall be uniformly keyed throughout the state.

Subp. 10. **ASME A17.1–2004 2.27.1.1.3(a).** ASME A17.1–2004 2.27.1.1.3(a) is deleted in its entirety.

Subp. 11. **ASME A17.1–2004 3.28.1 Information included on layout drawing.** ASME A17.1–2004 3.28.1 is amended by adding the following subitem:

(p) the method used to comply with 3.18.3.8 (protection of cylinders buried in the ground).

Subp. 12. **ASME A17.1–2004 4.3.15 Car safeties.** ASME A17.1–2004 4.3.15 is amended by adding a sentence to read as follows:

All hand powered elevators must be equipped with a broken rope safety device.

Subp. 13. **ASME A17.1–2004 7.2.4.6 Application of safeties.** ASME A17.1–2004 7.2.4.6 is amended by adding a sentence at the end of the section as follows:

All hand powered dumbwaiters must be equipped with a broken rope safety device.

Subp. 14. **ASME A17.1–2004 8.10.1.1.3.** ASME A17.1–2004 8.10.1.1.3 is deleted and replaced with the following:

Elevator inspector qualifications. Inspectors shall have one of the following current electrical licenses: master elevator constructor, elevator constructor, class A master, or a class A journeyman issued by the Department of Labor and Industry.

Inspectors shall have proof of successful completion of the National Elevator Industry Education program examination, equivalent program, or equivalent experience. Any person performing inspections hired after January 29, 2007, shall be certified by an ASME accredited organization as a qualified elevator inspector (QEI) within 18 months of the employment start date.

Subp. 15. **ASME A17.1–2004 8.11.1.3 Periodic inspection and test frequency.** ASME A17.1–2004 8.11.1.3 Periodic inspection and test frequency. The frequency as established by the authority having jurisdiction shall be as stated in the Minnesota Table N–1.

MINNESOTA TABLE N–1
INSPECTION AND TEST INTERVALS IN "MONTHS"

		Periodic Inspections		Periodic Tests Category 1	
Reference Section	Equipment Type	Require–ment	Interval	Require–ment	Interval
8.11.2	Electric elevators	8.11.2.1	12	8.11.2.2	12
8.11.3	Hydraulic elevators	8.11.3.1	12	8.11.3.2	12
8.11.4	Escalators & moving walks	8.11.4.1	12	8.11.4.2	12
8.11.5.1	Sidewalk elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.3	Hand elevators	8.11.2.1	12	8.11.2.2	12
8.11.5.4	Dumbwaiters	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.6	Special purpose personal elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.7	Inclined elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.8	Shipboard elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.9	Screw–column elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.10	Rooftop elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12
8.11.5.12	Limited use/limited–application elevators	8.11.2.1, 8.11.3.1	12	8.11.2.2, 8.11.3.2	12

8.11.5.13	Elevators used for construction	8.11.2.1, 8.11.3.1	3	8.11.2.2, 8.11.3.2	12

		Periodic Inspections		Periodic Tests Category 3	
Reference Section	Equipment Type	Require–ment	Interval	Require–ment	Interval
8.11.2	Electric elevators	8.11.2.1	12	N/A	N/A
8.11.3	Hydraulic elevators	8.11.3.1	12	8.11.3.3	60
8.11.4	Escalators & moving walks	8.11.4.1	12	N/A	N/A
8.11.5.1	Sidewalk elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.3	Hand elevators	8.11.2.1	12	N/A	N/A
8.11.5.4	Dumbwaiters	8.11.3.1	12	8.11.3.3	60
8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.6	Special purpose personal elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.7	Inclined elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.8	Shipboard elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.9	Screw–column elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.10	Rooftop elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60
8.11.5.12	Limited use/limited–application elevators	8.11.2.1, 8.11.3.1	12	8.11.3.3	60

8.11.5.13	Elevators used for construction	8.11.2.1, 8.11.3.1	3	8.11.3.3	60

		Periodic Inspections		Periodic Tests Category 5	
Reference Section	Equipment Type	Require–ment	Interval	Require–ment	Interval
8.11.2	Electric elevators	8.11.2.1	12	8.11.2.3	60
8.11.3	Hydraulic elevators	8.11.3.1	12	8.11.3.4	60
8.11.4	Escalators & moving walks	8.11.4.1	12	N/A	N/A
8.11.5.1	Sidewalk elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.3	Hand elevators	8.11.2.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.4	Dumbwaiters	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.6	Special purpose personal elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.7	Inclined elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.8	Shipboard elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.9	Screw–column elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.10	Rooftop elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60
8.11.5.12	Limited use/limited–application elevators	8.11.2.1, 8.11.3.1	12	8.11.2.3, 8.11.3.4	60

8.11.5.13	Elevators used for construction	8.11.2.1, 8.11.3.1	3	8.11.2.3, 8.11.3.4	60

GENERAL NOTE: The intervals in this table shall be for periodic tests and inspections. Factors such as the environment, frequency and type of usage, quality of maintenance, etc., related to the equipment should be taken into account by the authority having jurisdiction prior to establishing more frequent inspection and test intervals.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748*

History: *31 SR 935*

1307.0070 STAGE, ORCHESTRA LIFTS, AND MECHANICAL PARKING GARAGE EQUIPMENT.

Stage, orchestra lifts, and mechanical parking garage equipment must be designed, installed, constructed, and maintained so as to be reasonably safe to life, limb, and adjoining property and must be reviewed by the authority having jurisdiction prior to installation or construction.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748*

History: *15 SR 70; 31 SR 935*

1307.0075 [Repealed, 23 SR 2051]

1307.0080 [Repealed, 23 SR 2051]

1307.0085 [Repealed, 31 SR 935]

1307.0090 EXISTING INSTALLATIONS.

Subpart 1. [Repealed, 31 SR 935]

Subp. 2. **Conditions for continued operation.** All existing installations of equipment governed by ASME A17.1–2004, ASME A17.3–2002, and ASME A90.1–2003 may be continued in service as long as they are properly maintained and are, in the opinion of the authority having jurisdiction, installed and maintained in a safe condition. The authority having jurisdiction shall order the installation of the following basic safety devices: automatic noncontact door reopening devices; top of car, under car lights, and pit lights, with ground fault interrupter outlets; pit ladder; emergency door unlocking device; and emergency lock box complying with part 1307.0067, subpart 9. All hand powered elevators and hand powered dumbwaiters must be equipped with a broken rope safety device. Elevator machine room lighting must meet the requirements of ASME A17.1–2004 2.7.5.1 to provide 19 footcandles of illumination at the floor level. The installation of these safety devices does not require compliance with ASME A17.1–2004.

Subp. 3. **Damaged installations.** Any installation, whether new or existing, which becomes damaged, defective, or worn, by fire, water, or other causes including ordinary wear to the extent that, in the opinion of the authority having jurisdiction it is dangerous to life, limb, or adjoining property, such installations shall be repaired or rebuilt in conformity with the applicable ASME code and its associated state amendments.

Subp. 4. **Unsafe conditions.** When an inspection reveals an unsafe condition, the inspector must immediately file with the owner and the authority having jurisdiction a full and true report of the inspection and the unsafe condition. The authority having jurisdiction shall shut down any piece of equipment covered by this chapter, that, in the opinion of the authority having jurisdiction, is dangerous to life, limb, or adjoining property, and the equipment shall not be put back into operation until the unsafe condition has been corrected and approved by the authority having jurisdiction. When an unsafe condition is determined by the authority having jurisdiction, the inspector shall place a notice, in a conspicuous location, on the elevator, escalator, or moving walk that the conveyance is unsafe. The owner shall ensure that the notice of unsafe condition is legibly maintained where placed by the authority having

jurisdiction. The authority having jurisdiction shall issue an order in writing to the owner requiring the repairs or alterations to be made to the conveyance in compliance with the applicable ASME code and its associated state amendments. A posted notice of unsafe conditions shall be removed only by the authority having jurisdiction when satisfied that the required repairs or alterations have been completed.

Subp. 5. [Repealed, 31 SR 935]

Subp. 6. **Other requirements.** Existing installations covered by subpart 2 must conform to the requirements of: ASME A17.1–2004 Part 1, and 5.10, 8.1, 8.6, 8.7, 8.8, 8.9, 8.10, and 8.11 as amended by this and other sections of this chapter. Alterations must conform to the requirements of ASME A17.1–2004, Part 8.6, or ASME A17.3–2002, whichever is more restrictive.

Subp. 7. **Compliance schedule.**

A. Where noncompliance with the applicable ASME code and its associated state amendments creates an imminent danger to persons or property, correction must be initiated immediately and the unit may not be placed into service until the correction is made or approval is granted by the authority having jurisdiction.

B. Where noncompliance with the applicable ASME code and its associated state amendments does not create an imminent danger, the owner or manager of the property shall submit for review and approval a time schedule for compliance with the authority having jurisdiction within 30 calendar days of receipt of notification by the authority having jurisdiction.

Subp. 8. **Removal of existing elevators.**

A. **Traction elevator.** Prior to a new installation, elevator personnel must remove all elevator–related equipment, that will not be reused on the new installation. If removal of the unit is part of building demolition or the hoistway is not reused for elevator equipment, elevator personnel must remove the unit from service by safely landing the elevator and counterweights at the lowest landing.

B. **Hydraulic elevator.** Prior to a new installation, elevator personnel must remove all elevator–related equipment that will not be reused on the new installation. If a hydraulic elevator is to be removed for building demolition, elevator personnel must remove all hydraulic oil in accordance with rules of the Minnesota Pollution Control Agency. A company licensed to seal wells and borings in accordance with the Minnesota Department of Health, parts 4725.3850 and 4725.3875, must seal the boring into the earth and provide proof of the sealing to the authority having jurisdiction.

C. **Dormant elevator, dormant dumbwaiter, or dormant escalator.** A dormant elevator, dormant dumbwaiter, or dormant escalator shall be placed out of service in accordance with ASME A17.1–2004 8.11.1.4.

D. **Temporarily dormant elevator, temporarily dormant dumbwaiter, or temporarily dormant escalator.** A temporarily dormant elevator, temporarily dormant dumbwaiter, or temporarily dormant escalator shall have its power disconnected by removing fuses, where applicable, and placing a seal on the mainline disconnect switch in the "OFF" position. The car shall be parked and the hoistway doors left in the closed and latched position. A wire seal and notification shall be installed on the mainline disconnect switch by an authority having jurisdiction. This installation shall not be used until it has been put in safe running order and is in condition for use. Annual inspections shall continue for the duration of the temporarily dormant status by an authority having jurisdiction. The temporarily dormant status shall be reviewed on an annual basis, and shall not exceed a three–year period. The inspector shall file a report with the supervising authority having jurisdiction describing the current conditions. The wire seal and notification shall not be removed for any purpose without permission from the authority having jurisdiction. When the elevator, dumbwaiter, or escalator has exceeded the three–year temporarily dormant status, the unit shall be placed out of service according to ASME A17.1–2004 8.11.1.4.

Statutory Authority: *MS s 16B.59 to 16B.75*

History: *15 SR 70; 23 SR 2051; 31 SR 935*

1307.0095 CHAPTER 30 OF THE INTERNATIONAL BUILDING CODE; ELEVATORS AND CONVEYING SYSTEMS.

Subpart 1. **IBC Section 3001, General.** IBC Section 3001 is amended to read as follows:

3001.1 Scope. This chapter governs the design, construction, installation, alteration, and repair of elevators and conveying systems and their components.

3001.2 Referenced standards. Except as otherwise provided by applicable law, the design, construction, installation, alteration, repair, and maintenance of elevators and conveying systems and their components shall conform to Minnesota Rules, chapter 1307.

3001.3 Accessibility. Passenger elevators required to be accessible by the 2006 IBC, Chapter 11, shall conform to Minnesota Rules, chapter 1341.

3001.4 Change in use. A change in use of an elevator from freight to passenger, passenger to freight, or from one freight class to another freight class shall comply with Minnesota Rules, chapter 1307.

Subp. 2. **IBC Section 3002, Hoistway enclosures.** IBC Section 3002 is amended to read as follows:

3002.1 Hoistway enclosure protection. Elevators, dumbwaiters, and other hoistway enclosures shall be shaft enclosures complying with Section 707.

3002.1.1 Opening protectives. Openings in hoistway enclosures shall be protected as required in Chapter 7.

> **Exception:** The elevator car doors and the associated hoistway enclosure doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I Emergency Recall Operation.

3002.1.2 Hardware. Delete this section in its entirety.

3002.2 Number of elevator cars in a hoistway. Where four or more elevator cars serve all or the same portion of a building, the elevators shall be located in at least two separate hoistways. Not more than four elevator cars shall be located in any single hoistway enclosure.

3002.3 Emergency signs. An approved pictorial sign of a standardized design shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall be as illustrated in ASME A17.1–2004; Appendix O. The emergency sign shall not be required for elevators that are part of an accessible means of egress complying with Section 1007.4.

3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above grade plane or four or more stories below grade plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate a 24–inch by 84–inch (610 mm by 2133.5 mm) ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than three inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame.

> **Exception:** When approved by the authority having jurisdiction, passenger elevators to be installed in existing buildings where existing hoistway configuration or technical infeasibility prohibits strict compliance with the minimum inside car size, the minimum inside car area may be reduced to not less than 48 inches by 48 inches.

3002.5 Emergency doors. Where an elevator is installed in a single blind hoistway or on the outside of a building, there shall be installed in the blind portion of the hoistway or blank face of the building, an emergency door in accordance with ASME A17.1–2004.

3002.6 Prohibited doors. Doors, other than hoistway doors, elevator car doors, and smoke control doors, when required, shall be prohibited at the point of access to an elevator car. Smoke control doors shall be:

1. held open during normal operation by a "hold open" device that is activated for closure by fire or smoke sensing devices located in the elevator lobby or its immediate vicinity; and

2. readily openable from the car side without a key, tool, special knowledge, or effort when closed.

3002.7 Common enclosure with stairway. Elevators shall not be in a common shaft enclosure with a stairway.

3002.8 Glass in elevator enclosures. Glass in elevator enclosures shall comply with Section 2409.1.

Subp. 3. **IBC Section 3003, Emergency operations.** IBC Section 3003 is amended to read as follows:

3003.1 Standby power. In buildings and structures where standby power is required or furnished to operate an elevator, the operation shall be in accordance with Sections 3003.1.1 through 3003.1.4.

3003.1.1 Manual transfer. Standby power shall be manually transferable to all elevators in each bank.

3003.1.2 One elevator. Where only one elevator is installed, the elevator shall automatically transfer to standby power within 60 seconds after failure of normal power.

3003.1.3 Two or more elevators. Where two or more elevators are controlled by a common operating system, all elevators shall automatically transfer to standby power within 60 seconds after failure of normal power where the standby power source is of sufficient capacity to operate all elevators at the same time. Where the standby power source is not of sufficient capacity to operate all elevators at the same time, the elevators shall operate according to ASME A17.1–2004 2.27.2.

3003.1.4 Venting. Where standby power is connected to elevators, machine room ventilation or air conditioning, if provided, shall be connected to the standby power source.

3003.2 Firefighters' emergency operation. Elevators shall be provided with Phase I emergency recall operation and Phase II emergency in–car operation in accordance with ASME A17.1–2004.

Subp. 4. **IBC Section 3004, Hoistway venting.** IBC Section 3004 is amended to read as follows:

3004.1 Vents required. Hoistways of elevators and dumbwaiters having a travel of 25 feet or more shall be provided with a means for venting smoke and hot gases to the outer air in case of fire.

Exceptions:

1. In occupancies of other than Groups R–1, R–2, I–1, I–2, as defined in Minnesota Rules, chapter 1305, and similar occupancies with overnight sleeping quarters, venting of hoistways is not required when the building is equipped throughout with an approved automatic sprinkler system installed in accordance with the 2006 International Building Code, Section 903.3.1.1 or 903.3.1.2 and similar local codes.

2. Sidewalk elevator hoistways are not required to be vented.

3004.2 Location of vents. Vents shall be located directly (directly is defined as being as close as technically possible to the top of the hoistway including the supporting structures located at the top of the hoistway) below the top of the hoistway and shall be open either directly to the outer air or through noncombustible ducts to the outer air. Noncombustible ducts shall be permitted to pass through the elevator machine room provided the portions of the ducts located outside the hoistway or machine room are enclosed by construction having not less than the fire protection rating required for the hoistway. Holes in the machine room floors for the passage of ropes, cables, or other moving elevator equipment shall be limited so as not to provide greater than two inches (51 mm) of clearance on all sides.

1. Protective grilles must be installed at vent openings in the top of the hoistway to prevent people from falling into the hoistway. The protective grilles must be securely mounted to the building structure.

2. Interconnection of separate hoistways for the purpose of venting is prohibited.

3. Vents must be operated by a keyed manual remote device and equipped with a remote visual LED–type indicator device for indicating the full open position.

a. The indicator device shall be activated by a device having a direct mechanical connection to vent shutters.

b. The keyed manual remote control device shall have two positions: vent closed and vent open. The markings for both positions shall be permanent. The key shall be removable only in the closed position.

c. The keyed manual remote control device must be located adjacent to the fire control panel, if provided, or in the elevator lobby of a designated floor. The designated floor shall be approved by the authority having jurisdiction.

d. The keyed manual remote control device may not be co–located with any operating devices for the elevators.

3004.3 Area of vents. Except as provided for in Section 3004.3.1, the area of the vents shall not be less than 3–1/2 percent of the area of the hoistway nor less than three square feet (0.28 m^2) for each elevator car and not less than 3–1/2 percent nor less than 0.5 square foot (0.047 m^2) for each dumbwaiter car in the hoistway, whichever is greater.

3004.3.1 Reduced vent area. Where mechanical ventilation conforming to the International Mechanical Code is provided, a reduction in the required vent area is allowed, provided that all of the following conditions are met:

1. The occupancy is not in Group R–1, R–2, I–1, or I–2, as defined in chapter 1305, or of a similar occupancy with overnight sleeping quarters.

2. The vents required by Section 3004.2 do not have outside exposure.

3. The hoistway does not extend to the top of the building.

4. The hoistway and machine room exhaust fan is automatically reactivated by thermostatic means.

5. Equivalent venting of the hoistway is accomplished.

3004.4 Plumbing and mechanical systems. Delete this section in its entirety.

Subp. 5. **IBC Section 3005, Conveying systems.** IBC Section 3005 is amended to read as follows:

3005.1 General. Escalators, moving walks, conveyors, personnel hoists, and material hoists shall comply with Minnesota Rules, chapter 1307.

3005.2 Escalators and moving walks. Escalators and moving walks shall be constructed of approved noncombustible and fire–retardant materials. This requirement shall not apply to electrical equipment, wiring, wheels, handrails, and the use of 1/28–inch (0.9 mm) wood veneers on balustrades backed up with noncombustible materials.

3005.2.1 Enclosure. Escalator floor openings shall be enclosed with shaft enclosures complying with Section 707.

3005.2.2 Escalators. Where provided in below–grade transportation stations, escalators shall have a clear width of 32 inches (815 mm) minimum.

Exception: The clear width is not required in existing facilities undergoing alterations.

3005.3 Conveyors. Conveyors and conveying systems shall comply with ASME B20.1–2003.

3005.3.1 Enclosure. Conveyors and related equipment connecting successive floors or levels shall be enclosed with shaft enclosures complying with Section 707.

3005.3.2 Conveyor safeties. Power–operated conveyors, belts, and other material–moving devices shall be equipped with automatic limit switches that will shut off the power in an emergency and automatically stop all operation of the device.

3005.4 Personnel and material hoists. Personnel and material hoists shall be designed utilizing an approved method that accounts for the conditions imposed during the intended operation of the hoist device. The design shall include, but is not limited to, anticipated loads, structural stability, impact, vibration, stresses, and seismic restraint. The design shall account for the construction, installation, operation, and inspection of the hoist tower, car, machinery and control equipment, guide members, and hoisting mechanism. Additionally, the design of personnel hoists shall include provisions for field testing and maintenance that will demonstrate that the hoist device functions in accordance with the design. Field tests shall be

conducted upon the completion of an installation or following a major alteration of a personnel hoist.

Subp. 6. **IBC Section 3006, Machine rooms.** IBC Section 3006 is amended to read as follows:

3006.1 Access. An approved means of access shall be provided to elevator machine rooms and overhead machinery spaces.

3006.2 Venting. Delete this section in its entirety.

3006.3 Pressurization. The elevator machine room serving a pressurized elevator hoistway shall be pressurized upon activation of a heat or smoke detector located in the elevator machine room.

3006.4 Machine rooms and machinery spaces. Elevator machine rooms and machinery spaces shall be enclosed with construction having a fire–resistance rating not less than the required rating of the hoistway enclosure served by the machinery. Openings shall be protected with assemblies having a fire–resistance rating not less than that required for the hoistway enclosure doors.

3006.5 Shunt trip. Delete this section in its entirety.

3006.6 Plumbing systems. Delete this section in its entirety.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748*

History: *31 SR 935*

1307.0100 [Repealed, 31 SR 935]

1307.0110 MINNESOTA AMENDMENTS TO ASME A18.1–2005.

Subpart 1. **ASME A18.1–2005 Section 2.1 Runways.**

A. ASME A18.1–2005 2.1.2.5 is amended to read as follows:

2.1.2.5. All doors, except as provided in paragraph 2.1.2.9, shall be provided with a combination mechanical lock and electric contact. Locking devices shall be protected against tampering from the landing side. The locking devices shall permit a door to be opened only if the platform floor is within two inches (51 mm) of the respective landing. The platform shall be permitted to move away from the landing under control of the normal operating device if the door is closed but not locked, provided that the device will cause the platform to stop if it moves more than two inches (51 mm) away from the landing before the door is locked.

B. ASME A18.1–2005 2.1.2 Partial runway enclosure provided, is amended by adding a new paragraph 2.1.2.9 to read as follows:

2.1.2.9. Where the lift is installed at a location that does not have guards at the upper landing as allowed by building codes (see definition), the requirements of paragraphs 2.1.2.2, 2.1.2.3, and 2.1.2.4 shall be permitted to be omitted when platform gates are provided. They shall extend to a height at least equal to the top terminal landing height plus six inches (152 mm) measured when the platform is at its lowest position. The gates shall be of unperforated construction, self–closing, and be provided with electric contact to prevent movement of the platform if the gates are not closed. The gates shall not be permanently deformed when a force of 125 lbf (556 N) is applied on any four–inch (102 mm) by four–inch (102 mm) area.

C. ASME A18.1–2005 2.1.2 Partial runway enclosure provided, is amended by adding a new paragraph 2.1.2.10 to read as follows:

2.1.2.10. The clearance between the platform floor and the upper landing sill shall be permitted to be increased to three inches (76 mm) if a platform gate complying with paragraph 2.1.2.9 and an automatically folding ramp to service the upper landing is provided. When deployed, the ramp shall have a minimum overlap at the upper landing sill of two inches (51 mm) and shall be substantially level. It shall be provided with an electric contact, which will stop the movement of the platform within six inches (152 mm) of travel away from the upper landing if the ramp has failed to rise to its retracted position.

D. ASME A18.1–2005 2.1.3 Runway enclosure not provided.

For purposes of A18.1–2005 Section 2 Vertical platform lifts, 2.1.3 is deleted in its entirety. However, as referenced in A18.1–2005 Section 5.1 Runways, 2.1.3 remains in full force and effect.

E. ASME A18.1–2005 2.1.5 Lower level access ramps and pits is amended to read as follows:

2.1.5 Lower level across ramps and pits. Lifts shall be permitted to have a pit. Where a pit is not provided, a floor–mounted or retractable platform floor–mounted ramp complying with the requirements for ramps in ICC/ANSI A17.1 and having a maximum rise of four inches (100 mm) shall be provided. When backing down an incline from the lift platform may be necessary, the slope of the incline shall not exceed one in 20.

F. ASME A18.1–2005 2.1.5.1 is deleted in its entirety.

G. ASME A18.1–2005 2.1.5.2 is deleted in its entirety.

Subp. 2. **ASME A18.1–2005 2.7.1 Limitation of load, speed, and travel.**

ASME A18.1–2005 2.7.1 Limitation of load, speed, and travel is amended to read as follows:

2.7.1 Limitation of load, speed, and travel. The rated load shall not be less than 450 lbs. (200 kg) nor more than 750 lbs. (340 kg). The lift shall be capable of sustaining and lowering a load as specified in figure 9.7. The rated speed shall not exceed 30 ft./min. (0.15 m/s). The travel shall not exceed 168 inches (4250m^2). Platforms with a floor greater than 15 ft.^{2} (1.4 m^2) shall have a rated load of not less than 750 lbs. (340 kg).

Subp. 3. **ASME A18.1–2005 Section 2.10 Operating devices and control equipment.**

A. ASME A18.1–2005 2.10.1 Operation is amended to read as follows:

2.10.1 Operation. Operation of the lift from the landings and from the platform shall be controlled by "UP" and "DOWN" control switches at all stations, and shall be by means of the continuous pressure type. Control switches shall be two inches (50 mm) minimum wide and four inches (100 mm) minimum high. Controls shall be 48 inches (1220 mm) maximum and 15 inches (380 mm) minimum above the platform floor or facility floor or ground level. Operation devices shall be designed so that both the "UP" and "DOWN" circuits cannot be operated at the same time.

B. ASME A18.1–2005 2.10.2.2 is amended to read as follows:

2.10.2.2. The attendant shall operate the platform by means of a continuous pressure switch so located that the attendant has full view of the platform throughout its travel. A manually reset emergency stop switch shall also be provided at that location.

Subp. 4. **ASME A18.1–2005 Section 2.11 Emergency signals.**

A. ASME A18.1–2005 Section 2.11 Emergency signals is amended to read as follows:

2.11 Emergency signals. If the platform is installed in an area not visible or audible to persons at all times, or installed in an enclosed runway, emergency signaling devices shall be provided in accordance with the requirements of paragraphs 2.11.1 and 2.11.2. Standby power shall be provided in accordance with paragraph 2.11.3.

B. ASME A18.1–2005 2.11.2 is amended to read as follows:

2.11.2. The lift shall be provided with a means of two–way communication complying with ASME A17.1–2004.

Subp. 5. **ASME A18.1–2005 Section 2.12 Standby power.** ASME A18.1–2005 Section 2.12 Standby power is amended as follows:

2.12 Standby power. Vertical lifts equipped with standby power shall comply with this chapter.

2.12.1 Standby power. Except where permitted by 2.12.1.1, the vertical lift shall be powered by a standby power system from the building.

2.12.1.1 Battery power. A lift equipped with rechargeable battery power capable of cycling the lift under full load for five cycles minimum after building power is removed shall be permitted.

2.12.1.2 Battery power, rated number of cycles. Except where permitted by 2.12.1.3, where a lift provided with battery power serves an area with more wheelchair users than the

rated number of cycles provided by battery power, or where the authority having jurisdiction determines that the anticipated number of wheelchair users is greater than the rated number of cycles provided by battery power, the lift shall be powered by a standby power system from the building.

2.12.1.3 Existing buildings without standby power. Where an existing building is not required to provide a building standby power system, the installation of a lift shall not require the installation of a building standby power system. A battery standby power system complying with 2.12.1.1 shall be provided.

2.12.1.4 Auxiliary items. Auxiliary items necessary for lift operation such as power doors and runway lighting shall remain operational under standby power.

Subp. 6. **ASME A18.1–2005 3.6.8 Platform guarding.** ASME A18.1–2005 3.6.8 Platform guarding is amended to read as follows:

3.6.8 Platform guarding. Platform guarding shall be in accordance with paragraph 3.6.8.1, or, when safety issues are effectively addressed and approved by the authority having jurisdiction, in accordance with paragraph 3.6.8.2.

Subp. 7. **ASME A18.1–2005 Section 3.10.1 Operation.** ASME A18.1–2005 3.10.1 Operation is amended to read as follows:

3.10.1 Operation. Operation of the lift from the landings and from the platform shall be controlled by "UP" and "DOWN" control switches at all stations, and shall be by means of the continuous pressure type. Control switches shall be two inches (50 mm) minimum wide and four inches (100 mm) minimum high. Controls shall be 48 inches (1220 mm) maximum and 15 inches (380 mm) minimum above the platform floor or facility floor or ground level. Operation devices shall be designed so that both the "UP" and "DOWN" circuits cannot be operated at the same time.

Subp. 8. **ASME A18.1–2005 Section 3.11 Emergency signals.**

A. ASME A18.1–2005 Section 3.11 Emergency signals is amended to read as follows:

3.11 Emergency signals. If the lift is installed in an area not visible or audible to persons at all times, or installed in an enclosed runway, emergency signaling devices shall be provided in accordance with the requirements of paragraphs 3.11.1 and 3.11.2.

B. ASME A18.1–2005 3.11.2 is amended to read as follows:

ASME 3.11.2. The lift shall be provided with a means of two–way communication complying with ASME A17.1–2004.

Subp. 9. **ASME A18.1–2005 Section 3.12 Standby power.** ASME A18.1–2005 Section 3.12 Standby power is amended to read as follows:

3.12 Standby power. Inclined lifts equipped with standby power shall comply with this chapter.

3.12.1 Standby power. Except where permitted by paragraph 3.12.1.1, the inclined lift shall be powered by a standby power system from the building.

3.12.1.1 Battery power. A lift equipped with rechargeable battery power capable of cycling the lift under full load for five cycles minimum after building power is removed shall be permitted.

3.12.1.2 Battery power, rated number of cycles. Except where permitted by paragraph 3.12.1.3, where a lift provided with battery power serves an area with more wheelchair users than the rated number of cycles provided by battery power, or where the authority having jurisdiction determines that the anticipated number of wheelchair users is greater than the rated number of cycles provided by battery power, the lift shall be powered by a standby power system from the building.

3.12.1.3 Existing buildings without standby power. Where an existing building is not required to provide a building standby power system, the installation of a lift shall not require the installation of a building standby power system. A battery standby power system complying with 3.12.1.1 shall be provided.

3.12.1.4 Auxiliary items. Auxiliary items necessary for lift operation such as power doors and runway lighting shall remain operational under standby power.

Subp. 10. **ASME A18.1–2005 6.1.2 Clearances.** ASME A18.1–2005 6.1.2 Clearances is amended to read as follows:

6.1.2 Clearances. Clearances between the platform and adjacent surfaces shall not be less than .75 inches (29 mm). At no point in its travel shall the edge of the platform facing the upper landing be more than 24 inches (610 mm) above a step or landing as measured vertically. Headroom clearance measured vertically from any position on the platform floor shall be 54 inches (1370 mm) minimum throughout the travel of the platform or alternate methods, approved by the authority having jurisdiction, shall be provided, which will stop the movement of the platform in the direction of travel should the clearance be reduced.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748*

History: *31 SR 935*