# 1320.0100 ELEVATORS, AND RELATED DEVICES

# CHAPTER 1320 DEPARTMENT OF ADMINISTRATION MINNESOTA STATE BUILDING CODE ELEVATORS, AND RELATED DEVICES

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#### 1320.0100 GENERAL.

Subpart 1. Scope. Elevators, dumbwaiters, escalators, manlifts, moving walks, temporary hoists, stage and orchestra lifts, and wheelchair elevating lifts must be designed, constructed, installed, and maintained so as to be reasonably safe to life, limb, and adjoining property.

Subp. 2. [Repealed, 11 SR 1405]

Subp. 3. [Repealed, 11 SR 1405]

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 11 SR 1405

#### **1320.0200 DEFINITIONS.**

Subpart 1. Scope. For the purpose of this chapter, the terms or words listed in this part have the meaning indicated.

Subp. 2. Existing installation. "Existing installation" means one for which, prior to the effective date of this code:

A. all work of installation was completed; or

B. the plans and specifications were filed with the enforcing authority and work was begun not later than 12 months after the approval of such plans and specifications.

Subp. 3. New installation. "New installation" means any installation which is not an existing installation.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

### 1320.0300 EXISTING INSTALLATIONS.

Subpart 1. [Repealed, 11 SR 1405]

Subp. 2. Conditions for continued operation. All existing installations may be continued in service as long as they are properly maintained and are, in the opinion of the administrative authority, installed and maintained in a safe condition. The administrative authority may order the installation of car gates,

car tops, and the car walls extended to the car top on all existing installations. The administrative authority shall have the authority to shut down any piece of equipment covered by this chapter, which in his opinion is dangerous to life, limb, and adjoining property, and such equipment shall not be put back into operation until such unsafe condition has been corrected and approved by the administrative authority.

Subp. 3. Material change or damage. Any installation which is materially changed subsequent to the date of enactment of this code shall comply with all of the requirements covering a new installation.

A material change shall be defined as any change which moves the location, increases or decreases the length of travel, changes the type of operation, increases the speed or carrying capacity, or changes the types of power supply of an existing installation

Any installation, whether new or existing, which shall become damaged, defective, or worn by fire or other causes including ordinary wear to such an extent that in the opinion of the administrative authority it becomes dangerous to life, limb, and adjoining property, such installations shall be repaired or rebuilt in conformity with the provisions of this chapter for new installations. Such equipment shall, if in the opinion of the administrative authority, it is found necessary to protect life, limb, and property, be taken out of service until such unsafe condition has been removed.

Subp. 4. Unsafe conditions. When an inspection reveals an unsafe condition, the inspector shall immediately file with the owner and the administrative authority a full and true report of such inspection and such unsafe condition. If the administrative authority finds that the unsafe condition endangers human life, he shall cause to be placed on such elevator, escalator, or moving walk in a conspicuous place a notice stating that such conveyance is unsafe. The owner shall see to it that such notice of unsafe condition is legibly maintained where placed by the administrative authority. The administrative authority shall also issue an order in writing to the owner requiring the repairs or alterations to be made to such conveyance which are necessary to render it safe, and may order the operation thereof discontinued until the repairs or alterations are made or the unsafe conditions are removed. A posted notice of unsafe conditions shall be removed only by the administrative authority when he is satisfied that the unsafe conditions have been corrected.

Statutory Authority: MS s 16B.59 to 16B.73

# 1320.0400 INSPECTION, TESTS AND APPROVAL.

Subpart 1. [Repealed by amendment, 9 SR 1557]

- Subp. 2. Approval of plans. Any person, firm, or corporation desiring to install, relocate, alter materially, or extend any installation covered by this chapter shall be required to obtain approval for so doing from the administrative authority. Two sets of drawings and specifications showing such installations, relocation, alteration, or extension shall be submitted for approval.
- Subp. 3. Inspections and tests. It is unlawful for any person, firm, or corporation to 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 administrative authority. The installer of any equipment included in this chapter must notify in writing the administrative authority seven days prior to completion of the installation for inspection. The administrative authority may require tests provided in ANSI A17.1-1984 Edition and Supplement ANSI A17.1a-1985 which he considers necessary to prove the safe operation of any installation.
- Subp. 4. Approval. A certificate or letter of approval shall be issued by the administrative authority for such installation when the entire installation is completed in conformity with this chapter. The entire installation shall include

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all enclosures or shafts, gates, doors, machinery safety and control devices, and all other appurtenances necessary.

Subp. 5. Limited use of an elevator. When a building or structure is to be equipped with one or more elevators, at least one of such elevators may be approved for limited use prior to the completion of the building or structure.

The use of such elevators may be permitted by the administrative authority under the authority of a limited permit issued by him for each class of service. Such limited permit shall specify the class of service permitted and it shall not be issued until the elevator has been tested with rated load and the car safety and terminal stopping equipment have been tested to determine the safety of the equipment and until permanent or temporary guards or enclosures are placed on the car and around the hoistway and at the landing entrance on each floor. Landing entrance guards shall be provided with locks that can be released from the hoistway side only. Automatic and continuous pressure elevators shall not be placed in temporary operation from the landing push buttons unless door locking devices and/or interlocks are installed and operative.

Statutory Authority: MS s 16B.59 to 16B.73

History: 9 SR 1557; 11 SR 1405

#### 1320,0500 ACCIDENTS.

Subpart 1. To be reported. The owner or person in control of an elevator or other installation covered by this chapter shall promptly notify the administrative authority of any accident to a person or apparatus on, about, or in connection with such elevator or other installation, and shall afford the administrative authority every facility for investigating such accident and the damage resulting therefrom. Notification may be given to the administrative authority by telephone or verbally, but such notification shall be confirmed in writing.

- Subp. 2. Investigation. The administrative authority shall make or cause to be made an investigation of the accident, and the report of such investigation shall be placed on file in his office. Such report shall give in detail the cause or causes, so far as they can determine, and such report shall be open to public inspection.
- 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 shall be taken out of service and shall not be used again until it has been made safe and such reuse approved by the administrative authority.

The administrative authority may, if deemed necessary, order the discontinuance of operation of any such elevator or installation until a new certificate of approval has been issued.

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

Statutory Authority: MS s 16B.59 to 16B.73

# 1320.0600 ELEVATORS, DUMBWAITERS, ESCALATORS, AND MOVING WALKS.

Subpart 1. [Repealed by amendment, 9 SR 1557]

Subp. 2. Incorporations by reference. The American National Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks, ANSI A17.1-1984 including supplement ANSI A17.1a-1985, is incorporated by reference and made a part of this code. All references in ANSI A17.1-1984 and supplements, to the National Electrical Code are changed to read: "National Electrical Code" ANSI/NFPA 70-1984.

Subp. 3. Exceptions to ANSI. Winding drum machines shall not be permitted on new elevator installations nor replacements on existing installations.

- Subp. 4. Exceptions; swing doors. Horizontal swing doors, either single-section or center-opening two-section, shall not be permitted on new elevator installations nor as replacements on existing installations, except the administrative authority may approve such installation if the conditions are such as to make it impossible to install other than swing doors.
- Subp. 5. Exceptions; side exits. Side emergency exits on elevator cars shall not be permitted.
  - Subp. 6. [Repealed by amendment, 9 SR 1557]
- Subp. 7. Exceptions; call buttons. Exterior elevator call buttons may not be placed higher than 60 inches above the floor. No door opening and door closing buttons or elevator floor buttons may be placed higher than 60 inches above the floor.
  - Subp. 8. [Repealed by amendment, 9 SR 1557]
- Subp. 9. Operating devices. Operating devices must be of the enclosed electric type. Rope or rod operated devices activated by hand, or rope operating devices activated by wheels, levers or cranks, must be removed. Exception: This is not considered a material change.

Statutory Authority: MS s 16B.59 to 16B.73

History: 9 SR 1557; 11 SR 1405

### 1320.0605 ANSI A17.1A, RULE 100.1A FIRE-RESISTIVE CONSTRUCTION.

ANSI A17.1, Rule 100.1a is amended to read as follows:

100.1a Fire-Resistive Construction.

- (1) Hoistways must be enclosed throughout their height with fire-resistive enclosures as required by Part IV of the Uniform Building Code.
- (2) Partitions between fire-resistive hoistways and machine rooms having fire-resistive enclosures and which are located at a side of or beneath the hoistway may be of unperforated noncombustible material at least equal to 0.0598 in. (1.519 mm) thick sheet steel in strength and stiffness with openings essential for ropes, drums, sheaves, and other elevator equipment.
- (3) All hoistway openings must be provided with fire-resistive protective assemblies. The fire resistance rating must not be less than 1-1/2 hours when installed in two hour fire-resistance-rated construction. Protective assemblies installed in fire-resistance-rated construction of less than two hours must have ratings as required by the Uniform Building Code. The fire-resistance rating must be determined by the test specified in Section 1102.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

#### 1320.0610 ANSI A17.1, RULE 100.1D.

ANSI A17.1, Rule 100.1d is amended to read as follows:

100.1d Multiple Hoistways.

If there are three or fewer elevator cars in a building, they may be located within the same hoistway enclosure. If there are four elevator cars, they must be divided so that at least two separate hoistway enclosures are provided. If there are more than four elevators, not more than four elevator cars may be located within a single hoistway enclosure.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

#### 1320.0615 ANSI A17.1, RULE 100.4A.

ANSI A17.1, Rule 100.4a is amended to read as follows:

100.4a Control of smoke and hot gases.

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Hoistways of elevators must be provided with means to prevent the accumulation of smoke and hot gases in case of fire. Hoistways housing elevators extending through more than two floor levels must be vented to the outside. The area of the vent must be not less than 3-1/2 percent of the area of the elevator shaft, as long as a minimum of three square feet per elevator is provided.

The venting of each individual hoistway must be independent from any other hoistway venting, and the interconnection of separate hoistways for the purpose of venting is prohibited.

Vents must be manually openable or remote control automatic vents. Location of operating devices is subject to approval of the fire chief.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

# 1320.0620 ANSI A17.1, RULE 100.4B.

ANSI A17.1. Rule 100.4b is amended to read as follows:

100.4b Location of vents.

Vents must be located:

- 1. in the side of the hoistway enclosure directly below the floor or floors at the top of the hoistway, and must open either directly to the outer air or through noncombustible ducts to the outer air; or
- 2. in the wall or roof of the penthouse or overhead machinery space above the roof, if the openings have a total area not less than the minimum specified in rule 100.4c. Vents passing through machine rooms must be in noncombustible ducts. When a vent is installed in the roof of a hoistway, a protective grille must be provided to prevent persons from falling into the hoistway.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

#### 1320.0625 ANSI A17.1, RULE 100.4C.

ANSI A17.1, Rule 100.4 is amended to read as follows:

100.4c Pressurization of hoistway.

If air pressurization of a hoistway is used as a means of smoke and hot gas control, the air must not be introduced into the hoistway in such a manner as to cause erratic operation by impingement of traveling cables, selector tapes, governor ropes, compensating ropes, and other components sensitive to excessive movement or deflection.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

## 1320.0630 ANSI A17.1, RULE 101.5A.

ANSI A17.1, rule 101.5a is amended to read as follows:

101.5a Lighting.

Permanent electric lighting shall be provided in all machine rooms and machinery spaces.

The illumination shall be not less than ten footcandles at the floor level. The lighting control switch shall be located within easy reach of the access to such rooms or spaces. Where practicable, the light control switch shall be located on the lock-jamb side of the access door.

A 20-ampere, 110-to-120-volt AC ground-type convenience outlet shall be installed in the machine room. The circuit for this convenience outlet shall not be connected to the equipment circuits.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 11 SR 1405

#### 1320.0635 ANSI A17.1, RULE 106.1E.

ANSI A17.1, rule 106.1e is amended to read as follows:

106.1e Illumination of Pits.

A permanent lighting fixture shall be provided in all pits, which shall provide an illumination of not less than five footcandles at the pit floor. A light switch shall be provided and shall be so located as to be accessible from the pit access door.

A 20-ampere, 110-to-120-volt AC ground-type convenience outlet shall be installed in the pit. The circuit for this convenience outlet shall not be connected to the equipment circuits.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

# 1320.0638 ANSI A17.1, Rule 100.7.

ANSI A17.1, Rule 100.7 is amended to read as follows:

100.7 Emergency signs.

Except at the main entrance level, an approved pictorial sign of a standardized design must be posted adjacent to each elevator call station to indicate that, in case of fire, the elevator will not operate and exit stairways should be used.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 11 SR 1405

#### 1320.0640 ANSI A17.1, RULE 110.2a.

ANSI A17.1, Rule 110.2a is amended to read as follows:

ANSI A17.1 — Rule 110.2a — Passenger elevators and freight elevators authorized to carry employees.

Entrances on passenger elevators and freight elevators authorized to carry employees must be one of the following types:

- (1) horizontal side, single or multisection:
- (2) swing, single section;
- (3) combination horizontal slide and swing;
- (4) power-operated, vertical slide biparting counterbalanced, or vertical slide counterweighted which slide down to open, where located at entrances used by passenger (See Rule 207.4); or
  - (5) hand- or power-operated vertical slide which slide up to open.

Elevator doors must provide a clear opening of at least 32 inches.

Exception: At landing openings used exclusively for freight, any type of entrance permitted by Rule 110.2b.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 9 SR 1557; 11 SR 1405

#### 1320.0645 ANSI A17.1, RULE 111.9B.

ANSI A17.1, rule 111.9b is amended to read as follows:

111.9b — Location and Design of Hoistway Access Switches.

Hoistway access switches shall conform to the following:

- 1. Hoistway access switches shall be provided at top and bottom landings. The operation of the switch at the top floor shall be zoned to stop the top of the elevator car substantially level with the top floor.
- 2. The switch shall be installed adjacent to hoistway entrance at the access landing with which it is identified.
- 3. The switch shall be of the continuous-pressure spring-return type, and shall be operated by a cylinder-type lock having not less than a five-pin or

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five-disc combination with the key removable only when the switch is in the "OFF" position. The lock shall not be operable by any key which will operate locks or devices used for other purposes in the building. The key shall be available to and used only by inspectors, maintenance men, and repairmen.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 11 SR 1405

# 1320.0650 ANSI A17.1, RULE 111.9E.

ANSI A17.1, rule 111.9e is amended to read as follows:

111.9e — Location and Design of Hoistway Door Unlocking Devices.

Hoistway door unlocking devices shall conform to the following:

- 1. The device shall unlock and permit the opening of the hoistway door from the lowest landing irrespective of the position of the car.
  - 2. The device shall be installed only at the lowest landings.

Exception: For emergency use, see rule 111.10.

- 3. The device shall be designed to prevent unlocking the door with common tools.
- 4. The operating means for unlocking the door shall be provided with a special key not easily duplicated, and said key shall be available only to elevator mechanics and inspectors. The interlocks shall be designed and adjusted as to prevent movement of the car until after the door is closed and in the locking position.
- 5. The unlocking-device keyway shall be located at a height not greater than six feet 11 inches above the floor.

Note: For diagrammatic representation, see Appendix C.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

## 1320.0655 ANSI A17.1, RULE 112.5.

ANSI A17.1, rule 112.5 is amended to read as follows:

ANSI A17.1 — rule 112.5 — Reopening Device for Power-Operated Car Doors or Gates.

Where required by rule 112.3d or rule 112.4, a power-operated car door or gate shall be provided with a reopening device which will function to stop and reopen a car door or gate and the adjacent hoistway door in the event that the car door or gate is obstructed while closing. If the closing kinetic energy is reduced to 2-1/2 foot-pounds or less, the reopening device may be rendered inoperative (see rule 112.4-a).

For center-opening doors, the reopening device shall be so designed and installed that the obstruction of either door panel when closing will cause the reopening device to function.

Hoistway door protection in passenger elevators. Hoistway doors on all passenger elevators shall not be solely dependent upon the door edge reopening device for protection from the doors closing on an obstruction, but shall also be provided with an approved light beam or electronic door protection device.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

## 1320.0660 ANSI A17.1, RULE 210.2E.

ANSI A17.1, Rule 210.2e is amended to read as follows:

210.2e Emergency stop switches. Emergency stop switches are not permitted to be installed inside the car on new installations of automatic operation elevators.

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Note: Emergency stop switches must not be removed from existing automatic operation elevators which do not conform to Rule 210.10.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 9 SR 1557; 11 SR 1405

1320.0665 ANSI A17.1, RULE 211.1.

ANSI A17.1, Rule 211.1 is amended to read as follows:

Rule 211.1

Emergency communications. Every elevator car must be provided with a two-way communication system connected to an approved emergency service which operates 24 hours every day.

Statutory Authority: MS s 16B.59 to 16B.73

History: 9 SR 1557; 11 SR 1405 1320.0670 ANSI A17.1, RULE 211.3.

ANSI A17.1, Rule 211.3 is amended to read as follows:

211.3 Operation of elevators under fire or other emergency conditions. All elevators having a travel of 25 feet (7.62 meters) or more, above or below the designated level must conform to the requirements of Rule 211.3.

Note: (Rule 211.3): See Section 3 for definition of "designated level."

In buildings with elevators requiring phase I and II operation all floors must be served by cars sized to accommodate an ambulance stretcher in the horizontal position. The opening to the elevator car must be capable of passageway for such an ambulance stretcher.

Statutory Authority: MS s 16B.59 to 16B.73

History: 9 SR 1557; 11 SR 1405

1320.0675 ANSI A17.1, RULE 211.3D.

ANSI A17.1, Rule 211.3d is amended by adding the following:

The switches required by 211.3d must conform to the following:

Emergency elevators. All keyed switches installed to operate elevators on emergency service must be keyed alike to a pattern approved by the administrative authority. In lieu of the above, keys for emergency elevator service may be in a metal box placed in a location approved by the administrative authority, if the box is locked with a five-pin tumbler core lock or equivalent which is keyed to the same pattern.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 11 SR 1405

### 1320.0680 ANSI A17.1, RULE 602.1.

ANSI A17.1, rule 602.1 is amended to read as follows:

Rule 602.1 — Car Safeties.

Elevators having a travel of more than 15 feet shall be provided with a car safety, attached to the underside of the car frame, capable of stopping and sustaining the car, and rated load.

The car safety device is not required to be operated by a speed governor, and may be of the instantaneous type operated as a result of the breaking or slackening of the suspension members.

Where the travel exceeds 40 feet, driving machines having hand-operated brakes shall also be equipped with an automatic speed retarder.

All handpowered elevators shall be equipped with a broken rope safety device.

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Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

# **AMENDMENTS TO ANSI A 17.1**

1320.0700 [Repealed, 11 SR 1405]

1320.0710 [Repealed, 11 SR 1405]

1320.0720 [Repealed, 11 SR 1405]

# 1320.0785 ANSI A17.1, RULE 703.1.

ANSI A17.1, rule 703.1 is amended to read as follows:

Rule 703.1 — Where Required.

Car and counterweight safeties shall not be required except for protection of spaces below hoistways for all dumbwaiter cars and counterweights having a rated load over 25 pounds. Where required, the car and counterweight safeties may be operated as a result of breaking the suspension means and may be of the inertia type without governors. Car safeties may be located in the car crosshead.

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

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

1320.0800 [Repealed, 11 SR 1405]

**1320.0900** [Renumbered 1320.0630]

**1320.1000** [Renumbered 1320.0635]

1320.1100 [Renumbered 1320.0640]

1320.1200 [Renumbered 1320.0645]

**1320.1300** [Renumbered 1320.0650]

1320.1400 [Renumbered 1320.0655]

1320.1500 [Repealed, 11 SR 1405]

1320.1600 [Repealed by amendment, 9 SR 1557]

**1320.1650** [Renumbered 1320.0660]

**1320.1700** [Renumbered 1320.0665]

1320.1800 [Repealed, 11 SR 1405]

**1320.1850** [Renumbered 1320.0670]

**1320.1900** [Renumbered 1320.0680]

**1320.2000** [Renumbered 1320.0785]

1320.2001 ANSI A17.1, RULE 2000.

ANSI A17.1, Rule 2000 is amended by adding the following language: INCLINED AND VERTICAL WHEELCHAIR LIFTS.

Scope. This part applies to vertical wheelchair lifts (ANSI Section 2000), and inclined wheelchair lifts (ANSI Section 2001), installed in buildings other than in or at a private residence for use by the physically handicapped. Wheelchair lifts do not meet the accessibility requirements contained in chapter 1340.

Note: See ANSI A17.1, Part XXI for the requirements for this equipment installed in or at a private residence.

Protection from weather. Devices must not be exposed to the outside elements.

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Testing, tests, and inspections must be made in accordance with the applicable provisions of part 1320.0400 of this code.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

# 1320.2005 ANSI A17.1, RULE 2000.6D

ANSI A17.1, Rule 2000.6D is amended to read as follows:

Rule 2000.6d Car and platform illumination lighting must comply with rule 204.7.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

## 1320.2010 ANSI A17.1B-1985, RULE 2000.10H.

ANSI A17.1, Rule 2000.10h is added to rule 2000 as follows:

Rule 2000.10h Release and application of driving-machine brake. Driving-machine brakes must not be electrically released until power has been applied to the driving machine motor. All power feed lines to the brake must be opened and the brake must apply automatically when:

- (1) any operating device in Rule 2000.10a or 2000.10b is in the stop position; or
  - (2) any electrical protective device functions.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 11 SR 1405

## 1320.2015 ANSI A17.1, RULE 2001.1A.

ANSI A17.1, Rule 2001.1a is amended to read as follows:

Rule 2001.1a Means of egress. Lifts must be installed so that the means of egress is maintained as required by the authority having jurisdiction.

When installed on ramps or stairs, the lift must be separated from the ramp or stair by a solid guard rail not less than 42 inches in height. Handrails complying with the requirements of the UBC Section 3306(j) must be provided on the ramp or stairway side of the guardrail.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

#### 1320.2020 ANSI A17.1, RULE 2001.6C.

ANSI A17.1, Rule 2001.6c,(2) is amended to read as follows:

Rule 2001.6c,(2). Guards of at least 6 inches (153 mm) high must be provided on the sides of the platform not used for access. A retractable metal guard at least 6 inches (153 mm) high must be provided on the lower access end side of the platform to prevent the wheelchair from rolling off that end of the platform. The guard must be automatically activated by the movement from the lower landing or manually activated and must remain in its elevated position until the platform returns to the lower landing. It must be provided with an electric contact which will stop the movement of the platform within 6 inches (153 mm) of travel away from the lower landing if the guard has failed to rise to its guarding position.

Means must be provided to prevent a wheelchair from rolling off the platform at the upper access end. When in use, the incline of the ramp must not be greater than:

- (a) 1 in 6 for heights up to 2-1/2 inches (64 mm).
- (b) 1 in 8 for heights greater than 2-1/2 inches (64 mm) and less than 3 inches (76 mm).

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(c) 1 in 12 for heights 3 inches (76 mm) or greater. A hand grip must be provided at a height of not less than 36 inches (914 mm) from the platform.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

## 1320,2025 ANSI A17.1, RULE 2001.6F.

Rule 2001.6f is amended to read as follows:

Rule 2001.6f Platform illumination. Lighting must comply with Rule 204.7.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

# 1320.2030 ANSI A17.1, RULE 2001.10H.

Rule 2001.10h is added to Rule 2001 as follows:

Rule 2001.10h Release and application of driving-machine brake. Driving-machine brakes must not be electrically released until power has been applied to the driving machine motor. All power feed lines to the brake must be opened and the brake must apply automatically when:

- (a) any operating device in Rule 2001.10a or 2001.10b is in the stop position; or
  - (b) any electrical protective device functions.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

# 1320.2035 ANSI A17.1, RULE 2002.

Rule 2002 is deleted in its entirety.

Statutory Authority: MS s 16B.59 to 16B.73

History: 11 SR 1405

## LIFTS AND HOISTS

#### 1320.2100 STAGE AND ORCHESTRA LIFTS.

Stage and orchestra lifts shall be designed, installed, constructed, and maintained so as to be reasonably safe to life, limb, and adjoining property and shall be approved by the administrative authority prior to installation or construction.

Statutory Authority: MS s 16B.59 to 16B.73

#### 1320.2200 MANLIFTS.

Manlifts must be designed, installed, constructed, and maintained so as to be reasonably safe to life, limb, and adjoining property and must conform to the rules of the Department of Labor and Industry, parts 5205.0010 and 5205.0550 to 5205.0590.

Statutory Authority: MS s 16B.59 to 16B.73

**History:** 9 SR 1557

#### 1320.2300 TEMPORARY INTERIOR AND EXTERIOR HOISTS.

Temporary interior and exterior hoists shall be designed, constructed, installed, and maintained so as to be reasonably safe to life, limb, and adjoining property and shall conform to Safety Requirements for Workman's Hoists, ANSI 10.4-1963, Safety Requirements for Material Hoists, ANSI 10.5-1969 and rules of the Department of Labor and Industry.

Statutory Authority: MS s 16B.59 to 16B.73

#### 1320.2400 MECHANICAL PARKING GARAGE EOUIPMENT.

Mechanized parking garage equipment shall be designed, constructed, installed,

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and maintained so as to be reasonably safe to life, limb, and adjoining property and shall conform to the standards specified in the American Standard Safety Code for Mechanized Parking Garage Equipment, ANSI A113.1 (R-1971).

Statutory Authority: MS s 16B.59 to 16B.73

1320.2500 [Repealed, 11 SR 1405]

1320.2600 [Repealed, 11 SR 1405]

1320.2700 [Repealed, 11 SR 1405]

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