CHAPTER 1307

DEPARTMENT OF LABOR AND INDUSTRY ELEVATORS AND RELATED DEVICES

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1307.0005 TITLE.

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

Statutory Authority: *MS s* 16*B*.59 to 16*B*.75; 326*B*.101 to 326*B*.194 **History:** 23 SR 2051; *L* 2007 c 140 art 4 s 61; art 13 s 4; *L* 2008 c 337 s 64; 39 SR 95 **Published Electronically:** January 26, 2015

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 326B.184, subdivision 4.

Statutory Authority: MS s 16B.59 to 16B.75; 326B.02; 326B.101 to 326B.194

History: 15 SR 70; 23 SR 2051; 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 39 SR 91

Published Electronically: January 26, 2015

1307.0015 [Repealed, 23 SR 2051]

Published Electronically: February 23, 2009

1307.0020 CODES ADOPTED BY REFERENCE.

Subpart 1. **Incorporation by reference.** The following are incorporated by reference, are not subject to frequent change, are available in the office of the commissioner of labor and industry, and are made part of the Minnesota State Building Code as amended in this chapter:

A. ASME A17.1/CSA B44-2016 Safety Code for Elevators and Escalators;

B. ASME A17.3-2015 Safety Code for Existing Elevators and Escalators;

C. ASME A17.5-2014 Elevator and Escalator Electrical Equipment;

D. ASME A17.7/CSA B44.7-2007 Performance-Based Safety Codes for Elevators and Escalators;

E. ASME A18.1-2017 Safety Standard for Platform Lifts and Stairway Chairlifts;

F. ASME A90.1-2015 Safety Standard for Belt Manlifts;

G. ASME B20.1-2015 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.

Subp. 2. [Repealed, 23 SR 2051]

Subp. 3. Emergency personnel. ASME A17.4-2015 Guide for Emergency Personnel is the reference document for emergency personnel.

Subp. 4. **Building Code elevator and conveying systems provisions.** Chapter 30 of the 2018 International Building Code is incorporated by reference, as amended in Minnesota Rules, chapter 1305, the Minnesota Building Code.

Statutory Authority: *MS s 16B.59 to 16B.75; 326B.02; 326B.101 to 326B.194; 326B.106; 326B.187*

History: 15 SR 70; 23 SR 2051; 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 39 SR 91; 45 SR 301

Published Electronically: September 30, 2020

1307.0025 [Repealed, 31 SR 935] **Published Electronically:** *February 23, 2009*

1307.0027 DEFINITIONS.

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

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

A. inspection, investigation, or testing;

B. accepted principles;

C. computer simulations;

D. research reports; or

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

Subp. 2. ASME A17.1/CSA B44-2016. "ASME A17.1/CSA B44-2016" means the ASME A17.1/CSA B44-2016, Safety Code for Elevators and Escalators.

Subp. 3. **ASME A17.3-2015.** "ASME A17.3-2015" means the ASME A17.3-2015 Safety Code for Existing Elevators and Escalators (and related equipment).

Subp. 4. ASME A17.5-2014. "ASME A17.5-2014" means the ASME A17.5-2014 Elevators and Escalators Electrical Equipment.

Subp. 4a. ASME A17.7/CSA B44.7-2007. "ASME A17.7/CSA B44.7-2007" means the ASME A17.7/CSA B44.7-2007 Performance-Based Safety Codes for Elevators and Escalators.

Subp. 5. ASME A18.1-2017. "ASME A18.1-2017" means the ASME A18.1-2017 Safety Standard for Platform Lifts and Stairway Chairlifts.

Subp. 6. ASME A90.1-2015. "ASME A90.1-2015" means the ASME A90.1-2015 Safety Standard for Belt Manlifts.

Subp. 7. **ASME B20.1-2015.** "ASME B20.1-2015" means the ASME B20.1-2015 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 326B.106, or a unit of local government pursuant to Minnesota Statutes, sections 326B.106 and 326B.184.

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/CSA B44-2016, 8.11.1.4.

Subp. 13. Endless belt lift. "Endless belt lift" means belt manlifts and is governed by ASME A90.1-2015 Safety Standard for Belt Manlifts.

Subp. 14. Existing installation. "Existing installation" means that, before March 31, 2020:

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, Washington, D.C., 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 B20.1-2015, Safety Standard for Conveyors and Related Equipment.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748; 326B.02; 326B.101; 326B.106; 326B.13; 326B.187*

History: 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; 39 SR 91; 45 SR 301 **Published Electronically:** September 30, 2020

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/CSA B44-2016 sections: 8.6.2.3 repair of speed governors; 8.6.2.4 repair of releasing carrier; 8.6.3.3 suspension means fastenings and hitch plates; 8.6.3.4 replacement of governor rope; 8.6.3.6 replacement of speed governor; 8.6.3.9 replacement of releasing carrier; and 8.6.3.10 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/CSA B44-2016, ASME A17.3-2015, and ASME A90.1-2015 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 shall be made by the owner, or an authorized representative, for equipment governed by ASME A17.1/CSA B44-2016, ASME A17.3-2015, and ASME A90.1-2015. The application shall be accompanied by an inspection report. Fees for the Certificate of Operation shall be as specified by the administrative authority.

Statutory Authority: *MS s 16B.59 to 16B.75; 326B.02; 326B.101 to 326B.194; 326B.106; 326B.187*

History: 15 SR 70; 23 SR 2051; 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 39 SR 91; 45 SR 301

Published Electronically: September 30, 2020

1307.0032 [Repealed, L 2013 c 85 art 2 s 44] **Published Electronically:** *January 2, 2014*

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 shall obtain approval for doing so from

the authority having jurisdiction. Two sets of drawings and/or specifications, or PDF files containing the same information if submitted electronically, showing the installation, relocation, alteration, or removal shall be submitted as required by the authority having jurisdiction. A corporation desiring to install, relocate, alter, or remove any installation covered by this chapter shall obtain approval for doing so from the authority having jurisdiction. Two sets of drawings and/or specifications showing the installation, relocation, alteration, or removal shall 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 this chapter 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 shall be issued by the authority having jurisdiction for equipment governed by ASME A17.1/CSA B44-2016, ASME A17.3-2015, ASME A90.1-2015, and ASME B20.1-2015 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; 326B.02; 326B.101 to 326B.194; 326B.106; 326B.187*

History: 15 SR 70; 23 SR 2051; 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 39 SR 91; 45 SR 301

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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 326B.178.

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; 326B.101 to 326B.194* **History:** *15 SR 70; 23 SR 2051; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64* **Published Electronically:** *February 23, 2009*

1307.0045 [Repealed, 31 SR 935] **Published Electronically:** *February 23, 2009*

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/CSA B44-2016 and ASME A17.3-2015.

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 A18.1-2017.

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/CSA B44-2016 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. [Repealed, 45 SR 301]

Subp. 9. All work required for compliance with ASME A17.1/CSA B44-2016 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/CSA B44-2016 8.6.5.8, Safety Bulkhead. A material transfer device shall comply with ASME B20.1-2015.

Subp. 10. [Repealed, 45 SR 301]

Subp. 11. [Repealed, 45 SR 301]

Subp. 12. [Repealed, 45 SR 301]

Subp. 13. [Repealed, 45 SR 301]

Subp. 14. [Repealed, 45 SR 301]

Subp. 15. **ASME A17.3-2015 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. Newly constructed and altered elevator hoistways in parking ramps shall maintain a conditioned temperature between 50 and 90 degrees F.

Statutory Authority: *MS s 16B.59; 16B.61; 16B.64; 16B.748; 326B.02; 326B.101; 326B.106; 326B.13; 326B.187*

History: 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; 39 SR 91; 45 SR 301 **Published Electronically:** September 30, 2020

1307.0050 [Repealed, 23 SR 2051] **Published Electronically:** *February 23, 2009*

1307.0055 [Repealed, 23 SR 2051] **Published Electronically:** *February 23, 2009*

1307.0060 [Repealed, 23 SR 2051]

Published Electronically: February 23, 2009

1307.0065 [Repealed, 31 SR 935] **Published Electronically:** *February 23, 2009*

1307.0067 AMENDMENTS TO ASME A17.1/CSA B44-2016.

Subpart 1. ASME A17.1/CSA B44-2016 2.2.2.4. ASME A17.1/CSA B44-2016 2.2.2.4 is amended by adding a paragraph to read as follows:

An elevator pit drain shall 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 shall be located outside the pit with a dry pan drain flowing to it. The sump for the elevator pit drain shall not be located in the elevator machine room.

Subp. 2. ASME A17.1/CSA B44-2016 2.5.1.1 Between car and hoistway enclosures. ASME A17.1/CSA B44-2016 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/CSA B44-2016 2.7.3.1 General requirements. ASME A17.1/CSA B44-2016 2.7.3.1 is amended by adding the following:

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

Subp. 4. ASME A17.1/CSA B44-2016 2.7.4.1. ASME A17.1/CSA B44-2016 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/CSA B44-2016 2.12.6.2.5. ASME A17.1/CSA B44-2016 2.12.6.2.5 is amended to read as follows:

The unlocking-device keyway and locked panel (see ASME A17.1/CSA B44-2016 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/CSA B44-2016 2.12.7.1. ASME A17.1/CSA B44-2016 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/CSA B44-2016 2.12.7.1.2. ASME A17.1/CSA B44-2016 2.12.7.1.2 is deleted in its entirety.

Subp. 8. ASME A17.1/CSA B44-2016 2.14.7.1.4. ASME A17.1/CSA B44-2016 2.14.7.1.4 is amended to read as follows:

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

Subp. 9. ASME A17.1/CSA B44-2016 2.27 Emergency operation and signaling devices. ASME A17.1/CSA B44-2016 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/CSA B44-2016 2.27.2 to 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/CSA B44-2016 2.27.1.1.3(a). ASME A17.1/CSA B44-2016 2.27.1.1.3(a) is deleted in its entirety.

Subp. 11. ASME A17.1/CSA B44-2016 3.28.1 Information included on layout drawing. ASME A17.1/CSA B44-2016 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).

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Subp. 12. ASME A17.1/CSA B44-2016 4.3.15 Car safeties. ASME A17.1/CSA B44-2016 4.3.15 is amended by adding a sentence to read as follows:

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

Subp. 13. ASME A17.1/CSA B44-2016 7.2.4.6 Application of safeties. ASME A17.1/CSA B44-2016 7.2.4.6 is amended by adding a sentence at the end of the section as follows:

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

Subp. 14. **ASME A17.1/CSA B44-2016 8.10.1.1.3.** ASME A17.1/CSA B44-2016 8.10.1.1.3 is deleted and replaced with the following:

Elevator inspector qualifications. Inspectors shall have a current license issued by the Department of Labor and Industry as a master elevator constructor or elevator journeyworker constructor.

Inspectors shall have proof of successful completion of the National Elevator Industry Education program examination, equivalent program, or equivalent experience. Within 18 months of the employment start date, any person performing inspections shall be certified to the ASME QEI-1 standard as a qualified elevator inspector (QEI) by an organization recognized by the commissioner. Upon initial certification, persons performing inspections shall maintain the QEI certification.

Subp. 15. ASME A17.1/CSA B44-2016 8.11.1.3 Periodic inspection and test frequency. ASME A17.1/CSA B44-2016 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 Tests		
		Periodic In	Periodic Inspections		Category 1	
Reference Section	Equipment Type	Require- ment	Interval	Require- ment	Interval	
8.11.2	Electric elevators	8.11.2.1	12	8.6.4.19	12	
8.11.3	Hydraulic elevators	8.11.3.1	12	8.6.5.14	12	
8.11.4	Escalators & moving walks	8.11.4.1	12	8.6.8.15	12	
8.11.5.1	Sidewalk elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12	
8.11.5.3	Hand elevators	8.11.2.1	12	8.6.4.19	12	
8.11.5.4	Dumbwaiters	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12	

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8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.6	Special purpose personnel elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.7	Inclined elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.8	Shipboard elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.9	Screw-column elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.10	Rooftop elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.12	Limited use/limited-application elevators	8.11.2.1, 8.11.3.1	12	8.6.4.19, 8.6.5.14	12
8.11.5.13	Elevators used for construction	8.11.2.1, 8.11.3.1	3	8.6.4.19, 8.6.5.14	12

Periodic Tests

		Periodic Inspections		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	8.6.5.15	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	8.6.5.15	60
8.11.5.3	Hand elevators	8.11.2.1	12	N/A	N/A
8.11.5.4	Dumbwaiters	8.11.2.1, 8.11.3.1	12	8.6.5.15	60
8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices	8.11.2.1, 8.11.3.1	12	8.6.5.15	60
8.11.5.6	Special purpose personnel elevators	8.11.2.1, 8.11.3.1	12	8.6.5.15	60

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8.11.5.7	Inclined elevators	8.11.2.1, 8.11.3.1	12	8.6.5.15	60	
8.11.5.8	Shipboard elevators	8.11.2.1, 8.11.3.1	12	8.6.5.15	60	
8.11.5.9	Screw-column elevators	8.11.2.1, 8.11.3.1	12	8.6.5.15	60	
8.11.5.10	Rooftop elevators	8.11.2.1, 8.11.3.1	12	8.6.5.15	60	
8.11.5.12	Limited use/limited-application elevators	8.11.2.1, 8.11.3.1	12	8.6.5.15	60	
8.11.5.13	Elevators used for construction	8.11.2.1, 8.11.3.1	3	8.6.5.15	60	
			F			
		Periodic Ins	spections	Categ	egory 5	
Reference Section	Equipment Type	Require- ment	Interval	Require- ment	Interval	
8.11.2	Electric elevators	8.11.2.1	12	8.6.4.20	60	
8.11.3	Hydraulic elevators	8.11.3.1	12	8.6.5.16	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	8.6.4.20, 8.6.5.16	60	
8.11.5.3	Hand elevators	8.11.2.1	12	8.6.4.20, 8.6.5.16	60	
8.11.5.4	Dumbwaiters	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60	
8.11.5.5	Material lifts & dumbwaiters w/automatic transfer devices	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60	
8.11.5.6	Special purpose personnel elevators	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60	
8.11.5.7	Inclined elevators	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60	
8.11.5.8	Shipboard elevators	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60	

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8.11.5.9	Screw-column elevators	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60
8.11.5.10	Rooftop elevators	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60
8.11.5.12	Limited use/limited-application elevators	8.11.2.1, 8.11.3.1	12	8.6.4.20, 8.6.5.16	60
8.11.5.13	Elevators used for construction	8.11.2.1, 8.11.3.1	3	8.6.4.20, 8.6.5.16	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: *MSs* 16B.59; 16B.61; 16B.64; 16B.748; 326B.02; 326B.101; 326B.106; 326B.13; 326B.187

History: 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; 39 SR 91; 45 SR 301 **Published Electronically:** September 30, 2020

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; 326B.101; 326B.106; 326B.13; 326B.187*

History: 15 SR 70; 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4 **Published Electronically:** February 23, 2009

1307.0075 [Repealed, 23 SR 2051] **Published Electronically:** *February 23, 2009*

1307.0080 [Repealed, 23 SR 2051] **Published Electronically:** *February 23, 2009*

1307.0085 [Repealed, 31 SR 935] **Published Electronically:** *February 23, 2009*

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/CSA B44-2016, ASME A17.3-2015, and ASME A90.1-2015 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 shall be equipped with a broken rope safety device. Elevator machine room lighting shall meet the requirements of ASME A17.1/CSA B44-2016 2.7.9.1 to provide 19 footcandles of illumination at the floor level. The installation of these safety devices does not require compliance with ASME A17.1/CSA B44-2016.

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 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 shall conform to the requirements of: ASME A17.1/CSA B44-2016 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 shall conform to the requirements of ASME A17.1/CSA B44-2016, Part 8.7, or ASME A17.3-2015, whichever is more restrictive.

Subp. 7. **Compliance schedule.** The authority having jurisdiction shall notify the owner of an existing elevator of the applicable ASME code and its associated state amendments (1) at the time of adoption or (2) following inspection of an elevator not in compliance with the applicable ASME code and its associated state amendments. The following applies to elevators or related devices upon the owner receiving notification:

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 60 calendar days of receipt of notification by the authority having jurisdiction.

Any compliance schedule submitted for an existing elevator shall result in compliance with the code requirements within five years of submission of the compliance schedule. The authority having jurisdiction, acting under Minnesota Statutes, section 326B.175, is authorized to take an elevator that is not in compliance with the code requirements within five years of submission of the compliance schedule out of service.

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

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

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

E. **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/CSA B44-2016 8.11.1.4.

F. 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/CSA B44-2016 8.11.1.4.

Statutory Authority: *MS s 16B.59 to 16B.75; 326B.02; 326B.101 to 326B.194; 326B.106; 326B.187*

History: 15 SR 70; 23 SR 2051; 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; L 2008 c 337 s 64; 39 SR 91; 45 SR 301

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1307.0092 REFERENCED CODES, STANDARDS, AND SPECIFICATIONS.

Section 9.1 ASME A17.1 referenced documents. References to NFPA 13-1985 shall be deleted and replaced with references to NFPA 13-2016.

Statutory Authority: MS s 326B.02; 326B.101; 326B.106; 326B.187

History: 36 SR 1479; 45 SR 301 Published Electronically: September 30, 2020

1307.0095 [Repealed, 45 SR 301] Published Electronically: September 30, 2020

1307.0100 [Repealed, 31 SR 935] **Published Electronically:** *February 23, 2009*

1307.0110 MINNESOTA AMENDMENTS TO ASME A18.1-2017.

Subpart 1. ASME A18.1-2017 section 2.1 Runways.

A. ASME A18.1-2017 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 51 mm (2 inches) 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 51 mm (2 inches) away from the landing before the door is locked.

B. ASME A18.1-2017 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 152 mm (6 inches) 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 556 N (125 lbf) is applied on any 102 mm (4 inches) by 102 mm (4 inches) area.

C. ASME A18.1-2017 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 76 mm (3 inches) 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 51 mm (2 inches) and shall be substantially level. It shall be provided with an electric contact, which will stop the movement of the platform within 152 mm (6 inches) of travel away from the upper landing if the ramp has failed to rise to its retracted position.

D. ASME A18.1-2017 2.1.3 Runway enclosure not provided.

For purposes of A18.1-2017 section 2 Vertical platform lifts, 2.1.3 is deleted in its entirety. However, as referenced in A18.1-2017 section 5.1 Runways, 2.1.3 remains in full force and effect.

E. ASME A18.1-2017 2.1.7 Lower level access ramps and pits is amended to read as follows:

2.1.7 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 A117.1 and having a maximum rise of 102 mm (4 inches) shall be provided. When backing down an incline from the lift platform may be necessary, the slope of the incline shall not exceed 1 in 20.

F. ASME A18.1-2017 2.1.7.1 is deleted in its entirety.

G. ASME A18.1-2017 2.1.7.2 is deleted in its entirety.

Subp. 2. [Repealed, 39 SR 91]

Subp. 3. ASME A18.1-2017 section 2.10 Operating devices and control equipment.

A. ASME A18.1-2017 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 51 mm (2 inches) minimum wide and 102 mm (4 inches) minimum high. Controls shall be 1219 mm (48 inches) maximum and 381 mm (15 inches) 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 A18.1-2017 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 A18.1-2017 section 2.11 Emergency signals.

A. ASME A18.1-2017 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 A18.1-2017 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/CSA B44-2016.

Subp. 5. ASME A18.1-2017 section 2.12 Standby power. ASME A18.1-2017 section 2.12 Standby power is amended as follows:

2.12 Standby power. In buildings and structures where standby power is required or furnished to operate a vertical lift, the operation shall be in accordance with section 2.12. Lifts not required to provide standby power are not required to be equipped with battery power.

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.

2.12.2 Battery power, rated number of cycles. Except where permitted by 2.12.3, 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.

2.12.3 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

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

Subp. 6. ASME A18.1-2017 3.6.8 Platform guarding. ASME A18.1-2017 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 A18.1-2017 section 3.10.1 Operation. ASME A18.1-2017 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 control switches at all stations, and shall be by means of the continuous pressure type. Control switches shall be 2 inches (50 mm) minimum wide and 4 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. Controls shall be located within forward or side reach of the passenger as defined in ANSI A117.1. Operation devices shall be designed so that both the "UP" and "DOWN" circuits cannot be operated at the same time.

Subp. 8. ASME A18.1-2017 section 3.11 Emergency signals.

A. ASME A18.1-2017 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 A18.1-2017 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/CSA B44-2016.

Subp. 9. ASME A18.1-2017 section 3.12 Standby power. ASME A18.1-2017 section 3.12 Standby power is amended to read as follows:

3.12 Standby power. In buildings and structures where standby power is required or furnished to operate an inclined lift, the operation shall be in accordance with section 3.12. Lifts not required to provide standby power are not required to be equipped with battery power.

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.

3.12.2 Battery power, rated number of cycles. Except where permitted by paragraph 3.12.3, 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.

3.12.3 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.

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

Subp. 10. ASME A18.1-2017 6.1.1 Clearances. ASME A18.1-2017 6.1.1 Clearances is amended to read as follows:

6.1.1 Clearances. Clearances between the platform and adjacent surfaces shall not be less than 20 mm (.75 inches). At no point in its travel shall the edge of the platform facing the upper landing be more than 600 mm (24 inches) above a step or landing as measured vertically. Headroom clearance measured vertically from any position on the platform floor shall be 1372 mm (54 inches) 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; 326B.02; 326B.101; 326B.106; 326B.13; 326B.187*

History: 31 SR 935; L 2007 c 140 art 4 s 61; art 13 s 4; 39 SR 91; 45 SR 301 **Published Electronically:** September 30, 2020