

1.1 **Department of Labor and Industry**

1.2 **Proposed Permanent Rules Relating to Elevators and Related Devices**

1.3 **1307.0010 PURPOSE AND SCOPE.**

1.4 The provisions of parts 1307.0010 to 1307.0110 are to safeguard life, limb, property,
1.5 and public welfare by establishing minimum requirements relating to the design,
1.6 construction, installation, alteration, repair, removal, and operation and maintenance of
1.7 passenger elevators, freight elevators, handpowered elevators, dumbwaiters, escalators,
1.8 moving walks, vertical reciprocating conveyors, stage and orchestra lifts, endless belt
1.9 lifts, wheelchair lifts, and other related devices. The requirements for the enforcement
1.10 of these provisions are established by this chapter, and by municipal option, according
1.11 to Minnesota Statutes, section 326B.184, subdivision ~~3~~ 4.

1.12 **1307.0020 CODES ADOPTED BY REFERENCE.**

1.13 Subpart 1. **Incorporation by reference.** The following are incorporated by
1.14 reference, are not subject to frequent change, and are made part of the Minnesota State
1.15 Building Code as amended in this chapter: Chapter 30 of the ~~2006~~ 2012 International
1.16 Building Code, published by the International Codes Council, ~~5203 Leesburg Pike, Suite~~
1.17 ~~600, Falls Church, VA 22041; Inc., Washington, D.C., copyright 2012, portions reproduced~~
1.18 ~~with permission, all rights reserved; ASME A17.1-2004 with 2005 A17.1A Addenda and~~
1.19 ~~the Supplement ASME A17.1S-2005~~ A17.1/CSA B44-2010 Safety Code for Elevators
1.20 and Escalators; ASME ~~A17.3-2002~~ A17.3-2011 Safety Code for Existing Elevators and
1.21 Escalators; ASME ~~A17.5-2004~~ A17.5-2011 Elevator and Escalator Electrical Equipment;
1.22 ASME ~~A18.1-2005~~ A18.1-2011 Safety Standard for Platform Lifts and Stairway Chairlifts;
1.23 ASME ~~A90.1-2003~~ A90.1-2009 Safety Standard for Belt Manlifts; ASME ~~B20.1-2003~~
1.24 B20.1-2009 Safety Standard for Conveyors and Related Equipment as published by the
1.25 American Society of Mechanical Engineers, United Engineering Center, 345 East 47th
1.26 Street, New York, New York 10017. These documents are available in the office of the

2.1 commissioner of labor and industry. Portions of this chapter reproduce text and tables
2.2 from Chapter 30 of the 2006 International Building Code. The International Building
2.3 Code is copyright 2006 by the International Code Council, Inc. All rights reserved.

2.4 [For text of subs 2 and 3, see M.R.]

2.5 **1307.0027 DEFINITIONS.**

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

2.7 Subp. 1a. **Approved.** "Approved" means approval by the building official, pursuant
2.8 to the Minnesota State Building Code, by reason of:

2.9 A. inspection, investigation, or testing;

2.10 B. accepted principles;

2.11 C. computer simulations;

2.12 D. research reports; or

2.13 E. testing performed by either a licensed engineer or by a locally or nationally
2.14 recognized testing laboratory.

2.15 Subp. 2. ~~ASME A17.1-2004~~ A17.1/CSA B44-2010. "ASME A17.1-2004
2.16 A17.1/CSA B44-2010" means the ASME A17.1-2004 with 2005 A17.1A Addenda and
2.17 the Supplement ASME A17.1S-2005 A17.1/CSA B44-2010, Safety Code for Elevators
2.18 and Escalators.

2.19 Subp. 3. ~~ASME A17.3-2002~~ A17.3-2011. "ASME A17.3-2002 A17.3-2011" means
2.20 the ASME A17.3-2002 A17.3-2011 Safety Code for Existing Elevators and Escalators
2.21 (and related equipment).

2.22 Subp. 4. ~~ASME A17.5-2004~~ A17.5-2011. "ASME A17.5-2004 A17.5-2011" means
2.23 the ASME A17.5-2004 A17.5-2011 Elevators and Escalators Electrical Equipment.

3.1 Subp. 5. ~~ASME A18.1-2005~~ A18.1-2011. "ASME ~~A18.1-2005~~ A18.1-2011" means
3.2 the ASME ~~A18.1-2005~~ A18.1-2011 Safety Standard for Platform Lifts and Stairway
3.3 Chairlifts.

3.4 Subp. 6. ~~ASME A90.1-2003~~ A90.1-2009. "ASME ~~A90.1-2003~~ A90.1-2009" means
3.5 the ASME ~~A90.1-2003~~ A90.1-2009 Safety Standard for Belt Manlifts.

3.6 Subp. 7. ~~ASME B20.1-2003~~ B20.1-2009. "ASME ~~B20.1-2003~~ B20.1-2009" means
3.7 the ASME ~~B20.1-2003~~ B20.1-2009 Safety Standard for Conveyors and Related Equipment.

3.8 [For text of subps 8 to 11, see M.R.]

3.9 Subp. 12. **Dormant elevator, dormant dumbwaiter, or dormant escalator.**
3.10 "Dormant elevator," "dormant dumbwaiter," or "dormant escalator" means an installation
3.11 placed out of service as specified in ASME ~~A17.1-2004~~ A17.1/CSA B44-2010, 8.11.1.4.

3.12 Subp. 13. **Endless belt lift.** "Endless belt lift" means belt manlifts and is governed
3.13 by ASME ~~A90.1-2003~~ A90.1-2009 Safety Standard for Belt Manlifts.

3.14 Subp. 14. **Existing installation.** "Existing installation" means ~~one for which~~ that,
3.15 before ~~January 29, 2007~~ the effective date of this code:

3.16 [For text of items A and B, see M.R.]

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

3.21 [For text of subps 16 and 17, see M.R.]

3.22 Subp. 18. **Vertical reciprocating conveyor.** "Vertical reciprocating conveyor"
3.23 means a vertical device for moving material only that is not designed to carry passengers
3.24 or an operator, and that is governed by ASME ~~B20.1-2003~~ B20.1-2009, Safety Standard
3.25 for Conveyors and Related Equipment.

4.1 **1307.0030 PERMITS.**

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

4.10 Permits for repairs are required by the Department of Labor and Industry for the
4.11 following ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 sections: 8.6.2.3 repair of speed
4.12 governors; 8.6.2.4 repair of releasing carrier; ~~8.6.3.3.2~~ 8.6.3.3 rope fastenings and hitch
4.13 plates; 8.6.3.4 replacement of governor rope; 8.6.3.6 replacement of speed governor;
4.14 ~~8.6.3.10~~ 8.6.3.9 replacement of releasing carrier; and ~~8.6.3.9~~ 8.6.3.10 replacement of
4.15 hydraulic jack plunger; cylinder, tanks, valve, and anticreep leveling device.

4.16 [For text of subps 2 and 3, see M.R.]

4.17 Subp. 4. **Certificate of operation required.** It is unlawful to operate equipment
4.18 governed by ASME ~~A17.1-2004~~ A17.1/CSA B44-2010, ASME ~~A17.3-2002~~ A17.3-2011,
4.19 and ASME ~~A90.1-2003~~ A90.1-2009 without a current Certificate of Operation issued by
4.20 the authority having jurisdiction. The certificate will be issued upon payment of prescribed
4.21 fees and the presentation of a valid inspection report indicating that the conveyance is safe
4.22 and that the inspections and tests have been performed according to this code. A certificate
4.23 will not be issued when the conveyance is posted as unsafe.

4.24 Subp. 5. **Application for certificate of operation.** Application for a certificate of
4.25 operation ~~must~~ shall be made by the owner, or an authorized representative, for equipment
4.26 governed by ASME ~~A17.1-2004~~ A17.1/CSA B44-2010, ASME ~~A17.3-2002~~ A17.3-2011,

5.1 and ASME ~~A90.1-2003~~ A90.1-2009. The application ~~must~~ shall be accompanied by an
5.2 inspection report. Fees for the Certificate of Operation ~~must~~ shall be as specified by the
5.3 administrative authority.

5.4 **1307.0035 INSPECTION, TESTS, AND APPROVALS.**

5.5 Subpart 1. **Approval of plans.** Any person, firm, or corporation desiring to install,
5.6 relocate, alter, or remove any installation covered by this chapter ~~must~~ shall obtain
5.7 approval for doing so from the authority having jurisdiction. Two sets of drawings and/or
5.8 specifications, or PDF files containing the same information if submitted electronically,
5.9 showing the installation, relocation, alteration, or removal ~~must~~ shall be submitted as
5.10 required by the authority having jurisdiction. A corporation desiring to install, relocate,
5.11 alter, or remove any installation covered by this chapter ~~must~~ shall obtain approval for
5.12 doing so from the authority having jurisdiction. Two sets of drawings and/or specifications
5.13 showing the installation, relocation, alteration, or removal ~~must~~ shall be submitted as
5.14 required by the authority having jurisdiction.

5.15 [For text of subp 2, see M.R.]

5.16 Subp. 3. **Approval.** A certificate or letter of approval ~~must~~ shall be issued by the
5.17 authority having jurisdiction for equipment governed by ASME ~~A17.1-2004~~ A17.1/CSA
5.18 B44-2010, ASME ~~A17.3-2002~~ A17.3-2011, ASME ~~A90.1-2003~~ A90.1-2009, and ASME
5.19 ~~B20.1-2003~~ B20.1-2009 when the entire installation is completed in conformity with
5.20 this code.

5.21 [For text of subp 4, see M.R.]

5.22 **1307.0047 SPECIAL PROVISIONS.**

5.23 Subpart 1. **Scope.** The special provisions in this part apply to the design,
5.24 construction, and installation of equipment governed by ASME ~~A17.1-2004~~ A17.1/CSA
5.25 B44-2010 and ASME ~~A17.3-2002~~ A17.3-2011.

6.1 Subp. 2. **Chairlifts.** Inclined stairway chairlifts shall only be installed within a
6.2 private residence or as approved in accordance with Minnesota Statutes, section 471.471.
6.3 The installation shall be in accordance with ASME ~~A18.1-2005~~ A18.1-2011.

6.4 [For text of subp 3, see M.R.]

6.5 Subp. 4. **Rooftop elevators.** Passenger and freight elevators are permitted at
6.6 rooftops when conditioned space or rooftop elevators meeting ASME ~~A17.1-2004~~
6.7 A17.1/CSA B44-2010 5.6 are provided.

6.8 [For text of subps 5 to 7, see M.R.]

6.9 Subp. 8. **All work required for compliance with ASME ~~A17.1-2004~~ A17.1/CSA**
6.10 **B44-2010 8.6.5.8 Safety Bulkhead.** All work required for compliance with ASME
6.11 ~~A17.1-2004~~ A17.1/CSA B44-2010 8.6.5.8 ~~must~~ shall be completed within 60 months of
6.12 January 29, 2007. Failure to complete the work within the required time period will result
6.13 in the elevator being removed from service until such work has been completed.

6.14 Starting 12 months after January 29, 2007, until the elevator complies with ASME
6.15 ~~A17.1-2004~~ A17.1/CSA B44-2010 8.6.5.8, the owner or owner's agent ~~must~~ shall annually
6.16 submit a notarized statement that an oil usage log is being properly utilized by the owner
6.17 or owner's agent or elevator maintenance company and that the elevator has successfully
6.18 passed the annual tests required by ASME ~~A17.1-2004~~ ~~8.11.3.2.1~~ A17.1/CSA B44-2010
6.19 8.6.5.14.1 and ~~8.11.3.2.2~~ 8.6.5.14.2. A copy of the test report shall be included with
6.20 the statement.

6.21 Subp. 9. **All work required for compliance with ASME ~~A17.1-2004~~ A17.1/CSA**
6.22 **B44-2010 8.6.5.8 Bulkhead Material Transfer Device.** Elevators shall not be converted
6.23 to a material transfer device (vertical reciprocating conveyor) without meeting the
6.24 requirements of ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.6.5.8, Safety Bulkhead. A
6.25 material transfer device shall comply with ASME ~~B20.1-2003~~ B20.1-2009.

7.1 Subp. 10. **All work required for compliance with ASME ~~A17.3-2002 2.7.4~~**
7.2 **A17.3-2011 2.7.5 Restricted Opening of Hoistway Doors and Car Doors on Passenger**
7.3 **Elevators.** All work required for compliance with ASME ~~A17.3-2002 2.7.4~~ must
7.4 A17.3-2011 2.7.5 shall be completed within 60 months of January 29, 2007. Failure
7.5 to complete the work within the required time period will result in the elevator being
7.6 removed from service until such work has been completed.

7.7 Subp. 11. **All work required for compliance with ASME ~~A17.3-2002~~ A17.3-2011**
7.8 **3.11.3 Firefighter's Service.** All work required for compliance with ASME ~~A17.3-2002~~
7.9 A17.3-2011 3.11.3 ~~must~~ shall be completed within 60 months of January 29, 2007. Failure
7.10 to complete the work within the required time period will result in the elevator being
7.11 removed from service until such work has been completed.

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

7.19 Subp. 12. **All work required for compliance with ASME ~~A17.3-2002~~ A17.3-2011**
7.20 **4.3.3 Hydraulic Elevators.** All work required for compliance with ASME ~~A17.3-2002~~
7.21 A17.3-2011 4.3.3 ~~must~~ shall be completed within 60 months of January 29, 2007. Failure
7.22 to complete the work within the required time period will result in the elevator being
7.23 removed from service until such work has been completed.

7.24 Starting 12 months after January 29, 2007, until the elevator complies with ASME
7.25 ~~A17.3-2002~~ A17.3-2011 4.3.3, the owner or owner's agent ~~must~~ shall submit annually on a
7.26 notarized statement that an oil usage log is being properly utilized by the owner or owner's
7.27 agent or elevator maintenance company and that the elevator has successfully passed

8.1 annual tests required by ASME ~~A17.1-2004 8.11.3.2.1~~ A17.1/CSA B44-2010 8.6.5.14.1
8.2 and ~~8.11.3.2.2~~ 8.6.5.14.2. A copy of the test report shall be included with the statement.

8.3 Subp. 13. ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.10.4.1.1(p)(5) **Clearance**
8.4 **between step and skirt (load gap) and ASME ~~A17.1-2004~~ A17.1/CSA B44-2010.**
8.5 **8.10.4.1.1(t) step/skirt index.** Where an existing escalator or moving walk requires
8.6 alteration to comply with ASME ~~A17.1-2004 6.1.3.3.7~~ A17.1/CSA B44-2010 6.1.3.3.9
8.7 and ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.6.8.3, all work ~~must~~ shall be completed
8.8 within 36 months of January 29, 2007. This 36-month period to achieve compliance only
8.9 applies to those escalators that fail to meet the test requirements of the referenced rule.
8.10 Failure to complete the required work within the applicable time period will result in the
8.11 escalators being removed from service until such work has been completed.

8.12 Subp. 14. ASME ~~A17.3-2002~~ A17.3-2011 5.1.11 **Step/skirt performance index.**
8.13 Where an existing escalator requires alteration to comply with ASME ~~A17.3-2002~~
8.14 A17.3-2011 5.1.11, all work ~~must~~ shall be completed within 36 months of January 29,
8.15 2007. This 36-month period to achieve compliance only applies to those escalators that
8.16 fail to meet the test requirements of the referenced rule. Failure to complete the required
8.17 work within the applicable time period will result in the escalators being removed from
8.18 service until such work has been completed.

8.19 Subp. 15. ASME ~~A17.3-2002~~ A17.3-2011 2.2.4 **Temperature control.** Machine
8.20 rooms shall be provided with natural or mechanical means to avoid overheating of the
8.21 electrical equipment and to ensure safe and normal operation of the elevator.

8.22 Subp. 16. **Newly constructed parking ramps or new construction in an existing**
8.23 **parking ramp.** ~~Elevators installed in newly constructed parking ramps or new construction~~
8.24 ~~in an existing parking ramp shall be installed so safe operating temperature for people and~~
8.25 ~~elevator equipment is maintained.~~ Newly constructed and altered elevator hoistways in
8.26 parking ramps shall maintain a conditioned temperature between 50 and 90 degrees F.

9.1 **1307.0067 AMENDMENTS TO ASME ~~A17.1-2004~~ A17.1/CSA B44-2010.**

9.2 Subpart 1. ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.2.2.4. ASME ~~A17.1-2004~~
9.3 A17.1/CSA B44-2010 2.2.2.4 is amended by adding a paragraph to read as follows:

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

9.8 Subp. 2. ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.5.1.1 **Between car and**
9.9 **hoistway enclosures.** ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.5.1.1 is amended
9.10 to read as follows:

9.11 **2.5.1.1. Between car and hoistway enclosures.** The clearance between the car and the
9.12 hoistway enclosures shall not be less than 0.8 inches (20 mm), except on the sides used for
9.13 loading and unloading. The distance between the car and the hydraulic piping, hydraulic
9.14 fittings, electrical piping, electrical boxes, steam or hot water piping where permitted,
9.15 sprinkler piping, where permitted, or any other item not by elevator design shall not
9.16 be less than 0.8 inches (20 mm).

9.17 Subp. 3. ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.7.3.1 **General requirements.**
9.18 ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.7.3.1 is amended by adding a sentence at the
9.19 ~~end of the section as follows~~ the following:

9.20 2.7.3.1.3 Access to elevator equipment space as referenced in 2.7.3.1.1 and 2.7.3.1.2
9.21 shall not be through any toilet room.

9.22 Subp. 4. ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.7.4.1. ASME ~~A17.1-2004~~
9.23 A17.1/CSA B44-2010 2.7.4.1 is amended by adding a sentence to the end of the section
9.24 as follows:

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

10.1 Subp. 5. ~~ASME A17.1-2004~~ A17.1/CSA B44-2010 2.12.6.2.5. ASME A17.1-2004
10.2 A17.1/CSA B44-2010 2.12.6.2.5 is amended to read as follows:

10.3 The unlocking-device keyway and locked panel (see ASME ~~A17.1-2004~~ A17.1/CSA
10.4 B44-2010 2.12.6.2.3) if provided, shall be located at a height not greater than 83 inches
10.5 (2100 mm) above the landing and all keyways, with the exception of the keyway at
10.6 the bottom landing and all private residence elevator keyways, shall have keyed plugs
10.7 installed with the key for those plugs kept in the key box as defined in subpart 9.

10.8 Subp. 6. ~~ASME A17.1-2004~~ A17.1/CSA B44-2010 2.12.7.1. ASME A17.1-2004
10.9 A17.1/CSA B44-2010 2.12.7.1 is amended to read as follows:

10.10 **2.12.7.1.1** Hoistway access switches shall be provided when the rate of speed is greater
10.11 than 30 ft./min. at:

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

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

10.15 Subp. 7. ~~ASME A17.1-2004~~ A17.1/CSA B44-2010 2.12.7.1.2. ASME A17.1-2004
10.16 A17.1/CSA B44-2010 2.12.7.1.2 is deleted in its entirety.

10.17 Subp. 8. ~~ASME A17.1-2004~~ A17.1/CSA B44-2010 2.14.7.1.4. ASME A17.1-2004
10.18 A17.1/CSA B44-2010 2.14.7.1.4 is amended to read as follows:

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

10.22 Subp. 9. ~~ASME A17.1-2004~~ A17.1/CSA B44-2010 2.27 **Emergency operation and**
10.23 **signaling devices**. ASME A17.1-2004 A17.1/CSA B44-2010 2.27 is amended by adding
10.24 the following language at the beginning of section 2.27.8:

10.25 **2.27.8 Switch keys**. The key switches required by ASME ~~A17.1-2004~~ A17.1/CSA
10.26 B44-2010 2.27.2 through to 2.27.5 for elevators in a building shall be operable by the

11.1 same key. The keys shall be a Group 3 Security (see section 8.1). There shall be a key for
11.2 each switch provided. Keys shall be painted or marked red.

11.3 These keys shall be kept on premises, in a key box labeled "Fire Dept" approved by
11.4 the authority having jurisdiction. The key box shall be located in the elevator lobby, on the
11.5 main egress floor or in the fire command room. When there is not a fire command room and
11.6 site conditions prohibit installation at the elevator lobby, the authority having jurisdiction
11.7 shall specify the location of the Fire Dept key box. Keys for emergency access doors
11.8 (2.11.1.2) and hoistway door unlocking device (2.12.6.2.4) of Group 1 shall be accessible
11.9 to emergency personnel and a set shall be included in the elevator emergency key box.

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

11.15 Subp. 10. ~~ASME A17.1-2004~~ ASME A17.1/CSA B44-2010 2.27.1.1.3(a). ASME
11.16 ~~A17.1-2004~~ A17.1/CSA B44-2010 2.27.1.1.3(a) is deleted in its entirety.

11.17 Subp. 11. ~~ASME A17.1-2004~~ ASME A17.1/CSA B44-2010 3.28.1 **Information included**
11.18 **on layout drawing.** ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 3.28.1 is amended by
11.19 adding the following subitem:

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

11.22 Subp. 12. ~~ASME A17.1-2004~~ ASME A17.1/CSA B44-2010 4.3.15 **Car safeties.** ASME
11.23 ~~A17.1-2004~~ A17.1/CSA B44-2010 4.3.15 is amended by adding a sentence to read
11.24 as follows:

11.25 All hand-powered elevators ~~must~~ shall be equipped with a broken rope safety device.

12.1 Subp. 13. **ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 7.2.4.6 Application of**
 12.2 **safeties.** ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 7.2.4.6 is amended by adding a
 12.3 sentence at the end of the section as follows:

12.4 All hand-powered dumbwaiters ~~must~~ shall be equipped with a broken rope safety
 12.5 device.

12.6 Subp. 14. **ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.10.1.1.3.** ASME ~~A17.1-2004~~
 12.7 A17.1/CSA B44-2010 8.10.1.1.3 is deleted and replaced with the following:

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

12.11 Inspectors shall have proof of successful completion of the National Elevator Industry
 12.12 Education program examination, equivalent program, or equivalent experience. Within
 12.13 18 months of the employment start date, any person performing inspections ~~hired after~~
 12.14 ~~January 29, 2007,~~ shall be certified by an ASME accredited organization as a qualified
 12.15 elevator inspector (QEI) ~~within 18 months of the employment start date.~~ shall be certified
 12.16 to the ASME QEI-1 standard as a qualified elevator inspector (QEI) by an organization
 12.17 recognized by the commissioner. Upon initial certification, persons performing inspections
 12.18 shall maintain the QEI certification.

12.19 Subp. 15. **ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.11.1.3 Periodic inspection**
 12.20 **and test frequency.** ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.11.1.3 Periodic
 12.21 inspection and test frequency. The frequency as established by the authority having
 12.22 jurisdiction shall be as stated in the Minnesota Table N-1.

12.23 MINNESOTA TABLE N-1

12.24 INSPECTION AND TEST INTERVALS IN "MONTHS"

12.25		Periodic Tests
12.26	Periodic Inspections	Category 1

	Reference Section	Equipment Type	Requirement	Interval	Requirement	Interval
13.1	8.11.2	Electric elevators			8.11.2.2	
13.2			8.11.2.1	12	<u>8.6.4.19</u>	12
13.3	8.11.3	Hydraulic elevators			8.11.3.2	
13.4			8.11.3.1	12	<u>8.6.5.14</u>	12
13.5	8.11.4	Escalators & moving walks			8.11.4.2	
13.6			8.11.4.1	12	<u>8.6.8.15</u>	12
13.7	8.11.5.1	Sidewalk elevators			8.11.2.2,	
13.8					8.11.3.2	
13.9			8.11.2.1,		<u>8.6.4.19,</u>	
13.10			8.11.3.1	12	<u>8.6.5.14</u>	12
13.11	8.11.5.3	Hand elevators			8.11.2.2	
13.12			8.11.2.1	12	<u>8.6.4.19</u>	12
13.13	8.11.5.4	Dumbwaiters			8.11.2.2,	
13.14					8.11.3.2	
13.15			8.11.2.1,		<u>8.6.4.19,</u>	
13.16			8.11.3.1	12	<u>8.6.5.14</u>	12
13.17	8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices			8.11.2.2,	
13.18					8.11.3.2	
13.19			8.11.2.1,		<u>8.6.4.19,</u>	
13.20			8.11.3.1	12	<u>8.6.5.14</u>	12
13.21	8.11.5.6	Special purpose personal <u>personnel</u> elevators			8.11.2.2,	
13.22					8.11.3.2	
13.23			8.11.2.1,		<u>8.6.4.19,</u>	
13.24			8.11.3.1	12	<u>8.6.5.14</u>	12
13.25	8.11.5.7	Inclined elevators			8.11.2.2,	
13.26					8.11.3.2	
13.27			8.11.2.1,		<u>8.6.4.19,</u>	
13.28			8.11.3.1	12	<u>8.6.5.14</u>	12
13.29	8.11.5.8	Shipboard elevators			8.11.2.2,	
13.30					8.11.3.2	
13.31			8.11.2.1,		<u>8.6.4.19,</u>	
13.32			8.11.3.1	12	<u>8.6.5.14</u>	12
13.33						
13.34						

14.1	8.11.5.9	Screw-column elevators			8.11.2.2,	
14.2					8.11.3.2	
14.3			8.11.2.1,		<u>8.6.4.19,</u>	
14.4			8.11.3.1	12	<u>8.6.5.14</u>	12
14.5	8.11.5.10	Rooftop elevators			8.11.2.2,	
14.6					8.11.3.2	
14.7			8.11.2.1,		<u>8.6.4.19,</u>	
14.8			8.11.3.1	12	<u>8.6.5.14</u>	12
14.9	8.11.5.12	Limited			8.11.2.2,	
14.10		use/limited-application			8.11.3.2	
14.11		elevators	8.11.2.1,		<u>8.6.4.19,</u>	
14.12			8.11.3.1	12	<u>8.6.5.14</u>	12
14.13	8.11.5.13	Elevators used for construction			8.11.2.2,	
14.14					8.11.3.2	
14.15			8.11.2.1,		<u>8.6.4.19,</u>	
14.16			8.11.3.1	3	<u>8.6.5.14</u>	12
14.17					Periodic Tests	
14.18					Periodic Inspections	Category 3
14.19	Reference	Equipment Type	Require-	Interval	Require-	Interval
14.20	Section		ment		ment	
14.21	8.11.2	Electric elevators	8.11.2.1	12	N/A	N/A
14.22	8.11.3	Hydraulic elevators			8.11.3.3	
14.23			8.11.3.1	12	<u>8.6.5.15</u>	60
14.24	8.11.4	Escalators & moving walks	8.11.4.1	12	N/A	N/A
14.25	8.11.5.1	Sidewalk elevators	8.11.2.1,		8.11.3.3	
14.26			8.11.3.1	12	<u>8.6.5.15</u>	60
14.27	8.11.5.3	Hand elevators	8.11.2.1	12	N/A	N/A
14.28	8.11.5.4	Dumbwaiters	<u>8.11.2.1,</u>		8.11.3.3	
14.29			8.11.3.1	12	<u>8.6.5.15</u>	60
14.30	8.11.5.5	Material lifts & dumbwaiters	8.11.2.1,		8.11.3.3	
14.31		w/automatic transfer devices	8.11.3.1	12	<u>8.6.5.15</u>	60
14.32	8.11.5.6	Special purpose personal	8.11.2.1,		8.11.3.3	
14.33		<u>personnel</u> elevators	8.11.3.1	12	<u>8.6.5.15</u>	60
14.34	8.11.5.7	Inclined elevators	8.11.2.1,		8.11.3.3	
14.35			8.11.3.1	12	<u>8.6.5.15</u>	60

15.1	8.11.5.8	Shipboard elevators	8.11.2.1,		8.11.3.3	
15.2			8.11.3.1	12	<u>8.6.5.15</u>	60
15.3	8.11.5.9	Screw-column elevators	8.11.2.1,		8.11.3.3	
15.4			8.11.3.1	12	<u>8.6.5.15</u>	60
15.5	8.11.5.10	Rooftop elevators	8.11.2.1,		8.11.3.3	
15.6			8.11.3.1	12	<u>8.6.5.15</u>	60
15.7	8.11.5.12	Limited				
15.8		use/limited-application	8.11.2.1,		8.11.3.3	
15.9		elevators	8.11.3.1	12	<u>8.6.5.15</u>	60
15.10	8.11.5.13	Elevators used for construction	8.11.2.1,		8.11.3.3	
15.11			8.11.3.1	3	<u>8.6.5.15</u>	60
15.12						Periodic Tests
15.13			Periodic Inspections			Category 5
15.14	Reference	Equipment Type	Require-	Interval	Require-	Interval
15.15	Section		ment		ment	
15.16	8.11.2	Electric elevators			8.11.2.3	
15.17			8.11.2.1	12	<u>8.6.4.20</u>	60
15.18	8.11.3	Hydraulic elevators			8.11.3.4	
15.19			8.11.3.1	12	<u>8.6.5.16</u>	60
15.20	8.11.4	Escalators & moving walks	8.11.4.1	12	N/A	N/A
15.21	8.11.5.1	Sidewalk elevators			8.11.2.3,	
15.22					8.11.3.4	
15.23			8.11.2.1,		<u>8.6.4.20,</u>	
15.24			8.11.3.1	12	<u>8.6.5.16</u>	60
15.25	8.11.5.3	Hand elevators			8.11.2.3,	
15.26					8.11.3.4	
15.27					<u>8.6.4.20,</u>	
15.28			8.11.2.1	12	<u>8.6.5.16</u>	60
15.29	8.11.5.4	Dumbwaiters			8.11.2.3,	
15.30					8.11.3.4	
15.31			8.11.2.1,		<u>8.6.4.20,</u>	
15.32			8.11.3.1	12	<u>8.6.5.16</u>	60

16.1	8.11.5.5	Material lifts & dumbwaiters			8.11.2.3,	
16.2		w/automatic transfer devices			8.11.3.4	
16.3			8.11.2.1,		<u>8.6.4.20,</u>	
16.4			8.11.3.1	12	<u>8.6.5.16</u>	60
16.5	8.11.5.6	Special purpose personal			8.11.2.3,	
16.6		<u>personnel</u> elevators			8.11.3.4	
16.7			8.11.2.1,		<u>8.6.4.20,</u>	
16.8			8.11.3.1	12	<u>8.6.5.16</u>	60
16.9	8.11.5.7	Inclined elevators			8.11.2.3,	
16.10					8.11.3.4	
16.11			8.11.2.1,		<u>8.6.4.20,</u>	
16.12			8.11.3.1	12	<u>8.6.5.16</u>	60
16.13	8.11.5.8	Shipboard elevators			8.11.2.3,	
16.14					8.11.3.4	
16.15			8.11.2.1,		<u>8.6.4.20,</u>	
16.16			8.11.3.1	12	<u>8.6.5.16</u>	60
16.17	8.11.5.9	Screw-column elevators			8.11.2.3,	
16.18					8.11.3.4	
16.19			8.11.2.1,		<u>8.6.4.20,</u>	
16.20			8.11.3.1	12	<u>8.6.5.16</u>	60
16.21	8.11.5.10	Rooftop elevators			8.11.2.3,	
16.22					8.11.3.4	
16.23			8.11.2.1,		<u>8.6.4.20,</u>	
16.24			8.11.3.1	12	<u>8.6.5.16</u>	60
16.25	8.11.5.12	Limited			8.11.2.3,	
16.26		use/limited-application			8.11.3.4	
16.27		elevators	8.11.2.1,		<u>8.6.4.20,</u>	
16.28			8.11.3.1	12	<u>8.6.5.16</u>	60
16.29	8.11.5.13	Elevators used for construction			8.11.2.3,	
16.30					8.11.3.4	
16.31			8.11.2.1,		<u>8.6.4.20,</u>	
16.32			8.11.3.1	3	<u>8.6.5.16</u>	60

16.33 GENERAL NOTE: The intervals in this table shall be for periodic tests and inspections.

16.34 Factors such as the environment, frequency and type of usage, quality of maintenance,

17.1 etc., related to the equipment should be taken into account by the authority having
17.2 jurisdiction prior to establishing more frequent inspection and test intervals.

17.3 **1307.0090 EXISTING INSTALLATIONS.**

17.4 Subpart 1. [Repealed, 31 SR 935]

17.5 Subp. 2. **Conditions for continued operation.** All existing installations of
17.6 equipment governed by ASME ~~A17.1-2004~~ A17.1/CSA B44-2010, ASME ~~A17.3-2002~~
17.7 A17.3-2011, and ASME ~~A90.1-2003~~ A90.1-2009 may be continued in service as long as
17.8 they are properly maintained and are, in the opinion of the authority having jurisdiction,
17.9 installed and maintained in a safe condition. The authority having jurisdiction shall order
17.10 the installation of the following basic safety devices: automatic noncontact door reopening
17.11 devices; top of car, under car lights, and pit lights, with ground fault interrupter outlets; pit
17.12 ladder; emergency door unlocking device; and emergency lock box complying with part
17.13 1307.0067, subpart 9. All hand-powered elevators and hand-powered dumbwaiters ~~must~~
17.14 shall be equipped with a broken rope safety device. Elevator machine room lighting ~~must~~
17.15 shall meet the requirements of ASME ~~A17.1-2004 2.7.5.1~~ A17.1/CSA B44-2010 2.7.9.1
17.16 to provide 19 footcandles of illumination at the floor level. The installation of these safety
17.17 devices does not require compliance with ASME ~~A17.1-2004~~ A17.1/CSA B44-2010.

17.18 [For text of subps 3 to 5, see M.R.]

17.19 Subp. 6. **Other requirements.** Existing installations covered by subpart 2 ~~must~~ shall
17.20 conform to the requirements of: ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 Part 1, and 5.10,
17.21 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.
17.22 Alterations ~~must~~ shall conform to the requirements of ASME ~~A17.1-2004~~ A17.1/CSA
17.23 B44-2010, Part ~~8.6~~ 8.7, or ASME ~~A17.3-2002~~ A17.3-2011, whichever is more restrictive.

17.24 [For text of subp 7, see M.R.]

18.1 Subp. 8. **Removal of existing elevators, dumbwaiters, escalators and moving**
18.2 **walks.**

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

18.8 [For text of item B, see M.R.]

18.9 C. **Dumbwaiters.** Prior to new installation, elevator personnel shall remove
18.10 all dumbwaiter-related equipment that will not be reused on the new installation. If
18.11 removal of the equipment is part of building demolition or the hoistway is not reused for
18.12 dumbwaiter equipment, elevator personnel shall remove the equipment from service by
18.13 safely landing the dumbwaiter and counterweights at the lowest landing.

18.14 D. **Escalators and moving walks.** Prior to a new installation, elevator
18.15 personnel shall remove all escalator or moving walk-related equipment that will not be
18.16 reused on the new installation. If removal of the equipment is part of building demolition,
18.17 elevator personnel shall remove the unit from service by safely removing power and
18.18 permanently securing the steps and drive chains to prevent unintentional motion of the
18.19 escalator or moving walk.

18.20 ~~E.~~ **Dormant elevator, dormant dumbwaiter, or dormant escalator.** A
18.21 dormant elevator, dormant dumbwaiter, or dormant escalator shall be placed out of service
18.22 in accordance with ASME A17.1-2004 A17.1/CSA B44-2010 8.11.1.4.

18.23 ~~F.~~ **Temporarily dormant elevator, temporarily dormant dumbwaiter, or**
18.24 **temporarily dormant escalator.** A temporarily dormant elevator, temporarily dormant
18.25 dumbwaiter, or temporarily dormant escalator shall have its power disconnected by
18.26 removing fuses, where applicable, and placing a seal on the mainline disconnect switch

19.1 in the "OFF" position. The car shall be parked and the hoistway doors left in the closed
19.2 and latched position. A wire seal and notification shall be installed on the mainline
19.3 disconnect switch by an authority having jurisdiction. This installation shall not be used
19.4 until it has been put in safe running order and is in condition for use. Annual inspections
19.5 shall continue for the duration of the temporarily dormant status by an authority having
19.6 jurisdiction. The temporarily dormant status shall be reviewed on an annual basis, and
19.7 shall not exceed a three-year period. The inspector shall file a report with the supervising
19.8 authority having jurisdiction describing the current conditions. The wire seal and
19.9 notification shall not be removed for any purpose without permission from the authority
19.10 having jurisdiction. When the elevator, dumbwaiter, or escalator has exceeded the
19.11 three-year temporarily dormant status, the unit shall be placed out of service according to
19.12 ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 8.11.1.4.

19.13 **1307.0095 CHAPTER 30 OF THE INTERNATIONAL BUILDING CODE;**
19.14 **ELEVATORS AND CONVEYING SYSTEMS.**

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

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

19.19 B. **3001.2 Referenced standards.** Except as otherwise provided by applicable
19.20 law, the design, construction, installation, alteration, repair, and maintenance of elevators
19.21 and conveying systems and their components shall conform to Minnesota Rules, chapter
19.22 1307.

19.23 C. **3001.3 Accessibility.** Passenger elevators required to be accessible by the
19.24 ~~2006~~ 2012 IBC, Chapter 11, shall conform to Minnesota Rules, chapter 1341.

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

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

20.6 A. 3002.1 Hoistway enclosure protection. Elevators, dumbwaiters, and other
20.7 hoistway enclosures shall be shaft enclosures complying with section ~~707~~ 713.

20.8 **3002.1.1 Opening protectives.** Openings in hoistway enclosures shall be protected as
20.9 required in IBC chapter 7.

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

20.13 **3002.1.2 Hardware.** Delete this section in its entirety.

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

20.18 C. 3002.3 Emergency signs. An approved pictorial sign of a standardized
20.19 design shall be posted adjacent to each elevator call station on all floors instructing
20.20 occupants to use the exit stairways and not to use the elevators in case of fire. The sign
20.21 shall be as illustrated in ASME A17.1-2004; Appendix O. ~~The emergency sign shall not~~
20.22 ~~be required for elevators that are part of an accessible means of egress complying with~~
20.23 ~~Section 1007.4~~ A17.1-2010 Figure 2.27.9.

20.24 **Exceptions:**

20.25 1. The emergency sign shall not be required for elevators that are part of an accessible
20.26 means of egress complying with section 1007.4.

21.1 2. The emergency sign shall not be required for elevators that are used for occupant
21.2 self-evacuation in accordance with section 3008.

21.3 D. 3002.4 Elevator car to accommodate ambulance stretcher. Where
21.4 elevators are provided in buildings four or more stories above grade plane or four or more
21.5 stories below grade plane, at least one elevator shall be provided for fire department
21.6 emergency access to all floors. The elevator car shall be of such a size and arrangement to
21.7 accommodate ~~a 24-inch by 84-inch~~ an ambulance stretcher 24-inches by 84-inches (610
21.8 mm by 2133.5 mm) ~~ambulance stretcher~~ with not less than 5-inch (127 mm) radius corners
21.9 in the horizontal, open position and shall be identified by the international symbol for
21.10 emergency medical services (star of life). The symbol shall not be less than three inches
21.11 (76 mm) high and shall be placed inside on both sides of the hoistway door frame.

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

21.16 E. 3002.5 Emergency doors. Where an elevator is installed in a single blind
21.17 hoistway or on the outside of a building, there shall be installed in the blind portion of
21.18 the hoistway or blank face of the building, an emergency door in accordance with ASME
21.19 ~~A17.1-2004~~ A17.1/CSA B44-2010.

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

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

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

22.3 G. **3002.7 Common enclosure with stairway.** Elevators shall not be in a
22.4 common shaft enclosure with a stairway.

22.5 H. **3002.8 Glass in elevator enclosures.** Glass in elevator enclosures shall
22.6 comply with section 2409.1.

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

22.9 A. **3003.1 Standby power.** In buildings and structures where standby power
22.10 is required or furnished to operate an elevator, the operation shall be in accordance with
22.11 sections 3003.1.1 ~~through~~ to 3003.1.4.

22.12 **3003.1.1 Manual transfer.** Standby power shall be manually transferable to all elevators
22.13 in each bank.

22.14 **3003.1.2 One elevator.** Where only one elevator is installed, the elevator shall
22.15 automatically transfer to standby power within 60 seconds after failure of normal power.

22.16 **3003.1.3 Two or more elevators.** Where two or more elevators are controlled by a
22.17 common operating system, all elevators shall automatically transfer to standby power
22.18 within 60 seconds after failure of normal power where the standby power source is of
22.19 sufficient capacity to operate all elevators at the same time. Where the standby power
22.20 source is not of sufficient capacity to operate all elevators at the same time, the elevators
22.21 shall operate according to ASME ~~A17.1-2004~~ A17.1/CSA B44-2010 2.27.2.

22.22 **3003.1.4 Venting.** Where standby power is connected to elevators, machine room
22.23 ventilation or air conditioning, if provided, shall be connected to the standby power source.

22.24 B. **3003.2 Firefighters' emergency operation.** Elevators shall be provided
22.25 with Phase I emergency recall operation and Phase II emergency in-car operation in
22.26 accordance with ASME ~~A17.1-2004~~ A17.1/CSA B44-2010.

23.1 C. 3003.3 Standardized fire service elevator keys. All elevators shall be
23.2 equipped to operate with a standardized fire service elevator key in accordance with the
23.3 International Fire Code.

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

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

23.9 **Exceptions:**

- 23.10 1. In occupancies of other than Groups R-1, R-2, I-1, I-2, as defined in Minnesota
23.11 Rules, chapter 1305, and similar occupancies with overnight sleeping quarters,
23.12 venting of hoistways is not required when the building is equipped throughout with
23.13 an approved automatic sprinkler system installed in accordance with the 2006
23.14 International Building Code, section 903.3.1.1 or 903.3.1.2 and similar local codes.
- 23.15 2. Sidewalk elevator hoistways are not required to be vented.
- 23.16 3. Elevators contained within and serving open parking garages only.
- 23.17 4. Elevators within individual residential dwelling units.

23.18 B. 3004.2 Location of vents. Vents shall be located directly (directly is
23.19 defined as being as close as technically possible to the top of the hoistway including the
23.20 supporting structures located at the top of the hoistway) below the top of the hoistway
23.21 and shall be open either directly to the outer air or through noncombustible ducts to the
23.22 outer air. Noncombustible ducts shall be permitted to pass through the elevator machine
23.23 room provided the portions of the ducts located outside the hoistway or machine room
23.24 are enclosed by construction having not less than the fire protection rating required for
23.25 the hoistway. Holes in the machine room floors for the passage of ropes, cables, or other

24.1 moving elevator equipment shall be limited so as not to provide greater than ~~two~~ 2 inches
24.2 (51 mm) of clearance on all sides.

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

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

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

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

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

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

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

24.19 **C. 3004.3 Area of vents.** Except as provided for in section 3004.3.1, the area of
24.20 the vents shall not be less than 3-1/2 percent of the area of the hoistway nor less than ~~three~~
24.21 3 square feet (0.28 m²) for each elevator car and not less than 3-1/2 percent nor less than
24.22 0.5 square foot (0.047 m²) for each dumbwaiter car in the hoistway, whichever is greater.

24.23 **3004.3.1 Reduced vent area.** Where mechanical ventilation conforming to the
24.24 International Mechanical Code is provided, a reduction in the required vent area is
24.25 allowed, provided that all of the following conditions are met:

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

- 25.1 2. The vents required by section 3004.2 do not have outside exposure.
- 25.2 3. The hoistway does not extend to the top of the building.
- 25.3 4. The hoistway and machine room exhaust fan is automatically reactivated by
- 25.4 thermostatic means.
- 25.5 5. Equivalent venting of the hoistway is accomplished.

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

25.7 Subp. 5. **IBC section 3005, Conveying systems.** ~~IBC~~ Section 3005 is amended

25.8 to read as follows:

25.9 **A. 3005.1 General.** Escalators, moving walks, conveyors, personnel hoists, and

25.10 material hoists shall comply with Minnesota Rules, chapter 1307.

25.11 **B. 3005.2 Escalators and moving walks.** Escalators and moving walks shall

25.12 be constructed of approved noncombustible and fire-retardant materials. This requirement

25.13 shall not apply to electrical equipment, wiring, wheels, handrails, and the use of 1/28-inch

25.14 (0.9 mm) wood veneers on balustrades backed up with noncombustible materials.

25.15 **3005.2.1 Enclosure.** Escalator floor openings shall be enclosed with shaft enclosures

25.16 complying with section ~~707~~ 713.

25.17 **3005.2.2 Escalators.** Where provided in below-grade transportation stations, escalators

25.18 shall have a clear width of 32 inches (815 mm) minimum.

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

25.20 **C. 3005.3 Conveyors.** Conveyors and conveying systems shall comply with

25.21 ASME ~~B20.1-2003~~ B20.1-2009.

25.22 **3005.3.1 Enclosure.** Conveyors and related equipment connecting successive floors or

25.23 levels shall be enclosed with shaft enclosures complying with section ~~707~~ 713.

25.24 **3005.3.2 Conveyor safeties.** Power-operated conveyors, belts, and other material-moving

25.25 devices shall be equipped with automatic limit switches that will shut off the power in an

25.26 emergency and automatically stop all operation of the device.

26.1 D. 3005.4 Personnel and material hoists. Personnel and material hoists shall
26.2 be designed utilizing an approved method that accounts for the conditions imposed during
26.3 the intended operation of the hoist device. The design shall include, but is not limited to,
26.4 anticipated loads, structural stability, impact, vibration, stresses, and seismic restraint.
26.5 The design shall account for the construction, installation, operation, and inspection of
26.6 the hoist tower, car, machinery and control equipment, guide members, and hoisting
26.7 mechanism. Additionally, the design of personnel hoists shall include provisions for field
26.8 testing and maintenance that will demonstrate that the hoist device functions in accordance
26.9 with the design. Field tests shall be conducted upon the completion of an installation or
26.10 following a major alteration of a personnel hoist.

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

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

26.15 B. 3006.2 Venting. Delete this section in its entirety.

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

26.19 D. 3006.4 Machine rooms and machinery spaces. Elevator machine rooms
26.20 and machinery spaces shall be enclosed with ~~construction having a fire-resistance rating~~
26.21 ~~not less than the required rating of the hoistway enclosure served by the machinery.~~
26.22 ~~Openings shall be protected with assemblies having a fire-resistance rating not less than~~
26.23 ~~that required for the hoistway enclosure doors.~~ fire barriers constructed in accordance with
26.24 section 707 or horizontal assemblies constructed in accordance with section 711, or both.
26.25 The fire-resistance rating shall be not less than the required rating of the hoistway enclosure

27.1 served by the machinery. Openings in the fire barriers shall be protected with assemblies
27.2 having a fire protection rating not less than that required for the hoistway enclosure doors.

27.3 **Exceptions:**

27.4 1. Where machine rooms and machinery spaces do not abut and have no openings to
27.5 the hoistway enclosure they serve, the fire barriers constructed in accordance with
27.6 section 707 or horizontal assemblies constructed in accordance with section 711, or
27.7 both, shall be permitted to be reduced to a one-hour fire-resistance rating.

27.8 2. In buildings four stories or less above grade plane where machine room and
27.9 machinery spaces do not abut and have no openings to the hoistway enclosure they
27.10 serve, the machine room and machinery spaces are not required to be fire-resistance
27.11 rated.

27.12 **E. 3006.5 Shunt trip.** Delete this section in its entirety.

27.13 **F. 3006.6 Plumbing systems.** Delete this section in its entirety.

27.14 **Subp. 7. IBC section 3007, Fire service access elevator.**

27.15 **A. 3007.1 General.** Where required by section 403.6.1, every floor of the
27.16 building shall be served by fire service access elevators complying with sections 3007.1 to
27.17 3007.10. Except as modified in this section, fire service access elevators shall be installed
27.18 in accordance with this rule chapter and ASME A17.1/CSA B44-2010.

27.19 **B. 3007.2 Phase I emergency recall operation.** Actuation of any building fire
27.20 alarm-initiating device shall initiate Phase I emergency recall operation on all fire service
27.21 access elevators in accordance with the requirements in ASME A17.1/CSA B44-2010. All
27.22 other elevators shall remain in normal service unless Phase I emergency recall operation is
27.23 manually initiated by a separate, required three-position, key-operated "Fire Recall" switch
27.24 or automatically initiated by the associated elevator lobby, hoistway, or elevator machine
27.25 room smoke detectors. In addition, if the building also contains occupant evacuation
27.26 elevators in accordance with section 3008, an independent, three-position, key-operated

28.1 "Fire Recall" switch conforming to the applicable requirements in ASME A17.1/CSA
28.2 B44-2010 shall be provided at the designated level for each fire service access elevator.

28.3 C. **3007.3 Automatic sprinkler system.** The building shall be equipped
28.4 throughout with an automatic sprinkler system in accordance with section 903.3.1.1,
28.5 except as otherwise permitted by section 903.3.1.1.1 and as prohibited by section 3007.3.1.

28.6 **3007.3.1 Prohibited locations.** Automatic sprinklers shall not be installed in elevator
28.7 machine rooms, elevator machine spaces, or elevator hoistways of fire service access
28.8 elevators.

28.9 **3007.3.2 Sprinkler system monitoring.** The sprinkler system shall have a sprinkler
28.10 control valve supervisory switch and waterflow-initiating device provided for each floor
28.11 that is monitored by the building's fire alarm system.

28.12 D. **3007.4 Water protection.** An approved method to prevent water from
28.13 infiltrating into the hoistway enclosure from the operation of the automatic sprinkler
28.14 system outside the enclosed fire service access elevator lobby shall be provided.

28.15 E. **3007.5 Shunt trip.** Means for elevator shutdown in accordance with section
28.16 3006.5 shall not be installed on elevator systems used for fire service access elevators.

28.17 F. **3007.6 Hoistway enclosures.** The fire service access elevator hoistway shall
28.18 be located in a shaft enclosure complying with section 708.

28.19 **3007.6.1 Structural integrity of hoistway enclosures.** The fire service access elevator
28.20 hoistway enclosure shall comply with sections 403.2.3.1 to 403.2.3.4.

28.21 **3007.6.2 Hoistway lighting.** When firefighters' emergency operation is active, the entire
28.22 height of the hoistway shall be illuminated at not less than one footcandle (11 lux) as
28.23 measured from the top of the car of each fire service access elevator.

28.24 G. **3007.7 Fire service access elevator lobby.** The fire service access elevator
28.25 shall open into a fire service access elevator lobby in accordance with sections 3007.7.1 to
28.26 3007.7.5.

29.1 Exception: Where a fire service access elevator has two entrances onto a floor, the
29.2 second entrance shall be permitted to open into an elevator lobby in accordance
29.3 with section 708.14.1.

29.4 3007.7.1 Access. The fire service access elevator lobby shall have direct access to an
29.5 enclosure for an interior exit stairway.

29.6 3007.7.2 Lobby enclosure. The fire service access elevator lobby shall be enclosed with a
29.7 smoke barrier having a fire-resistance rating of not less than one hour, except that lobby
29.8 doorways shall comply with section 3007.7.3.

29.9 Exception: Enclosed fire service access elevator lobbies are not required at the levels
29.10 of exit discharge.

29.11 3007.7.3 Lobby doorways. Other than the door to the hoistway, each doorway to a
29.12 fire service access elevator lobby shall be provided with a 3/4-hour fire door assembly
29.13 complying with section 716.5. The fire door assembly shall also comply with the smoke
29.14 and draft control door assembly requirements of section 716.5.3.1 with the UL 1784 test
29.15 conducted without the artificial bottom seal.

29.16 3007.7.4 lobby size. Each enclosed fire service access elevator lobby shall be not less
29.17 than 150 square feet (14 m²) in an area with a minimum dimension of 8 feet (2440 mm).

29.18 3007.7.5 Fire service access elevator symbol. A pictorial symbol of a standardized
29.19 design designating which elevators are fire service access elevators shall be installed on
29.20 each side of the hoistway door frame on the portion of the frame at right angles to the fire
29.21 service access elevator lobby. The fire service access elevator symbol shall be designed as
29.22 shown in Figure 3007.7.5 and shall comply with the following:

29.23 1. The fire service access elevator symbol shall be not less than 3 inches (76 mm)
29.24 in height.

29.25 2. The vertical center line of the fire service access elevator symbol shall be centered
29.26 on the hoistway door frame. Each symbol shall not be less than 78 inches (1981 mm),
29.27 and not more than 84 inches (2134 mm) above the finished floor at the threshold.

30.1 H. 3007.8 Elevator system monitoring. The fire service access elevator shall
30.2 be continuously monitored at the fire command center by a standard emergency service
30.3 interface system meeting the requirements of NFPA 72.

30.4 I. 3007.9 Electrical power. The following features serving each fire service
30.5 access elevator shall be supplied by both normal power and Type 60/Class 2/Level 1
30.6 standby power:

30.7 1. Elevator equipment.

30.8 2. Elevator hoistway lighting.

30.9 3. Elevator machine room ventilation and cooling equipment.

30.10 4. Elevator controller cooling equipment.

30.11 3007.9.1 Protection of wiring or cables. Wires or cables that are located outside of the
30.12 elevator hoistway and machine room and that provide normal or standby power, control
30.13 signals, communication with the car, lighting, heating, air conditioning, ventilation and
30.14 fire-detecting systems to fire service access elevators shall be protected by construction
30.15 having a fire-resistance rating of not less than two hours, or shall be circuit integrity cable
30.16 having a fire-resistance rating of not less than two hours.

30.17 Exception: Wiring and cables to control signals are not required to be protected
30.18 provided that wiring and cable do not serve Phase II emergency in-car operations.

30.19 J. 3007.10 Standpipe hose connection. A Class I standpipe hose connection
30.20 in accordance with section 905 shall be provided in the interior exit stairway and ramp
30.21 having direct access from the fire service access elevator lobby.

30.22 Subp. 8. IBC section 3008, Occupant evacuation elevators.

30.23 A. 3008.1 General. Where elevators are to be used for occupant self-evacuation
30.24 during fires, all passenger elevators for general public use shall comply with section
30.25 3008.1 to 3008.11. Where other elevators are used for occupant self-evacuation, they shall
30.26 also comply with these sections.

31.1 **3008.1.1 Additional exit stairway.** Where an additional means of egress is required
31.2 in accordance with section 403.5.2, an additional exit stairway shall not be required to
31.3 be installed in buildings provided with occupant evacuation elevators complying with
31.4 section 3008.1.

31.5 **3008.1.2 Fire safety and evacuation plan.** The building shall have an approved fire
31.6 safety and evacuation plan in accordance with the applicable requirements of section
31.7 404 of the International Fire Code. The fire safety and evacuation plan shall incorporate
31.8 specific procedures for the occupants using evacuation elevators.

31.9 **B. 3008.2 Phase I emergency recall operation.** An independent,
31.10 three-position, key-operated "Fire Recall" switch complying with ASME A17.1/CSA
31.11 B44-2010 shall be provided at the designated level for each occupant evacuation elevator.

31.12 **3008.2.1 Operation.** The occupant evacuation elevators shall be used for occupant
31.13 self-evacuation only in the normal elevator operating mode prior to Phase I emergency
31.14 recall operation in accordance with the requirements in ASME A17.1/CSA B44-2010 and
31.15 the building's fire safety and evacuation plan.

31.16 **3008.2.2 Activation.** Occupant evacuation elevator systems shall be activated by any of
31.17 the following:

- 31.18 1. The operation of an automatic sprinkler system complying with section 3008.3.
- 31.19 2. Smoke detectors required by another provision of the code.
- 31.20 3. Approved manual controls.

31.21 **C. 3008.3 Automatic sprinkler system.** The building shall be protected
31.22 throughout by an approved, electrically supervised automatic sprinkler system in
31.23 accordance with section 903.3.1.1, except as otherwise permitted by section 903.3.1.1.1
31.24 and as prohibited by section 3008.3.1.

31.25 **3008.3.1 Prohibited locations.** Automatic sprinklers shall not be installed in elevator
31.26 machine rooms and elevator machine spaces for occupant evacuation elevators.

32.1 **3008.3.2 Sprinkler system monitoring.** The sprinkler system shall have a sprinkler
32.2 control valve supervisory switch and water flow-initiating device provided for each floor
32.3 that is monitored by the building's fire alarm system.

32.4 **D. 3008.4 Water protection.** An approved method to prevent water from
32.5 infiltrating into the hoistway enclosure from the operation of the automatic sprinkler
32.6 system outside the enclosed occupant evacuation elevator lobby shall be provided.

32.7 **E. 3008.5 Shunt trip.** Means for elevator shutdown in accordance with section
32.8 3006.5 shall not be installed on elevator systems used for occupant evacuation elevators.

32.9 **F. 3008.6 Hoistway enclosure protection.** Occupant evacuation elevator
32.10 hoistways shall be located in shaft enclosures complying with section 713.

32.11 **3008.6.1 Structural integrity of hoistway enclosures.** Occupant evacuation elevator
32.12 hoistway enclosures shall comply with sections 403.2.3.1 to 403.2.3.4.

32.13 **G. 3008.7 Occupant evacuation elevator lobby.** The occupant evacuation
32.14 elevators shall open into an elevator lobby in accordance with sections 3008.7.1 to 3008.7.7.

32.15 **3008.7.1 Access.** The occupant evacuation elevator lobby shall have direct access to
32.16 an interior exit stairway or ramp.

32.17 **3008.7.2 Lobby enclosure.** The occupant evacuation elevator lobby shall be enclosed
32.18 with a smoke barrier having a fire-resistance rating of not less than one hour, except that
32.19 lobby doorways shall comply with section 3008.7.3.

32.20 **Exception:** Enclosed occupant evacuation elevator lobbies are not required at the
32.21 levels of exit discharge.

32.22 **3008.7.3 Lobby doorways.** Other than the door to the hoistway, each doorway to an
32.23 occupant evacuation elevator lobby shall be provided with a 3/4-hour fire door assembly
32.24 complying with section 716.5. The fire door assembly shall also comply with the smoke
32.25 and draft control assembly requirements of section 716.5.3.1 with the UL 1784 test
32.26 conducted without the artificial bottom seal.

33.1 **3008.7.3.1 Vision panel.** A vision panel shall be installed in each fire door assembly
 33.2 protecting the lobby doorway. The vision panel shall consist of fire-protection-rated glazing
 33.3 and shall be located to furnish clear vision of the occupant evacuation elevator lobby.

33.4 **3008.7.3.2 Door closing.** Each fire door assembly protecting the lobby doorway shall be
 33.5 automatic-closing upon receipt of any fire alarm signal from the emergency voice/alarm
 33.6 communication system serving the building.

33.7 **3008.7.4 Lobby size.** Each occupant evacuation elevator lobby shall have minimum
 33.8 floor area as follows:

33.9 1. The occupant evacuation elevator lobby floor area shall accommodate, at 3 square
 33.10 feet (0.28 m²) per person, not less than 25 percent of the occupant load of the floor
 33.11 area served by the lobby.

33.12 2. The occupant evacuation elevator lobby floor area also shall accommodate one
 33.13 wheelchair space of 30 inches by 48 inches (760 mm by 1220 mm) for each 50
 33.14 persons, or portion thereof, of the occupant load of the floor area served by the lobby.

33.15 **Exception:** The size of lobbies serving multiple banks of elevators shall have the
 33.16 minimum floor area approved on an individual basis and shall be consistent with the
 33.17 building's fire safety and evacuation plan.

33.18 **3008.7.5 Signage.** An approved sign indicating elevators are suitable for occupant
 33.19 self-evacuation shall be posted on all floors adjacent to each elevator call station servicing
 33.20 occupant evacuation elevators.

33.21 **3008.7.6 Lobby status indicator.** Each occupant evacuation elevator lobby shall be
 33.22 equipped with a status indicator arranged to display all of the following information:

33.23 1. An illuminated green light and the message "Elevators available for occupant
 33.24 evacuation." when the elevators are operating in normal service and the fire alarm
 33.25 system is indicating an alarm in the building.

34.1 2. An illuminated red light and the message "Elevators out of service, use exit stairs."
34.2 when the elevators are in Phase I emergency recall operation in accordance with the
34.3 requirements in ASME A17.1/CSA B44-2010.

34.4 3. No illuminated light or message when the elevators are operating in normal service.

34.5 **3008.7.7 Two-way communication system.** A two-way communication system shall
34.6 be provided in each occupant evacuation elevator lobby for the purpose of initiating
34.7 communication with the fire command center or an alternate location approved by the
34.8 fire department.

34.9 **3008.7.7.1 Design and installation.** The two-way communication system shall include
34.10 audible and visible signals and shall be designed and installed in accordance with the
34.11 requirements in ICC A117.1.

34.12 **3008.7.7.2 Instructions.** Instructions for the use of the two-way communication system
34.13 along with the location of the station shall be permanently located adjacent to each station.
34.14 Signage shall comply with the ICC A117.1 requirements for visual characters.

34.15 **H. 3008.8 Elevator system monitoring.** The occupant evacuation elevators
34.16 shall be continuously monitored at the fire command center or a central control point
34.17 approved by the fire department and arranged to display all of the following information:

34.18 1. Floor location of each elevator car.

34.19 2. Direction of travel of each elevator car.

34.20 3. Status of each elevator car with respect to whether it is occupied.

34.21 4. Status of normal power to the elevator equipment, elevator controller cooling
34.22 equipment, and the elevator machine room ventilation and cooling equipment.

34.23 5. Status of standby or emergency power system that provides backup power to the
34.24 elevator equipment, elevator controller cooling equipment, and elevator machine
34.25 room ventilation and cooling equipment.

34.26 6. Activation of any fire alarm initiating device in any elevator lobby, elevator
34.27 machine room or machine space, or elevator hoistway.

35.1 **3008.8.1 Elevator recall.** The fire command center or an alternate location approved
35.2 by the fire department shall be provided with the means to manually initiate a Phase
35.3 I emergency recall of the occupant evacuation elevators in accordance with ASME
35.4 A17.1/CSA B44-2010.

35.5 **I. 3008.9 Electrical power.** The following features serving each occupant
35.6 evacuation elevator shall be supplied by both normal power and Type 60/Class 2/Level 1
35.7 standby power:

35.8 1. Elevator equipment.

35.9 2. Elevator machine room ventilation and cooling equipment.

35.10 3. Elevator controller cooling equipment.

35.11 **3008.9.1 Protection of wiring or cables.** Wires or cables that are located outside of the
35.12 elevator hoistway and machine room and that provide normal or standby power, control
35.13 signals, communication with the car, lighting, heating, air conditioning, ventilation, and
35.14 fire-detecting systems to fire service access elevators shall be protected by construction
35.15 having a fire-resistance rating of not less than two hours, or shall be circuit integrity cable
35.16 having a fire-resistance rating of not less than two hours.

35.17 **Exception:** Wiring and cables to control signals are not required to be protected
35.18 provided that wiring and cables do not serve Phase II emergency in-car operations.

35.19 **J. 3008.10 Emergency voice/alarm communication system.** The building
35.20 shall be provided with an emergency voice/alarm communication system. The emergency
35.21 voice/alarm communication system shall be accessible to the fire department. The system
35.22 shall be provided in accordance with section 907.2.12.2.

35.23 **3008.10.1 Notification appliances.** No fewer than one audible and one visible notification
35.24 appliance shall be installed within each occupant evacuation elevator lobby.

36.1 K. 3008.11 Hazardous material areas. No building areas shall contain
 36.2 hazardous materials exceeding the maximum allowable quantities per control area as
 36.3 addressed in section 414.2.

36.4 **1307.0110 MINNESOTA AMENDMENTS TO ASME ~~A18.1-2005~~ A18.1-2011.**

36.5 Subpart 1. ASME ~~A18.1-2005~~ A18.1-2011 section 2.1 Runways.

36.6 A. ASME ~~A18.1-2005~~ A18.1-2011 2.1.2.5 is amended to read as follows:

36.7 **2.1.2.5.** All doors, except as provided in paragraph 2.1.2.9, shall be provided with
 36.8 a combination mechanical lock and electric contact. Locking devices shall be protected
 36.9 against tampering from the landing side. The locking devices shall permit a door to be
 36.10 opened only if the platform floor is within ~~two inches~~ 51 mm (51-mm 2 inches) of the
 36.11 respective landing. The platform shall be permitted to move away from the landing under
 36.12 control of the normal operating device if the door is closed but not locked, provided that
 36.13 the device will cause the platform to stop if it moves more than ~~two inches~~ 51 mm (51-mm
 36.14 2 inches) away from the landing before the door is locked.

36.15 B. ASME ~~A18.1-2005~~ A18.1-2011 2.1.2 Partial runway enclosure provided, is
 36.16 amended by adding a new paragraph 2.1.2.9 to read as follows:

36.17 **2.1.2.9.** Where the lift is installed at a location that does not have guards at the upper
 36.18 landing as allowed by building codes (see definition), the requirements of paragraphs
 36.19 2.1.2.2, 2.1.2.3, and 2.1.2.4 shall be permitted to be omitted when platform gates are
 36.20 provided. They shall extend to a height at least equal to the top terminal landing height plus
 36.21 ~~six inches~~ 152 mm (152-mm 6 inches) measured when the platform is at its lowest position.
 36.22 The gates shall be of unperforated construction, self-closing, and be provided with electric
 36.23 contact to prevent movement of the platform if the gates are not closed. The gates shall
 36.24 not be permanently deformed when a force of ~~125 lbf~~ 556 N (556-N 125 lbf) is applied on
 36.25 any ~~four-inch~~ 102 mm (102-mm 4 inches) by ~~four-inch~~ 102 mm (102-mm 4 inches) area.

37.1 C. ASME ~~A18.1-2005~~ A18.1-2011 2.1.2 Partial runway enclosure provided, is
37.2 amended by adding a new paragraph 2.1.2.10 to read as follows:

37.3 **2.1.2.10.** The clearance between the platform floor and the upper landing sill shall
37.4 be permitted to be increased to ~~three inches~~ 76 mm (76 mm 3 inches) if a platform gate
37.5 complying with paragraph 2.1.2.9 and an automatically folding ramp to service the upper
37.6 landing is provided. When deployed, the ramp shall have a minimum overlap at the upper
37.7 landing sill of ~~two inches~~ 51 mm (51 mm 2 inches) and shall be substantially level. It shall
37.8 be provided with an electric contact, which will stop the movement of the platform within
37.9 ~~six inches~~ 152 mm (152 mm 6 inches) of travel away from the upper landing if the ramp
37.10 has failed to rise to its retracted position.

37.11 D. ASME ~~A18.1-2005~~ A18.1-2011 2.1.3 Runway enclosure not provided.

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

37.15 E. ASME ~~A18.1-2005 2.1.5~~ A18.1-2011 2.1.6 Lower level access ramps and
37.16 pits is amended to read as follows:

37.17 **2.1.5 2.1.6 Lower level across ramps and pits.** Lifts shall be permitted to have a
37.18 pit. Where a pit is not provided, a floor-mounted or retractable platform floor-mounted
37.19 ramp complying with the requirements for ramps in ICC/ANSI ~~A17.1~~ A117.1 and having
37.20 a maximum rise of ~~four inches~~ 102 mm (100 mm 4 inches) shall be provided. When
37.21 backing down an incline from the lift platform may be necessary, the slope of the incline
37.22 shall not exceed ~~one~~ 1 in 20.

37.23 F. ASME ~~A18.1-2005 2.1.5.1~~ A18.1-2011 2.1.6.1 is deleted in its entirety.

37.24 G. ASME ~~A18.1-2005 2.1.5.2~~ A18.1-2011 2.1.6.2 is deleted in its entirety.

37.25 Subp. 2. [See repealer.]

38.1 Subp. 3. ASME ~~A18.1-2005~~ A18.1-2011 section 2.10 Operating devices and
38.2 control equipment.

38.3 A. ASME ~~A18.1-2005~~ A18.1-2011 2.10.1 Operation is amended to read as
38.4 follows:

38.5 **2.10.1 Operation.** Operation of the lift from the landings and from the platform shall
38.6 be controlled by "UP" and "DOWN" control switches at all stations, and shall be by
38.7 means of the continuous pressure type. Control switches shall be ~~two inches~~ 51 mm (50
38.8 ~~mm 2 inches)~~ minimum wide and ~~four inches~~ 102 mm (100 mm 4 inches) minimum high.
38.9 Controls shall be ~~48 inches~~ 1219 mm (1220 mm 48 inches) maximum and ~~15 inches~~ 381
38.10 mm (380 mm 15 inches) minimum above the platform floor or facility floor or ground
38.11 level. Operation devices shall be designed so that both the "UP" and "DOWN" circuits
38.12 cannot be operated at the same time.

38.13 B. ASME ~~A18.1-2005~~ A18.1-2011 2.10.2.2 is amended to read as follows:

38.14 **2.10.2.2.** The attendant shall operate the platform by means of a continuous pressure
38.15 switch so located that the attendant has full view of the platform throughout its travel. A
38.16 manually reset emergency stop switch shall also be provided at that location.

38.17 Subp. 4. ASME ~~A18.1-2005~~ A18.1-2011 section 2.11 Emergency signals.

38.18 A. ASME ~~A18.1-2005~~ A18.1-2011 section 2.11 Emergency signals is amended
38.19 to read as follows:

38.20 **2.11 Emergency signals.** If the platform is installed in an area not visible or audible
38.21 to persons at all times, or installed in an enclosed runway, emergency signaling devices
38.22 shall be provided in accordance with the requirements of paragraphs 2.11.1 and 2.11.2.
38.23 Standby power shall be provided in accordance with paragraph 2.11.3.

38.24 B. ASME ~~A18.1-2005~~ A18.1-2011 2.11.2 is amended to read as follows:

38.25 **2.11.2.** The lift shall be provided with a means of two-way communication complying
38.26 with ASME ~~A17.1-2004~~ A17.1/CSA B44-2010.

39.1 Subp. 5. ASME ~~A18.1-2005~~ A18.1-2011 section 2.12 Standby power. ASME
39.2 ~~A18.1-2005~~ A18.1-2011 section 2.12 Standby power is amended as follows:

39.3 **2.12 Standby power.** ~~Vertical lifts equipped with standby power shall comply with~~
39.4 ~~this chapter.~~ In buildings and structures where standby power is required or furnished to
39.5 operate a vertical lift, the operation shall be in accordance with section 2.12. Lifts not
39.6 required to provide standby power are not required to be equipped with battery power.

39.7 **2.12.1 Standby power.** Except where permitted by 2.12.1.1, the vertical lift shall be
39.8 powered by a standby power system from the building.

39.9 **2.12.1.1 Battery power.** A lift equipped with rechargeable battery power capable of
39.10 cycling the lift under full load for five cycles minimum after building power is removed
39.11 shall be permitted.

39.12 ~~2.12.1.2~~ **2.12.2 Battery power, rated number of cycles.** Except where permitted
39.13 by ~~2.12.1.3~~ 2.12.3, where a lift provided with battery power serves an area with more
39.14 wheelchair users than the rated number of cycles provided by battery power, or where
39.15 the authority having jurisdiction determines that the anticipated number of wheelchair
39.16 users is greater than the rated number of cycles provided by battery power, the lift shall be
39.17 powered by a standby power system from the building.

39.18 ~~2.12.1.3~~ **2.12.3 Existing buildings without standby power.** Where an existing
39.19 building is not required to provide a building standby power system, the installation of a
39.20 lift shall not require the installation of a building standby power system. A battery standby
39.21 power system complying with 2.12.1.1 shall be provided.

39.22 ~~2.12.1.4~~ **2.12.4 Auxiliary items.** Auxiliary items necessary for lift operation such as
39.23 power doors and runway lighting shall remain operational under standby power.

39.24 Subp. 6. ASME ~~A18.1-2005~~ A18.1-2011 3.6.8 Platform guarding. ASME
39.25 ~~A18.1-2005~~ A18.1-2011 3.6.8 Platform guarding is amended to read as follows:

40.1 **3.6.8 Platform guarding.** Platform guarding shall be in accordance with paragraph
40.2 3.6.8.1, or, when safety issues are effectively addressed and approved by the authority
40.3 having jurisdiction, in accordance with paragraph 3.6.8.2.

40.4 Subp. 7. ~~ASME A18.1-2005~~ A18.1-2011 section 3.10.1 Operation. ASME
40.5 ~~A18.1-2005~~ A18.1-2011 3.10.1 Operation is amended to read as follows:

40.6 **3.10.1 Operation.** Operation of the lift from the landings and from the platform shall
40.7 be controlled by "UP" and "DOWN" control switches at all stations, and shall be by means
40.8 of the continuous pressure type. Control switches shall be ~~two~~ 2 inches (50 mm) minimum
40.9 wide and ~~four~~ 4 inches (100 mm) minimum high. Controls shall be 48 inches (1220 mm)
40.10 maximum and 15 inches (380 mm) minimum above the platform floor or facility floor
40.11 or ground level. Controls shall be located within forward or side reach of the passenger
40.12 as defined in ANSI A117.1. Operation devices shall be designed so that both the "UP"
40.13 and "DOWN" circuits cannot be operated at the same time.

40.14 Subp. 8. ~~ASME A18.1-2005~~ A18.1-2011 section 3.11 Emergency signals.

40.15 A. ~~ASME A18.1-2005~~ A18.1-2011 section 3.11 Emergency signals is amended
40.16 to read as follows:

40.17 **3.11 Emergency signals.** If the lift is installed in an area not visible or audible to
40.18 persons at all times, or installed in an enclosed runway, emergency signaling devices shall
40.19 be provided in accordance with the requirements of paragraphs 3.11.1 and 3.11.2.

40.20 B. ~~ASME A18.1-2005~~ A18.1-2011 3.11.2 is amended to read as follows:

40.21 **ASME 3.11.2.** The lift shall be provided with a means of two-way communication
40.22 complying with ~~ASME A17.1-2004~~ A17.1/CSA B44-2010.

40.23 Subp. 9. ~~ASME A18.1-2005~~ A18.1-2011 section 3.12 Standby power. ASME
40.24 ~~A18.1-2005~~ A18.1-2011 section 3.12 Standby power is amended to read as follows:

40.25 **3.12 Standby power.** ~~Inclined lifts equipped with standby power shall comply with~~
40.26 ~~this chapter.~~ In buildings and structures where standby power is required or furnished to

41.1 operate an inclined lift, the operation shall be in accordance with section 3.12. Lifts not
41.2 required to provide standby power are not required to be equipped with battery power.

41.3 **3.12.1 Standby power.** Except where permitted by paragraph 3.12.1.1, the inclined
41.4 lift shall be powered by a standby power system from the building.

41.5 **3.12.1.1 Battery power.** A lift equipped with rechargeable battery power capable of
41.6 cycling the lift under full load for five cycles minimum after building power is removed
41.7 shall be permitted.

41.8 ~~3.12.1.2~~ **3.12.2 Battery power, rated number of cycles.** Except where permitted
41.9 by paragraph ~~3.12.1.3~~ 3.12.3, where a lift provided with battery power serves an area
41.10 with more wheelchair users than the rated number of cycles provided by battery power,
41.11 or where the authority having jurisdiction determines that the anticipated number of
41.12 wheelchair users is greater than the rated number of cycles provided by battery power, the
41.13 lift shall be powered by a standby power system from the building.

41.14 ~~3.12.1.3~~ **3.12.3 Existing buildings without standby power.** Where an existing
41.15 building is not required to provide a building standby power system, the installation of a
41.16 lift shall not require the installation of a building standby power system. A battery standby
41.17 power system complying with 3.12.1.1 shall be provided.

41.18 ~~3.12.1.4~~ **3.12.4 Auxiliary items.** Auxiliary items necessary for lift operation such as
41.19 power doors and runway lighting shall remain operational under standby power.

41.20 Subp. 10. ~~ASME A18.1-2005 6.1.2~~ A18.1-2011 6.1.1 Clearances. ASME
41.21 ~~A18.1-2005 6.1.2~~ A18.1-2011 6.1.1 Clearances is amended to read as follows:

41.22 ~~6.1.2~~ **6.1.1 Clearances.** Clearances between the platform and adjacent surfaces shall
41.23 not be less than ~~.75 inches~~ 20 mm (29 mm .75 inches). At no point in its travel shall the
41.24 edge of the platform facing the upper landing be more than ~~24 inches~~ 600 mm (610 mm 24
41.25 inches) above a step or landing as measured vertically. Headroom clearance measured
41.26 vertically from any position on the platform floor shall be ~~54 inches~~ 1372 mm (1370 mm
41.27 54 inches) minimum throughout the travel of the platform or alternate methods, approved

42.1 by the authority having jurisdiction, shall be provided, which will stop the movement of
42.2 the platform in the direction of travel should the clearance be reduced.

42.3 **REPEALER.** Minnesota Rules, part 1307.0110, subpart 2, is repealed.

Office of the Revisor of Statutes

Administrative Rules



TITLE: Proposed Permanent Rules Relating to Elevators and Related Devices

AGENCY: Department of Labor and Industry

MINNESOTA RULES: Chapter 1307

INCORPORATION BY REFERENCE:

Part 1307.0020, subpart 1: Chapter 30 of the 2012 International Building Code, published by the International Codes Council, Inc., Washington, D.C., copyright 2012; ASME A17.1/CSA B44-2010 Safety Code for Elevators and Escalators; ASME A17.3-2011 Safety Code for Existing Elevators and Escalators; ASME A17.5-2011 Elevator and Escalator Electrical Equipment; ASME A18.1-2011 Safety Standard for Platform Lifts and Stairway Chairlifts; ASME A90.1-2009 Safety Standard for Belt Manlifts; ASME B20.1-2009 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 documents are available in the office of the commissioner of labor and industry.

The attached rules are approved for
publication in the State Register

A handwritten signature in cursive script that reads "Sheree Speer".

Sheree Speer
Senior Assistant Revisor