

Chapter Comm 18

ELEVATORS

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- Comm 18.74 Operating devices and control equipment [A17.1 2000.10].
- Comm 18.75 Means of egress [A17.1 2001.1a].
- Comm 18.76 Clearances [A17.1 2001.1b].
- Comm 18.77 Cars and platforms [A17.1 2001.6].
- Comm 18.79 Capacity, load, speed and angle of inclination [A17.1 2001.7].
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- Comm 18.81 Capacity, speed and angle of inclination [A17.1 2002.7].
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Subchapter IV—Accessibility Requirements for Elevators

- Comm 18.83 Accessibility requirements for elevators.

Subchapter V—Limited-use Elevators

- Comm 18.85 Limited-use elevators.

Note: Chapter Ind 4 as it existed on August 31, 1988 was repealed and a new chapter ILHR 18 was created effective September 1, 1988. Chapter ILHR 18 was renumbered to be chapter Comm 18 under s. 13.93 (2m) (b) 1, Stats., and corrections made under s. 13.93 (2m) (b) 6 and 7, Stats., Register, October, 1996, No. 490. Corrections were made under s. 13.93 (2m) (b) 6, Stats., Register, April, 1998, No. 508.

Subchapter I—Administration and Enforcement

Comm 18.01 Purpose. Pursuant to ss. 101.12, 101.13 and 101.17, Stats., the purpose of this chapter is to protect the health, safety and welfare of the public and employes by establishing minimum standards for the design, construction, installation, operation, inspection, testing, maintenance, alteration and repair of elevators and related devices installed in all public buildings and places of employment.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.02 Scope. (1) COVERED EQUIPMENT. This chapter applies to the following equipment installed in public buildings and places of employment:

- (a) Elevators;
- (b) Power dumbwaiters;

- (c) Escalators;
- (d) Moving walks;
- (e) Stage and orchestra lifts;

Note: The applicable rules of Parts 1, 2 and 3 of ASME A17.1 are used to determine the safe operation of stage and orchestra lifts.

(f) Material lifts and dumbwaiters with automatic transfer devices;

- (g) Special purpose personnel elevators; and
- (h) Lifts for use by people with disabilities.

(2) EXEMPTED EQUIPMENT. This chapter shall not apply to the following equipment:

- (a) Conveyors complying with ANSI B20.1;
- (b) Tiering or piling machines used to move material to and from storage, and located and operated entirely within one story;
- (c) Equipment for feeding or positioning materials at machine tools, printing presses and similar types of equipment;
- (d) Hoists for raising or lowering materials and which are provided with unguided hooks, slings and similar means for attachment to the materials;
- (e) Skip or furnace hoists;

- (f) Wharf ramps;
- (g) Amusement devices, except equipment specified in sub. (1);
- (h) Stage curtain hoists;
- (i) Lift bridges;
- (j) Railroad car lifts or dumpers;
- (k) Mechanical lifts serving only the floor level on which the lift is located and used only for the transfer of material or equipment;

(L) Mechanized parking garage equipment and automotive hoists used only for maintenance or repair of motor vehicles; and

(m) Personnel hoists and belt manlifts covered by ch. ILHR 32.

Note: Conveyors, personnel hoists and manlifts located in the private sector are covered by the Occupational Health and Safety Act. In the public sector, this equipment is covered by ch. Comm 32.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; am. (1) (h), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.03 Application. (1) **NEW INSTALLATIONS.** Unless otherwise provided in this chapter, all new installations shall conform to the requirements of this chapter.

(2) **EXISTING INSTALLATIONS.** All existing installations shall conform to the rules in effect on the contract date of the initial installation.

(3) **ALTERATIONS, REPAIRS AND REPLACEMENTS.** All alterations, repairs and replacements of parts shall comply with the applicable provisions of this chapter.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.04 Petition for variance. (1) **PROCEDURE.** The department shall consider and may grant a variance to a provision in this chapter upon receipt of a fee and a completed petition for variance form from the owner, provided an equivalency is established in the petition for variance which meets the intent of the provision being petitioned. The department may impose specific conditions in granting a variance to promote the protection of the health, safety and welfare of the employees or the public. Violation of the conditions under which a variance is granted shall constitute a violation of the rules for which a variance is received.

Note: Copies of the petition for variance (form SB-8) are available at no charge from the Safety and Buildings Division, Customer Service Center, P.O. Box 7162, Madison, Wisconsin 53707.

Note: Section 101.02 (6), Stats., and ch. ILHR 3 outline the procedure for submitting petitions to the department and the department procedures for hearing petitions.

(2) **PETITION PROCESSING TIME.** Except for priority petitions, the department shall review and make a determination on a petition for variance within 30 business days of receipt of all calculations, documents and fees required to complete the review. The department shall process priority petitions within 10 business days of receipt of the required items.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.05 Penalties. Penalties for violations of this chapter shall be assessed in accordance with s. 101.02, Stats.

Note: Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employee, owner or other person who fails or refuses to perform any duty lawfully enjoined, within the time prescribed by the department, for which no penalty has been specifically provided, or who fails, neglects or refuses to comply with any lawful order made by the department, or any judgment or decree made by any court in connection with ss. 101.01 to 101.25, Stats. For each such violation, failure or refusal, such employee, owner or other person must forfeit and pay into the state treasury a sum not less than \$10 nor more than \$100 for each violation.

Note: Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employee thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.06 Appeals. (1) **APPEAL OF LOCAL ORDER.** Any person affected by a local order which may be in conflict with a provision of this chapter may petition the department for a hearing on the grounds that the local order is unreasonable and in conflict with the rule of the department.

Note: Section 101.01 (8), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of alderpersons, board of trustees or the village board, of any village or city, or the board of health of any municipality, or an order or direction of any official of such municipality, upon any matter over which the department has jurisdiction.

(2) **PETITION OF ADMINISTRATIVE RULE.** Pursuant to s. 227.12, Stats., any municipality, corporation or any 5 or more persons having an interest in an administrative rule may petition the department requesting the adoption, amendment or repeal of the rule.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.07 Fees. Fees for plan examination, installation application, inspection, certificate for operation and other services performed by the department pertaining to elevators and related equipment shall be submitted as specified in ch. Comm 2.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.08 Enforcement. This chapter shall be enforced by department, municipality and insurance inspectors certified by the department. The department shall have the responsibility for interpreting the rules in this chapter, including those in the incorporated ASME A17.1 standard, and for the approval of equipment and material. Requests for interpretations shall be in writing to the department.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Subchapter II—General Requirements

Comm 18.09 Plan examination and approval.

(1) **PLAN SUBMITTAL.** Plans and specifications for all new installations covered by this chapter and the following alterations shall be submitted to the department or municipality for examination and approval:

- (a) Increase in rated load or speed;
- (b) Increase in dead weight of car by 10% or more;
- (c) Increase or decrease in travel;
- (d) Change in classification from freight to passenger service or from passenger to freight service;
- (e) Addition of hoistway doors or gates;
- (f) Relocation of machine room or machinery space;
- (g) Replacement of an existing driving machine by a new driving machine; and
- (h) Replacement of an existing controller by a new controller.

(2) **SUBMITTAL INFORMATION.** At least 3 sets of plans, including specifications, shall be submitted to the department for review. The plans shall include all of the following:

(a) A plan of the car, hoistway and machine room showing all clearances, including all inside car dimensions specified in ch. Comm 69.

(b) A section through the hoistway, machine room, pit and car showing all applicable dimensions. All landings shall be clearly shown, indicating types of hoistway doors or gates.

(c) A complete dimensioned layout of the machine room showing working clearances around machine, controller and disconnecting means.

(d) The size and weight per foot of guiderails and details of their support, including reinforcements where required.

(e) Sufficient data and information for the department to determine if the elevators, mechanical lifting devices and machine rooms comply with the requirements of this chapter and chs. Comm 69 and ILHR 50 to 64 and 66. This information shall include the location of the elevators or mechanical lifting devices and the name and address of the owner.

(3) **APPLICATION FOR INSTALLATION OR ALTERATION.** Prior to commencing work, at least 3 completed copies of the department application form shall be submitted to the department for all new installations, alterations listed in sub. (1) (a) to (h) and the following alterations:

- (a) Change in type of operation or control;
- (b) Addition of phase I emergency recall and phase II emergency in-car operation specified in ASME A17.1 Rule 211.3;
- (c) Change in size or type of suspension ropes;
- (d) Replacement, change in type, or addition of a car or counterweight safety or governor;
- (e) Replacement of hoistway doors;
- (f) Addition of hoistway-door locking devices or car door or gate electric contacts;
- (g) Addition of top-of-car operating devices;
- (h) Addition of hoistway-door, car-door or gate operating devices;
- (i) Addition of car-leveling or truck-zoning devices;
- (j) Change in size or type of guiderails;
- (k) Replacement of valves; and
- (l) Replacement of hydraulic jacks.

Note: Copies of the department application form (SB-22) are available from the Division of Safety and Buildings, Customer Service Center, P.O. Box 7162, Madison, Wisconsin 53707, telephone (608) 261-8471, TTY (608) 264-8777.

(4) APPROVAL OF PLANS AND APPLICATION. All approvals of plans and applications for installation or alteration shall be performed by certified department or municipal elevator inspectors.

(a) **Conditional approval.** If, upon examination, the department or municipality determines that the plans and application for installation or alteration substantially conform to the provisions of this chapter, a conditional approval, in writing, shall be granted. All noncode-complying conditions stated in the conditional approval shall be corrected before or during construction. A conditional approval issued by the department or municipality shall not be construed as an assumption of any responsibility for the design or construction of the equipment.

(b) **Denial of approval.** If the department or municipality determines that the plans or the application do not substantially conform to the provisions of this chapter, the application for conditional approval shall be denied, in writing.

(c) **Revocation of approval.** The department or municipality may revoke any approval, issued under the provisions of this chapter, for any false statements or misrepresentation of facts on which the approval was based.

(d) **Commencing work.** On-site fabrication or installation shall not commence before the plans and application are approved and an elevator permit issued.

(5) OWNER'S RESPONSIBILITY. The submission of plans, specifications and application form shall be the responsibility of the building owner when the manufacturer, manufacturer's representative or distributor does not submit that information.

(6) PROCESSING TIME. The department shall review and make a determination on an application for approval of an installation or an alteration within 15 business days of receiving the required information.

(7) MANUFACTURER'S RESPONSIBILITY. A manufacturer of any elevator or lift installed in a public building or place of employment shall provide the owner with a copy of the approved plans for the installed units in the building.

(8) INSTALLER'S RESPONSIBILITY. The installer shall certify to the owner that the mechanical equipment installed is in compliance with all applicable codes and shall explain the maintenance requirements necessary for the safe operation of the mechanical equipment installed.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; correction in (2) (a) made under s. 13.95 (2m) (b) 7, Stats., Register, December, 1997, No. 504; r. and recr. (2), am. (3) (intro.), (j) and (k), cr. (3) (l), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.10 Tests and inspections. (1) NEW INSTALLATIONS. (a) **General requirements.** 1. New elevator installations shall be tested and inspected by:

- a. A staff person of the department; or

- b. An authorized representative of the department who has received a letter of authorization from the department and who holds a valid credential issued under s. Comm 5.64.

2. Certified elevator inspectors shall determine whether or not the elevator installations conform to the conditionally approved plans and the provisions of this chapter.

3. The elevator installations may not be placed into service until a certified inspector determines the installation substantially conforms to this chapter.

Note: Tests and inspections are specified in ASME A17.1 Part 10, subject to the changes, additions and omissions specified in subch. III.

(b) **Notification for inspection.** The department shall be notified at least 10 days prior to the time the new installation is complete and ready for inspection.

(c) **Company representation.** A representative of the company installing the equipment shall be present during the tests and inspections specified in par. (a).

(d) **Registration numbers.** All new equipment, as specified in s. Comm 18.02 (1), shall be assigned a registration number by the department or municipality. The registration number shall be located as follows:

- 1. Elevators: on the car crosshead or at locations readily visible;
- 2. Dumbwaiters: in or on the car structure;
- 3. Escalators, moving walks: in the machine room at locations visible from the access opening; and
- 4. Other equipment: at locations readily visible.

(2) EXISTING INSTALLATIONS. (a) **Inspection.** An installation of equipment specified in s. Comm 18.02 (1) shall be inspected at least once every calendar year, except an inclined wheelchair lift and a stairway chairlift shall be inspected at least once every 3 years. All inspections required by this chapter shall be performed by certified inspectors.

(b) **Maintenance.** Elevators, dumbwaiters, escalators and moving walk or moving ramp equipment shall be kept in safe operating condition, properly lubricated and clean, including pits, machine rooms and machinery spaces.

(3) REINSPECTION. Equipment found to be in noncompliance will be reinspected as determined by the department or municipality to obtain compliance with the provisions of this chapter.

(4) ALTERATIONS. Every alteration specified in ASME A17.1 Part 12 and s. Comm 18.63, shall be inspected as determined by the department or municipality.

(5) INSPECTION REPORT. All certified inspectors shall file an inspection report with the department, on a form approved by the department, within 14 days after the inspection. The report shall identify items of noncompliance.

Note: Copies of the department elevator inspection form (SB-2D) and test report form (SB-2E) are available from the Division of Safety and Buildings, Customer Service Center, P.O. Box 7162, Madison, Wisconsin 53707, telephone (608) 261-8471, TTY (608) 264-8777.

(6) COMPLIANCE DATE. Every item which is listed on the inspection report as being out of compliance with this chapter shall be corrected on or before the compliance date stated on the report.

(7) COMPLIANCE WITH ORDERS. If a certified inspector is unable to obtain compliance with this chapter, the inspector shall notify the department. If it becomes necessary for the department to conduct inspections, a fee in accordance with s. Comm 2.15 will be charged for each inspection.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (1) (a), Register, December, 1997, No. 504, eff. 1-1-98.

Comm 18.11 Prohibited installations. (1) NEW AND EXISTING INSTALLATIONS. The following requirements shall apply to both new and existing installations:

(a) **Belt or chain driven machines.** A belt or chain driven machine shall not be used for a passenger elevator installation, except for an oil hydraulic elevator.

(b) *Friction gearing or clutch mechanism.* A friction gearing or a clutch mechanism shall not be used to connect a driving-machine drum or sheave to the main driving gear of any elevator.

(c) *Drum type installations.* A drum type freight elevator installation equipped with a mechanical brake shall not have a hoistway limit switch, car door or gate electric contact, hoistway landing door or gate electric contact or any combination thereof.

(d) *Power attachments on hand-powered elevators.* Power attachments, such as worm reduction units, rope clutch or rope grip devices, belts to improvised rope wheels, or any similar device, shall not be installed on any hand-powered elevator unless all requirements for power elevators are complied with.

(2) **NEW INSTALLATIONS.** The following requirements shall apply to new installations:

(a) *Counterbalance elevators.* Elevator cars shall not counterbalance each other.

(b) *Hand cable controls.* Hand cable control power operated elevators and dumbwaiters are prohibited.

History: Cr Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.12 Certificate for operation. (1) ISSUANCE. If the department, after inspection, determines that the installation conforms with the provisions of this chapter, a certificate for operation shall be issued by the department. The department shall issue a certificate for operation within 15 business days of the determination that the installation meets the applicable requirements of this chapter. The certificate for operation shall be posted in the equipment room.

(2) **EXPIRATION.** Certificates for operation shall be effective from the date of issuance until the next scheduled periodic inspection.

(3) **REVOCAION.** The department may revoke the certificate for operation if the equipment is found to be in noncompliance with the applicable safety standard. Upon revocation of the certificate for operation, the department shall notify the owner, in writing, of the noncomplying items and afford the owner the opportunity for a hearing within 30 days from the date of revocation.

History: Cr Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.14 Adoption of standards by reference.

(1) **CONSENT TO INCORPORATE.** Pursuant to s. 227.21, Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the standards listed in sub. (4).

(2) **COPIES.** Copies of the adopted standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies of the standards may be purchased through the respective organizations listed in sub. (4).

(3) **INTERIM AMENDMENTS.** Interim amendments of the adopted standards shall have no effect in the state until this chapter is revised to reflect those changes.

(4) **ADOPTION AND AVAILABILITY OF STANDARDS.** The following standards are hereby incorporated by reference into this chapter:

(a) *Safety code for elevators.* The American National Standard Safety Code for Elevators and Escalators, ASME A17.1-1990, subject to the substitutions, additions or omissions specified in subch. III is hereby incorporated by reference into this chapter.

Note: Copies of the ASME A17.1-1990 standard may be purchased from the ASME Order Department, 22 Law Drive, Box 2300, Fairfield, N.J. 07007-2300.

(b) *National fire alarm code.* The National Fire Protection Association (NFPA), National Fire Alarm Code, NFPA 72-1993, is hereby incorporated by reference into this chapter.

Note: Copies of the NFPA 72-1993 standard may be purchased from the NFPA, One Batterymarch Park, Quincy, MA 02169.

History: Cr Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.15 Construction and operation. All installations of equipment under the scope of this chapter shall conform

to the American National Standard Safety Code for Elevators and Escalators, ASME A17.1-1990, subject to those changes, additions and omissions specified in subch. III.

History: Cr Register, March, 1994, No. 459, eff. 4-1-94.

Subchapter III—Changes, Additions or Omissions to Adopted Standards

Comm 18.16 Changes, additions or omissions to ASME A17.1. Changes, additions or omissions to the ASME A17.1 standard are specified in this subchapter and are rules of the department and are not requirements of the ASME A17.1 standard.

Note: The referenced A17.1 section or rule number, located in brackets, follows the Comm designation and precedes the text of the rule. Example: Comm 18.23 [A17.1 Section 3].

History: Cr Register, March, 1994, No. 459, eff. 4-1-94.

INTRODUCTION

Comm 18.17 Scope and purpose [A17.1 Section 1 and Section 2]. (1) A17.1 Section 1—Scope and Section 2—Purpose and Exceptions do not apply in Wisconsin.

History: Cr Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.18 Definitions [A17.1 Section 3]. (1) ADDITIONS. The following are department definitions in addition to the definitions in A17.1 Section 3:

(a) “Department” means the department of commerce.

(b) “Clear floor space” means the minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

(c) “Fire-resistive rating” means a rating as defined in s. Comm 51.01 (50).

(d) “Municipality” means a city employing elevator inspectors certified by the department and exercising legal jurisdiction over elevator installations covered by this chapter.

(e) “Place of employment” has the meaning given in s. 101.01 (11), Stats.

Note: Section 101.01 (11), Stats., reads “Place of employment” includes every place, whether indoors or out or underground and the premises appurtenant thereto where either temporarily or permanently any industry, trade or business is carried on, or where any process or operation, directly or indirectly related to any industry, trade or business, is carried on, and where any person is, directly or indirectly, employed by another for direct or indirect gain or profit, but does not include any place where persons are employed in private domestic service which does not involve the use of mechanical power or in farming. “Farming” includes those activities specified in s. 102.04 (3), and also includes the transportation of farm products, supplies or equipment directly to the farm by the operator of said farm or employes for use thereon, if such activities are directly or indirectly for the purpose of producing commodities for market, or as an accessory to such production. When used with relation to building codes, “place of employment” does not include an adult family home certified under s. 50.01 (1) or, except for the purposes of s. 101.11, a previously constructed building used as a community-based residential facility, as defined in s. 50.01 (1g), which serves 20 or fewer unrelated residents.

(f) “Public building” has the meaning given in s. 101.01 (12), Stats.

Note: Section 101.01 (12), Stats., reads “Public building” means any structure, including exterior parts of such building, such as a porch, exterior platform or steps providing means of ingress or egress, used in whole or in part as a place of resort, assemblage, lodging, trade, traffic, occupancy, or use by the public or by 3 or more tenants. When used in relation to building codes, “public building” does not include a previously constructed building used as a community-based residential facility as defined in s. 50.01 (1g) which serves 20 or fewer unrelated residents or an adult family home defined under s. 50.01 (1).

(2) **SUBSTITUTIONS.** The following department definitions are substitutions for the respective definitions in A17.1 Section 3:

(a) “Approved” means acceptable to the department.

(b) “Building code” means chs. ILHR 50 to 64.

(c) “Capacity” or “rated load” means the approved safe live load specified on the application and plans submitted for approval.

(d) “Installations, existing” means equipment that has been completed or for which the contract was let before the effective date of any applicable rule change.

(e) "Installations, new" means equipment for which the contract has been let on or after the effective date of any applicable rule change.

(3) **DELETIONS.** The definition of "installation placed out of service" in A17.1 Section 3 does not apply in Wisconsin.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; correction in (1) (c) made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1997, No. 504; r. and recr. (1) (e) and (f), Register, April, 1998, No. 508, eff. 5-1-98.

Part I—Hoistways, Hoistway Enclosures and Related Construction for Electric Elevators

Comm 18.19 Construction of hoistways and hoistway enclosures [A17.1 100]. (1) **OBSERVATION ELEVATORS [A17.1 100.1C].** This is a department rule in addition to the requirements of A17.1 100.1c (2): This protection shall be not less than 7 feet in height.

(2) **DIFFERENCE IN FLOOR LEVELS [A17.1 100.3F].** This is a department rule in addition to the requirements of A17.1 100.3f: A toe board not less than 4 inches high shall be provided at the edge of the higher level.

(3) **CONTROL OF SMOKE AND HOT GASES [A17.1 100.4].** This is a department rule in addition to the requirements of A17.1 100.4: A ventilation opening in a hoistway wall, where provided, shall have guards securely anchored to the supporting structure inside the hoistway, consisting of a wire-mesh screen of at least 0.0915-inch diameter steel wire with openings which will reject a ball one inch in diameter, or expanded metal screen of equivalent strength and open area.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.20 Enclosure of machine rooms and machinery spaces [A17.1 101]. (1) **MACHINE ROOMS** These are department rules in addition to the requirements of A17.1 101.1a:

(a) **Related equipment.** Only equipment related to the maintenance and safe operation of the elevator shall be stored in the machine room. No other equipment or material shall be housed in this enclosure.

(b) **Guarding of floor openings.** The openings in machinery room floors, through which cables pass, shall be fitted with suitable guards to prevent any loose material from coming in contact with the cables, and to prevent any loose parts from dropping through the openings. The guards shall be at least 2 inches high and shall be securely attached to the floor.

(2) **IDENTIFICATION OF MACHINE ROOM AND CONTROL ROOMS [A17.1 101.6].** This is a department rule in addition to the requirements of A17.1 101.6: The entrance to the machine room and control rooms shall be identified with a permanent sign. The lettering on the sign shall be at least one-inch high and shall state "elevator machine room."

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.21 Installation of pipes or ducts conveying gases, vapors or liquids in hoistways, machine rooms or machinery spaces [A17.1 102.2]. (1) **HOISTWAYS OR MACHINE ROOMS.** The following are department rules in addition to the requirements of A17.1 102.2:

(a) **Sumps.** Sumps shall not be located in the elevator machine room.

(b) **Fire fighters' service.** Where sprinklers are installed in connection with an elevator machine room or hoistway, the elevator, regardless of the vertical travel distance, shall comply with Rules 211.3, 211.4 and 211.5 for fire fighters' service.

Note: See s. Comm 18.09 (3) for submittal requirements.

(2) **SPRINKLER SHUTOFF VALVES** Substitute the following wording for A17.1 102.2 (c) (3): Shutoff valves are not required

on sprinkler branch lines serving machine rooms and elevator hoistways.

(3) **MAIN LINE DISCONNECT.** These are department rules in addition to the requirements of A17.1 102.2 (c) (4):

(a) **Sprinklers in hoistway or machine room.** Where automatic fire sprinklers are installed in an elevator hoistway or machine room, or both, all of the following shall apply:

1. Sprinklers shall comply with the requirements of NFPA 13 as adopted in s. Comm 51.25.

2. Smoke detectors used to initiate fire fighters' service shall comply with the requirements of NFPA 72.

3. Heat detection shall be provided to open the main line power disconnect. Heat detectors used to disconnect the main line power supply shall comply with the requirement of NFPA 72.

(b) **Acceptance test.** An acceptance test shall be conducted in the presence of the authority having jurisdiction and the test shall verify compliance with this chapter.

Note: See Appendix for explanatory material.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.22 Guarding [A17.1 104.1]. This is a department rule in addition to the requirements of A17.1 104.1: Guarding beyond 7-0 high is not required.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.23 Design and construction of pits [A17.1 106.1b]. This is a department rule in addition to A17.1 106.1b (4): Drains or sumps shall be provided to serve the elevator pits. Drains and sumps shall comply with ss. Comm 82.33 (9) and 82.36 (11).

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

**Comm 18.24 Bottom and top clearances and run-
bys for elevator cars and counterweights [A17.1 107].**

(1) **BOTTOM CAR CLEARANCE [A17.1 107.1A].** These are department rules in addition to the requirements of A17.1 107.1a:

(a) Except as specified in par. (b), when the car rests on its fully compressed buffers or bumpers, there shall be a vertical clearance of not less than 24 inches between the pit floor and the lowest structural or mechanical part, equipment, or device installed beneath the car platform.

(b) Paragraph (a) does not apply to the following:

1. Any equipment on the car within 12 inches horizontally from any side of the car platform;

2. Any equipment located on or traveling with the car located within 12 inches horizontally from either side of the car frame centerline parallel to the guide rails; or

3. Any equipment mounted in or on the pit floor located within 12 inches horizontally from either side of the car frame centerline parallel to the guide rail.

(c) In no case shall the available refuge space be less than the following:

1. A horizontal area 24 inches by 48 inches, with a height of 24 inches; or

2. A horizontal area 18 inches by 36 inches, with a height of 42 inches.

(d) Trenches and depressions or foundation encroachments permitted by Rule 106.1b shall not be considered in determining these clearances.

(e) There shall be a minimum of 3 inches of clearance from the lowest projection of the car to the highest projection in the pit.

(2) **TOP CAR CLEARANCES FOR COUNTERWEIGHTED ELEVATORS [A17.1 107.1E].** Substitute the following wording for A17.1 107.1e (3): Two feet or the distance which any sheave or any other equipment mounted in or on the car crosshead projects above the top of the car crosshead, whichever is greater, but in no case shall there be less than 6 inches clearance above the equipment inclusive of

guide shoe assemblies or gate posts for vertical sliding gates, mounted on the car top or in or on the car crosshead when the car has reached its maximum upward movement.

(3) REFUGE SPACE ON TOP OF CAR ENCLOSURE [A17.1 107.1K]. This is a department rule in addition to the requirements of A17.1 107.1K: Refuge space of 650 square inches shall be outlined by contrasting color and identified "Refuge Space" by 2-inch high letters on the top of all car enclosures.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (1), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.25 Horizontal car and counterweight clearances [A17.1 108]. Replace 108.1a with the following: The running clearance between the car and hoistway enclosure and any projection within the hoistway enclosure shall not be less than 3/4 inch except on the sides used for loading and unloading.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.26 Hoistway-door locking devices, car door or gate electric contacts, hoistway access switches, and elevator parking devices [A17.1 111].

(1) LOCATION AND DESIGN OF HOISTWAY DOOR UNLOCKING DEVICES [A17.1 111.9E]. Substitute the following wording for A17.1 111.9e (2): The device shall be installed at all landings.

(2) ACCESS TO HOISTWAYS FOR EMERGENCY PURPOSES [A17.1 111.10]. Substitute the following wording for A17.1 111.10:

(a) The unlocking device operating key shall be located adjacent to the elevator disconnecting means located in the machine room. The key shall be identified and the following instructions shall be posted: "Place the disconnecting means in the off position and lock it, prior to using the hoistway door unlocking key."

(b) The machine room door key shall be kept in the building and shall be made available to emergency response personnel such as the fire department, police department, or other similar departments.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 2—Machinery and Equipment for Electric Elevators

Comm 18.27 Car enclosures, car doors and gates, and car illumination [A17.1 204]. **(1) TOP EMERGENCY EXITS [A17.1 204.1E (1) (C)].** This is a department rule in addition to the requirements of A17.1 204.1e (1) (c): The top exit cover shall be hinged to open outward. The exit cover shall be openable only from the top of the car, where it shall be openable without the use of special tools. The exit cover of the lower compartment of a multi-deck elevator shall be openable from both compartments.

(2) SIDE EMERGENCY EXITS [A17.1 204.2D]. Substitute the following wording for A17.1 204.2d: Side emergency exits are not permitted in Wisconsin.

(3) PASSENGER CAR DOORS AND GATES [A17.1 204.5]. (a) *Type required [A17.1 204.5b].* Substitute the following wording for A17.1 204.5b: In new buildings, horizontally sliding doors or gates subject to the restrictions of Rule 204.5c, shall be provided at each car entrance.

(b) *Vertical sliding doors or gates [A17.1 204.5 (c)].* Substitute the following wording for A17.1 204.5 (c): Vertical sliding doors and gates on passenger elevators are not permitted for use in Wisconsin.

(4) ILLUMINATION AND OUTLETS REQUIRED [A17.1 204.7A]. Substitute the following wording for A17.1 204.7a (4): Each elevator shall be provided with an electric light fixture and at least one 120 volt, single phase, 15- or 20-ampere receptacle on the car top and on the underside of the car platform.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.28 Car and counterweight safeties [A17.1 205]. **(1) REQUIRED DROP TEST [A17.1 205].** These are department rules in addition to the requirements of A17.1 205:

(a) *Drop test.* Every car safety device not previously approved by the department, shall be subjected to a drop test as outlined in this paragraph. The test shall be made at the risk and expense of the elevator manufacturer and witnessed by the department.

1. The test shall be made with the total load on the car safety device. The total load shall include the weight of the car structure, the safety device, the live load, and all appurtenances and devices attached to the car.

2. The free fall shall be such that the safety under test shall have attained the maximum governor tripping speed before the safety actuating device starts to function, except that where approval is desired for speeds greater than 280 feet per minute the governor tripping speed need not exceed 280 feet per minute.

3. The total drop from the starting point to rest for type B safeties shall not exceed 15 feet.

4. The application of the car safety device shall not cause the car platform to become out of level in excess of 1/2 inch per foot in any direction.

5. A drop test made on a car safety device that is designed and constructed to trip by inertia, when set within the drop test requirements, shall be considered as satisfactory. The governor in connection with the above car safety device shall be tested separately to determine the tripping speed as required in A17.1 Table 205.3.

(b) *Plans and specifications.* Complete plans and specifications for every car safety device and speed governor to be tested shall be submitted to the department.

(2) GOVERNOR-ACTUATED SAFETIES AND CAR-SAFETY-MECHANISM SWITCHES REQUIRED [A17.1 205.7]. Substitute the following wording for the first paragraph of Section A17.1 205.7 (a): Counterweight safeties, where provided, and car safeties shall be actuated by a separate speed governor.

(3) MARKING PLATES FOR SAFETIES [A17.1 205.14]. This is a department rule in addition to the requirements of A17.1 205.14: The manufacturer's identification, as designated on the approved plans required by s. Comm 18.09, shall also be marked on the metal plate.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.29 Speed governors [A17.1 206].

(1) SPEED GOVERNORS REQUIRED AND LOCATION [A17.1 206.1]. Substitute the following wording for A17.1 206.1 (a): Counterweight safeties and car safeties shall be actuated by separate speed governors.

(2) SPEED-GOVERNOR MARKING PLATE [A17.1 206.9]. This is a department rule in addition to the requirements of A17.1 206.9: The manufacturer's identification, as designated on the approved plans required by s. Comm 18.09, shall also be marked on the metal plate.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.295 Minimum rated load for passenger elevators [A17.1 207.1]. This is a department rule in addition to the requirements of A17.1 207.1: In all buildings at least 4 stories or more in height and in all health care facilities, including medical clinics, at least one elevator shall be designed to accommodate a 76 inch by 24 inch ambulance stretcher in the horizontal position. The door and car size shall permit the entrance and exit of an ambulance stretcher without tilting the stretcher at any time.

Note: See s. Comm 51.01 (122) for definition of "story".

History: Cr. Register, December, 1997, No. 504, eff. 1-1-98.

Comm 18.30 Operating devices and control equipment [A17.1 210]. **(1) TOP-OF-CAR OPERATING DEVICE [A17.1 210.1D (4)].** This is a department rule in addition to the requirements of A17.1 210.1d: Portable types shall be provided with hardware to securely mount it when not in use.

(2) EMERGENCY STOP SWITCH [A17.1 210.2 (E)]. (a) Substitute the following wording for the first paragraph of A17.1 210.2 (e): On all freight elevators, an emergency stop switch may be provided

in the car, and located in or adjacent to each car operating panel. When opened, this switch shall cause the electric power to be removed from the elevator driving-machine motor and brake.

(3) CAR SIDE-EMERGENCY-EXIT DOOR CONTACT SWITCHES [A17.1 210.2 (S)]. Section A17.1 210.2 (s) does not apply in Wisconsin.

(4) IN-CAR STOP SWITCH [A17.1 210.2 (V)]. Substitute the following wording for A17.1 210.2 (v):

(a) On a passenger elevator, a switch which will stop a car at any speed shall not be located within the car.

(b) A door hold-open keyed or toggle switch shall be permitted provided it is rendered inoperative when the elevator is under the emergency control required by A17.1 211.3.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.31 Emergency operation and signaling devices [A17.1 211]. (1) SIGNALING DEVICES This is a department rule in addition to the requirements of A17.1 211.1 (b); Emergency two-way communication systems within cars shall comply with ch. Comm 69, ADAAG 4.10.14.

(2) STANDBY EMERGENCY POWER [A17.1 211.2]. This is a department note in addition to the requirements of A17.1 211.2:

Note: Special emergency standby power requirements for elevators in health care facilities are found in the National Electrical Code, Article 517 as adopted under ch. Comm 16 and for high-rise buildings these requirements are found in s. ILHR 52.01.

(3) FIRE FIGHTERS' SERVICE [A17.1 211.3] (a) *Application* [A17.1 211.3, *intro. par.*]. Substitute the following wording for A17.1 211.3, *intro. par.*: All automatic elevators shall conform to the requirements of Rule 211.3. The requirements of Rule 211.3 do not apply when the travel of the elevator does not exceed 6 feet 8 inches, the hoistway does not penetrate a floor and the hoistway, or portion of the hoistway, is not required to be fire-resistive construction.

(b) *Smoke detectors* [A17.1 211.3b]. Substitute the following wording for A17.1 211.3b, (*intro.*): Smoke detectors used to initiate fire fighters' service shall comply with the requirements of NFPA 72. Smoke detectors shall be installed in each elevator lobby and associated machine room in accordance with NFPA 72. The lobby smoke detector shall be visible and located within 15 feet from all elevator hoistway doors. Smoke detectors are not required in elevator lobbies at unenclosed landings. Smoke detectors may be installed in any hoistway, and shall be installed in hoistways which are sprinklered.

Note: See A 17.1 102.2 for requirements relating to installation of pipes or ducts conveying gases, vapors or liquids in hoistways, machine rooms or machinery spaces.

(4) SWITCH KEYS [A17.1 211.8]. This is a department rule in addition to the requirements of A17.1 211.8: An additional set of switch keys and elevator machine room keys for use by the fire department, police department or emergency squad shall be kept in a metal box mounted in a conspicuous location at the designated floor or other approved level. The box shall have a lock-type cover, which can be opened only by the fire department, police department or emergency squad.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Part 3—Hydraulic Elevators

Comm 18.32 Hoistways, hoistway enclosures, and related construction [A17.1 300]. (1) MACHINE ROOMS AND MACHINERY SPACES [A17.1 300.2]. Substitute the following wording for A17.1 300.2: Machine rooms and machinery spaces shall comply with the requirements of Rules 101.1 to 101.5 and 101.7.

(2) MINIMUM BOTTOM AND TOP CAR RUNBY [A17.1 300.3B]. This is a department rule in addition to A17.1 300.3b: Where existing pits are used, the bottom car clearance shall be maintained at a minimum of 24 inches; however, the minimum runby may be reduced as determined by the department.

(3) EQUIPMENT PROJECTING ABOVE THE CAR TOP [A17.1 300.3E]. Substitute the following wording for A17.1 300.3e: When a car reaches its maximum upward movement, all equipment, including guide shoe assemblies or gate posts for vertically sliding gates, attached to and projecting above the car top, shall be at least 6 inches from striking any parts of the overhead structure or any equipment located in the hoistway.

(4) REFUGE SPACE ON TOP OF CAR ENCLOSURE [A17.1 300.3G]. This is a department rule in addition to A17.1 300.3g: Refuge space of 650 square inches shall be outlined in contrasting colors and be identified "Refuge Space" by 2-inch high letters on top of all car enclosures.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.33 Driving machines [A17.1 302].

(1) COLLECTION OF OIL LEAKAGE [A17.1 302.3G]. Substitute the following wording for A17.1 302.3g: A drip ring or reservoir shall be provided at the packing gland of the cylinder to collect the oil leakage. Collected oil shall be automatically returned by a separate pumping unit to a reservoir located outside of the hoistway.

(2) INSTALLATION BELOW GROUND [A17.1 302.3H]. Substitute the following wording for A17.1 302.3h: A cylinder installed below ground shall be provided with a protective casing immune to galvanic or electrolytic action, salt water, and other known underground conditions, which completely surrounds the exterior surface of a cylinder.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.34 Anti-creep leveling devices [A17.1 306.3 (a)]. Substitute the following wording for A17.1 306.3 (a): It shall maintain the car within 1/2 inch of the landing irrespective of the position of the hoistway door.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 4—Power Sidewalk Elevators

Comm 18.35 Scope [A17.1 Part IV]. This is a department rule in addition to A17.1 Part 4: A power sidewalk elevator shall not pierce a sidewalk, or be located within a building, and shall not be located in an area used by people or vehicles as a place of travel.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 5—Private Residence Elevators

Comm 18.36 Scope [A17.1 Part V]. Substitute the following wording for the A17.1 Part 5 Scope: Part 5 residential elevators complying with this part and as modified in ss. Comm 18.361 to 18.40 may only be installed in places of worship built prior to the effective date of this section.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.361 Hoistways, hoistway enclosures and related construction [A17.1 500].

(1) HOISTWAY ENCLOSURE CONSTRUCTION [A17.1 500.1]. (a) Substitute the following wording for A17.1 500.1, first paragraph, last sentence: The fire-resistive rating shall be in accordance with the requirements of Rule 100.1.

(b) [A17.1 500.1] Section A17.1 500.1 (a) to (d) does not apply in Wisconsin.

(2) PITS [A17.1 500.2]. This is a department rule in addition to the requirements of A17.1 500.2: A level pit shall be provided to accommodate all elevator equipment, but the minimum pit depth shall not be less than 12 inches.

(3) TOP CAR CLEARANCE [A17.1 500.3]. Substitute the following wording for A17.1 500.3: The top car clearance shall be not less than 24 inches when the elevator reaches its maximum mechanical upward limit of travel.

(4) PROTECTION OF HOISTWAY OPENINGS [A17.1 500.4]. (a) *Hoistway gates* [A17.1 500.4]. This is a department rule in addition to

the requirements of A17.1 500.4: As used in this part hoistway gates are prohibited.

(b) *Opening of hoistway doors or gates [A17.1 500.4e].* Substitute the following wording for A17.1 500.4e: Hoistway doors shall comply with s. Comm 18.362 (3).

(5) PIPES IN HOISTWAYS [A17.1 500.5] Substitute the following wording for A17.1 500.5: An installation of a pipe or duct conveying gases, vapors or liquids in a hoistway, machine room or machinery space shall comply with Rule 101.2.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.362 Cars [A17.1 501]. (1) CAR FRAMES AND PLATFORMS [A17.1 501.1]. This rule is a department rule in addition to the requirements of A17.1 501.1: A car platform shall be protected against fire as specified in Rule 203.8.

(2) CAR ENCLOSURE [A17.1 501.2] This rule is a department rule in addition to the requirements of A17.1 501.2: A car enclosure shall comply with Rules 204.1f and 204.2.

(3) CAR DOORS AND GATES [A17.1 501.4]. (a) *Construction [A17.1 501.4 intro.].* Substitute the following wording for A17.1 501.4 intro paragraphs: A car door or gate which, when closed, shall guard the full entrance opening and shall be provided at each entrance to the car. Car doors and collapsible car gates shall be of a solid design.

(b) *Power operation of car doors and gates [A17.1 501.4a].* Substitute the following wording for A17.1 501.4a:

1. a. Except as specified in subd. 2., hoistway doors shall be power-opening and self-closing and shall comply with Rule 112.2a (1), 112.3, 112.5 and 112.6. Power-opening hoistway doors shall not swing into the clear floor space required for the operation of the door-opening control.

b. Car gates shall be power-opening and power-closing and shall comply with the requirements of Rules 112.3, 112.5 and 112.6.

2. Hoistway doors may be manual-opening and self-closing, if the minimum maneuvering clearances at the hoistway doors are provided in accordance with the following:

a. When a person enters and exits the car from the same side of the car, the minimum maneuvering clearances at the pull-side of the hoistway door shall be provided as shown in ch. Comm 69, ADAAG 4.13.6, Figure 25 (a) for the pull side of swinging doors with a front approach. The maximum force for pushing or pulling open a hinged hoistway door shall comply with ch. Comm 69, ADAAG 4.13.10 and 4.13.11.

b. When a person enters on one side of the car and exits on the opposite side of the car, the minimum maneuvering clearances at the pull-side of the hoistway doors shall comply with ch. Comm 69, ADAAG 4.13, Figure 25 for the pull side of doors. The maximum force for pushing or pulling open a hinged hoistway door shall comply with ch. Comm 69, ADAAG 4.13.10 and 4.13.11.

(c) *Car door or gate locking devices [A17.1 501.4b].* Substitute the following wording for Rule 501.4b: Hoistway enclosures shall be continuous for the full travel of the car.

(4) LIGHT IN CAR [A17.1 501.5]. Substitute the following wording for A17.1 501.5: Lights on cars shall comply with Rule 204.7.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (3) (b) and (c), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.363 Location and guarding of counterweights [A17.1 502.2]. Substitute the following wording for A17.1 502.2: Counterweights shall be located in the hoistway of the elevator which they serve. Where the space below the hoistway is not permanently secured against access, counterweights shall comply with Section 109.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.364 Buffers and buffer supports [A17.1 505.1]. Rule 505.1 (c) is deleted and does not apply in Wisconsin.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.365 Driving machines, sheaves and their supports [A17.1 506]. (1) HYDRAULIC DRIVING MACHINE [A17.1 506.4]. Substitute the following wording for the first paragraph of A17.1 506.4: Direct-plunger hydraulic driving machines shall conform to the requirements of Sections 302 and 303.

(2) SCREW MACHINES [A17.1 506.5]. Substitute the following wording for A17.1 506.5: Screw machines, where used, shall conform to the requirements of Section 1804, except that the rated speed shall not exceed 30 feet per minute.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.366 Stopping devices required [A17.1 507.1]. Substitute the following wording for A17.1 507.1 (c), the first paragraph: If the driving machine is of the sprocket and chain suspension type.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.367 Operating devices and control equipment [A17.1 508]. (1) KEY-OPERATED SWITCHES [A17.1 508.3]. Substitute the following wording for A17.1 508.3: Key-operation is prohibited, except a key switch may be used for any car which is exterior to a church built prior to the effective date of this section.

(2) EMERGENCY STOP SWITCH [A17.1 508.7]. Substitute the following wording for A17.1 508.7:

(a) An emergency stop switch, if provided, shall comply with the requirements of Rule 210.2 (e).

(b) A stop switch shall be provided on top of the car and shall comply with Rule 210.2 (h).

(3) SLACK-CHAIN DEVICES FOR ROLLER-CHAIN TYPE DRIVING MACHINES [A17.1 508.8]. Eliminate the entire first paragraph of Rule A17.1 508.8.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.368 Emergency signal [A17.1 509.1]. Substitute the following wording for A17.1 509.1: Emergency signal devices shall comply with Rule 211.1.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.369 Limitation of load, speed and rise [A17.1 510]. (1) CAPACITY [A17.1 510.1]. Substitute the following wording for A17.1 510.1: The rated load shall be at least 650 pounds or 40 pounds per square foot with a maximum load of 750 pounds. The net platform area shall not exceed 18 square feet and shall have a minimum clear width of 32 inches and a minimum clear length of 54 inches.

(2) SPEED [A17.1 510.2]. Substitute the following wording for A17.1 510.2: The rated speed shall not exceed 30 feet per minute.

(3) RISE [A17.1 510.3]. Substitute the following wording for A17.1 510.3: The rise shall be less than 25 feet.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.40 Suspension means [A17.1 512]. (1) SUSPENSION ROPES [A17.1 512.2]. Substitute the following wording for A17.1 512.2: Suspension ropes shall be not less than 3/8 inches in diameter.

(2) FASTENING OF WIRE ROPE SUSPENSION MEANS TO CAR OR TO THE COUNTERWEIGHT [A17.1 512.8]. Substitute the following wording for A17.1 512.8: The fastening of a wire rope suspension means to a car or to a counterweight shall conform to the requirements of Rule 212.9.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.41 Private residence inclined elevators [A17.1 513]. Substitute the following wording for A17.1 Section 513: Private residence inclined elevators shall not be installed in public buildings or places of employment.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Part 6—Hand Elevators

Note: There are no changes, additions or omissions to A17.1 Part 6.

Part 7—Power Dumbwaiters

Comm 18.42 Scope [A17.1 Part 7]. Substitute the following wording for A17.1 Part 7 Scope: This part applies to power dumbwaiters.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.43 Hoistways, hoistway enclosures and related construction [A17.1 700]. (1) CONSTRUCTION OF HOISTWAYS AND HOISTWAY ENCLOSURES [A17.1 700.1 (D)]. Substitute the following wording for A17.1 700.1 (d): Rule 100.3b and 100.6 do not apply in Wisconsin.

(2) LOCATION AND GUARDING OF COUNTERWEIGHTS [A17.1 700.4]. Substitute the following wording for A17.1 700.4: The requirements for the location and guarding of counterweights do not apply in Wisconsin.

(3) TYPES OF ENTRANCES. Section A17.1 700.11b (2) does not apply in Wisconsin.

(4) CLOSING HOISTWAY DOORS OF HAND DUMBWAITERS [A17.1 700.11C]. Section A17.1 700.11c does not apply in Wisconsin.

(5) SIZE AND LOCATION OF HOISTWAY-DOOR OPENINGS [A17.1 700.11D]. Section A17.1 700.11d does not apply in Wisconsin.

(6) HOISTWAY-ACCESS DOORS [A17.1 700.11E]. This is a department rule in addition to A17.1 700.11e: Hoistway access door panels shall be provided with an electric contact to remove power to the driving means when the panel is not in the closed position.

(7) HOISTWAY-DOOR VISION PANELS [A17.1 700.11H]. Substitute the following wording for A17.1 700.11h: Vision panels not less than 4 square inches nor more than 12 square inches shall be provided in hoistway doors where position indicators are not provided. Vision panels shall be 1/4-inch clear wire glass mounted flush with the surface of the landing side of the door.

(8) HOISTWAY-DOOR LOCKING DEVICES [A17.1 700.12B]. Section A17.1 700.12b does not apply in Wisconsin.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.44 Car doors and gates [A17.1 701.5b]. Section A17.1 501.5b (12) does not apply in Wisconsin.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.45 Rated load and platform area [A17.1 701.8a]. Substitute the following wording for A17.1 701.8a: The maximum rated load shall not exceed 500 lbs. The inside net platform area shall not be more than 9 square feet.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 8—Escalators

Comm 18.46 General [A17.1 805.1]. These are department rules in addition to A17.1 805.1:

(1) HANDRAIL ENTRY DEVICE. A handrail entry device shall be provided at each newel. It shall operate in the handrail entry direction only, shall be of the manual reset type, and shall cause the escalator to stop by removing power from the driving machine motor and brake. It shall operate in either of 2 ways:

(a) If an object becomes caught between the handrail and the handrail guard; or

(b) If an object approaches the area between the handrail and handrail guard.

(2) COMB-STEP IMPACT DEVICES. Manual reset type devices shall be provided which cause the opening of the power circuit to the escalator driving machine motor and brake if either:

(a) A horizontal force in the direction of travel is applied exceeding 112 pounds of force at either side, or exceeding 225

pounds of force at the center of the front edge of the combplate; or

(b) A resultant vertical force in an upward direction is applied exceeding 150 pounds of force at the center of the front of the combplate.

(3) STEP LATERAL DISPLACEMENT DEVICE. In the event that a step is excessively displaced horizontally due to a failure in the lateral support system, a device shall be provided, on curved escalators, to cause the opening of the power circuit to the escalator driving machine motor and brake. The device shall be of the manually reset type.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 9—Moving Walks

Comm 18.47 General [A17.1 905.1]. This is a department rule in addition to A17.1 905.1:

(1) HANDRAIL ENTRY DEVICE. A handrail entry device shall be provided at each newel. It shall operate in the handrail entry direction only, shall be of the manual reset type, and shall cause the moving walk to stop by removing power from the driving machine motor and brake. It shall operate in either of 2 ways:

(a) If an object becomes caught between the handrail and the handrail guard; or

(b) If an object approaches the area between the handrail and the handrail guard.

(2) COMB-PALLET IMPACT DEVICES. Manual reset type devices shall be provided which will cause the opening of the power circuit to the moving walk driving machine motor and brake if either:

(a) A horizontal force in the direction of travel is applied exceeding 112 pounds of force at either side, or exceeding 225 pounds of force at the center of the front of the combplate; or

(b) A resultant vertical force in an upward direction is applied exceeding 150 pounds of force at the center of the front of the combplate.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 10—Routine, Periodic and Acceptance Inspections and Tests

Comm 18.48 Persons authorized to make inspections and tests [A17.1 1000.1]. (1) GENERAL [A17.1 1000.1]. Substitute the following wording for A17.1 1000.1: Elevator inspectors shall be certified in accordance with s. Comm 5.64.

(2) PERIODIC INSPECTION AND TESTS [A17.1 1000.1B]. (a) *General requirements.* Substitute the following wording for A17.1 1000.1b: Periodic inspections and tests shall be performed by:

1. A staff person of the department; or

2. An authorized representative of the department who has received a letter of authorization from the department and who holds a valid credential issued under s. Comm 5.64.

(b) *Witnessing of inspections.* The department may require witnessing of inspections and tests or retests.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, December, 1997, No. 504, eff. 1-1-98.

Comm 18.49 Installation placed out of service [A17.1 1000.3]. Substitute the following wording for A17.1 1000.3:

(1) REMOVED FROM USE. Elevators reported as not being used shall not be subjected to the annual inspection provided the installation conforms with the following requirements:

(a) All hoistway landing doors or gates shall be securely sealed to prevent opening from the landings.

(b) The conductors shall be disconnected from the load side terminals of the machine room circuit-breaker or disconnect switch.

(c) The fuses shall be removed from the disconnect switchbox and it shall be sealed by the department.

(d) For hand elevators, in addition to sealing the hoistway doors or gates, the car platform shall be substantially blocked and the hoisting cables removed from the car crosshead.

(2) **PUT BACK IN USE.** Before the installation is put back in use, it shall be subject to the required annual inspection by [the] department.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.50 Inspection and test periods [A17.1 1001.1]. Substitute the following wording for A17.1 1001.1: The routine inspection and tests of passenger and freight electric elevators shall be made at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.51 Inspection and test periods [A17.1 1002.1]. Substitute the following wording for A17.1 1002.1: In addition to the routine inspections and tests specified under Rule 1001.2, the inspections and tests specified in Rule 1002.3 shall be made at intervals not longer than 5 years.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.52 One-year inspection and test requirements [A17.1 1002.2]. The following rules of A17.1 1002.2 do not apply in Wisconsin: 1002.2a Oil Buffers, 1002.2b Safeties, and 1002.2g Standby (Emergency) Power Operation.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.53 Five-year inspection and test requirements [A17.1 1002.3]. (1) **SAFETY AND GOVERNOR SYSTEMS [A17.1 1002.3A].** (a) Substitute the following wording for the first sentence of A17.1 1002.3a: Types A, B and C car safeties and their governors shall be tested with rated load in the car.

(b) Substitute the following wording for the last paragraph of A17.1 1002.3a: A tag shall be fastened to the governor-releasing carrier upon completion of a satisfactory test of the car safety device and speed governor. Reports of tests as specified in A17.1 1002.3a shall be submitted to the department with complete information on form SB-2E. Tags shall be furnished by the department.

(2) **EXEMPTIONS.** The following rules of A17.1 1002.3 do not apply in Wisconsin: 1002.3c Oil Buffers, 1002.3d Brakes, and 1002.3e Standby (Emergency) Power Operation.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.54 Inspection and test periods [A17.1 1004.1]. Substitute the following wording for A17.1 1004.1: The routine inspection and tests of passenger and freight hydraulic elevators shall be made at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.545 Inspection and test requirements [A17.1 1005.1]. Substitute the following wording for A17.1 1005.1: Testing of the relief valve setting is not required unless the relief valve setting is altered or if the seal is broken. If the relief valve setting is altered or if the seal is broken, Rule 303.2a, Item 210.1b shall apply.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.55 Three-year inspection and test requirements [A17.1 1005.3]. Section A17.1 1005.3 does not apply in Wisconsin.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.56 Inspection and test periods [A17.1 1007.1]. Substitute the following wording for A17.1 1007.1: The routine inspection and tests of escalators and moving walks shall be made at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.57 Sidewalk elevator [A17.1 1010.1]. Substitute the following wording for A17.1 1010.1 second sentence: Routine inspections shall be performed at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.58 Private residence elevators and lifts [A17.1 1010.2]. Substitute the following wording for A17.1 Section 1010.2: Private residence elevators and lifts shall not be installed in public buildings or places of employment.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.59 Hand elevators [A17.1 1010.3]. Substitute the following wording for A17.1 1010.3 second sentence: Routine inspections shall be performed at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.60 Special purpose personnel elevators [A17.1 1010.6]. Substitute the following wording for A17.1 1010.6 second sentence: Routine inspections shall be performed at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.61 Inclined elevators [A17.1 1010.7]. Substitute the following wording for A17.1 1010.7 second sentence: Routine inspections shall be performed at intervals not longer than one year.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 11—Engineering and Type Tests

Note: There are no changes, additions or omissions to A17.1 Part 11.

Part 12—Alterations, Repairs, Replacements and Maintenance

Comm 18.62 General requirements [A17.1 1200].

(1) **CONFORMANCE WITH SAFETY CODE FOR EXISTING INSTALLATIONS [A17.1 1200.1].** Rule A17.1 1200.1 does not apply in Wisconsin.

(2) **SUSPENSION ROPES [A17.1 1200.4D].** These are department rules in addition to the requirements of A17.1 1200.4d:

(a) When ropes are replaced, the replacement ropes shall be the same as those specified by the original elevator manufacturer or shall be of an equivalent strength, weight and design.

(b) The ropes of a given set shall be from the same manufacturer and of the same material, grade, construction and diameter.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.63 Requirements for alterations [A17.1 1202 and 1203]. (1) **INCREASE OR DECREASE IN TRAVEL [A17.1 1202.10A AND 1203.4A].** This is a department rule in addition to the requirements of A17.1 1202.10a and A17.1 1203.4a: Where the alteration involves an increase or decrease in travel and the final travel exceeds the heights specified in A17.1 211.3, the applicable requirements of A17.1 211.3 shall be complied with.

(2) **ADDITION OF EMERGENCY RECALL AND EMERGENCY IN-CAR OPERATION [A17.1 1202.13 AND 1203.8H].** These are department rules in addition to the requirements of A17.1 1202.13 and 1203.8h: Where phase I and II operation is installed, the installation shall conform to the following requirements:

(a) The phase I and II operation shall conform to the requirements of A17.1 211.3.

(b) Emergency stop switches on passenger elevators, if provided in the car, shall be removed.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.64 Making safety devices inoperative [A17.1 1206.4]. This is a department rule in addition to the requirements of A17.1 1206.4: Nonrequired safety-related

devices installed on elevators or related equipment shall comply with the applicable provisions of this chapter.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.65 Maintenance of hydraulic elevators and dumbwaiters [A17.1 1206.5b]. Substitute the following wording for A17.1 1206.5b (5): A drip ring or reservoir shall be provided at the packing gland of the cylinder to collect the oil leakage. Collected oil shall be automatically returned by a separate pumping unit to a reservoir located outside of the hoistway.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 13—Design Data and Formulas

Note: There are no changes, additions or omissions to A17.1 Part 13.

Part 14—Material Lifts and Dumbwaiters With Automatic Transfer Devices

Note: There are no changes, additions or omissions to A17.1 Part 14.

Part 15—Special Purpose Personnel Elevators

Note: There are no changes, additions or omissions to A17.1 Part 15.

Part 16—Reference Codes, Standards and Specifications

Note: There are no changes, additions or omissions to A17.1 Part 16.

Part 17—Inclined Elevators

Note: There are no changes, additions or omissions to A17.1 Part 17.

Part 18—Screw Column Elevators

Note: There are no changes, additions or omissions to A17.1 Part 18.

Part 19—Elevators Used for Construction

Note: There are no changes, additions or omissions to A17.1 Part 19.

Comm 18.67 Operation and operating devices [A17.1 1901.2]. This is a department rule in addition to the requirements of A17.1 1901.2: All elevators shall have an assigned operator while in use.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Part 20—Inclined Stairway Chairlifts, and Inclined and Vertical Wheelchair Lifts

Comm 18.68 Scope [A17.1 Part 20 Scope]. Substitute the following wording for A17.1 Part 20 Scope:

(1) **SCOPE.** This part applies to vertical wheelchair lifts and inclined wheelchair lifts installed in or at public buildings or places of employment and to stairway chairlifts installed in or at existing places of worship.

(2) **WHERE PERMITTED (a) Vertical wheelchair lifts.** A vertical wheelchair lift complying with this chapter may only be used to provide vertical circulation between floor levels as specified in ch. Comm 69.

(b) **Inclined wheelchair lift.** 1. An inclined wheelchair lift complying with this chapter may only be used to provide vertical circulation between floor levels in buildings or facilities as specified in ch. Comm 69.

2. The inclined wheelchair lift shall be on an accessible route and the accessible route shall not pass through a room.

3. The inclined wheelchair lift in its operational position shall not infringe into the required exit width for the stairway.

(c) **Stairway chairlift.** 1. A stairway chairlift complying with this chapter may only be used in buildings or facilities as specified in ch. Comm 69.

2. A stairway chairlift installed in a required exit stairway shall be installed such that the required exit width as specified in chs. (ILHR) 50 to 64 shall be provided in addition to the space required for the stairway chairlift in its operational position. The minimum clear width shall be measured from the side of the lift,

in its operational position, to the nearest edge of the opposite handrail or stringer.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (2) (a), (b) 1. and (c) 1., Register, December, 1997, No. 504, eff. 1-1-98; corrections made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1997, No. 504.

Comm 18.69 Runway enclosure provided [A17.1 2000.1a]. (1) **VERTICAL SHAFT [A17.1 2000.1A].** This rule is in addition to the requirements of A17.1 2000.1a: A vertical shaft shall be designed and constructed in accordance with chs. (ILHR) 50 to 64.

(2) **DOORS [A17.1 2000.1A (2)].** These rules are in addition to the requirements of A17.1 2000.1a (2):

(a) **Door operation.** 1. Except as specified in subd. 2., hoistway doors shall be power-opening and self-closing and shall comply with Rule 112.2b (2). Power-opening hoistway doors shall not swing into the clear floor space required for the operation of the door-opening control. Door timing for hall calls and door delays for car calls shall comply with ch. Comm 69, ADAAG 4.10.7 and ADAAG 4.10.8.

2. Manual-opening and self-closing hoistway doors shall comply with s. Comm 18.362 (3) (b) 2.

Note: See Appendix B for an example of the maneuverability space required at a hoistway opening with a swing door.

(b) **Side entrances.** A side entrance to a lift is prohibited.

(c) **Lift operating keys and door unlocking device.** A set of lift operating keys and a door unlocking device which is intended for use by the fire department, police department or other authorized personnel in an emergency situation shall be located in a container marked "Emergency Lift Entry" and the container shall be adjacent to the lift on the main entrance level.

(d) **Vision panel.** A vision panel shall be provided in the hoistway door and shall be designed in accordance with Rules 110.7a and 110.7b.

(e) **Door size.** The doors to the hoistway shall provide a minimum clear opening of 32 inches.

(3) **RUNWAY ENTRANCE LOCKING DEVICE [A17.1 2000.1A (2)].** Substitute the following wording for A17.1 2000.1a (2), 5th sentence: The locking device may permit the door to be opened only if the platform is within 1/2 inch of that landing.

(4) **OVERHEAD CLEARANCE [A17.1 2000.1A (3)].** (a) This is a department rule in addition to the requirements of A17.1 2000.1a (3): A minimum overhead clearance of 6 feet 8 inches shall be provided between any point on the platform and the lowest overhead obstruction during the entire distance of travel.

(b) Substitute the following wording for the last sentence in A17.1 2000.1a (3): The locking device may permit the door to be opened only if the platform is within 1/2 inch of the landing.

(5) **RUNNING CLEARANCE [A17.1 2000.1A (6)].** Substitute the following wording for A17.1 2000.1a (6): The running clearance between the platform and entrance and exit sides shall be not less than 3/8 inch nor more than 3/4 inch.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (2) (a), cr. (2) (e), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.70 Runway enclosure not provided [A17.1 2000.1b]. (1) **SIDE ENTRANCE [A17.1 2000.1B].** This is a department rule in addition to the requirements of A17.1 2000.1b: A side entrance to a lift is prohibited.

(2) **RUNWAY ENTRANCE [A17.1 2000.1B (2)].** Substitute the following wording for A17.1 2000.1b (2) the 5th sentence: The door may be opened only if the platform is within 1/2 inch of the upper landing.

(3) **ACCESS TO LOWER LANDING [A17.1 2000.1B (3)].** Substitute the following wording for A17.1 2000.1b (3) the 4th sentence: The door may be opened only if the platform is within 1/2 inch of the lower landing.

(4) **HANDRAIL [A17.1 2000.1B (7)].** Substitute the following wording for A17.1 2000.1b (7) the 3rd sentence:

(a) **Number and location.** At least one handrail shall be provided extending the full length of either side guard.

(b) **Height, size and spacing.** The top of the handrail shall be mounted between 34 inches and 38 inches above the car floor. The space between the wall and the handrail shall be 1-1/2 inches. The handrail shall not project more than 4 inches from the wall.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (4) (b), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.71 Lower level access ramps and pits [A17.1 2000.1e]. Substitute the following wording for A17.1 2000.1e: Pits are not required. If a pit is not provided, any difference in elevation between the floor of the platform lift and the floor level of the building shall be overcome by ramps complying with ch. Comm 69, ADAAG 4.8.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; correction made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1997, No. 504; r. and recr. Register, April, 1998, No. 408, eff. 5-1-98.

Comm 18.72 Cars and platforms [A17.1 2000.6]. Substitute the following wording for A17.1 2000.6c: The net platform area shall not exceed 18 square feet with a minimum clear width of 32 inches and a minimum clear length of 54 inches.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.73 Limitation of load, speed and travel [A17.1 2000.7a]. Substitute the following wording for A17.1 2000.7a: A vertical wheelchair lift shall comply with the following:

- (1) **RATED LOAD.** The rated load shall be 750 pounds.
- (2) **SUSTAINING AND LOWERING A LOAD.** The lift shall be capable of sustaining and lowering a load as specified in Rule 207.1.
- (3) **RATED SPEED.** The rated speed shall not exceed 30 feet per minute.
- (4) **TRAVEL DISTANCE.** The travel shall not exceed 12 feet.
- (5) **NUMBER OF STOPS.** The lift shall have not more than 3 stops.
- (6) **FLOOR PENETRATION.** A vertical platform lift may penetrate one floor providing the design and construction of the vertical shaft complies with chs. ILHR 50 to 64. To eliminate shear and pinch points, the lift shall be enclosed in a shaft that is continuous from the lowest landing to a minimum height of 42 inches above the upper landing. The lift shall comply with A17.1 2000.1a.

(8) **ACCESSIBILITY FEATURES.** A platform lift shall be designed with all of the following accessibility features:

- (a) Raised and braille characters complying with ch. Comm 69, ADAAG 4.10.5.
- (b) Hall call buttons complying with ch. Comm 69, ADAAG 4.10.3 and ADAAG 4.27.
- (c) Floor surfaces complying with ch. Comm 69, ADAAG 4.10.10.
- (d) Illumination levels complying with ch. Comm 69, ADAAG 4.10.11.
- (f) Emergency communication systems complying with ch. Comm 69, ADAAG 4.10.14.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; corrections made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1997, No. 504; r. and recr. (6), cr. (8), Register, April, 1998, No. 408, eff. 5-1-98.

Comm 18.74 Operating devices and control equipment [A17.1 2000.10]. (1) **KEY OPERATION [A17.1 2000.10a].** Substitute the following wording for A17.1 2000.10a:

(a) Key operation of a lift is prohibited. If an entrance to a lift is to the exterior of a building, the owner may lock the lift entrance when the building is not occupied by the public or employees, providing written approval is given by the department.

(b) Operation of the lift shall be by continuous-pressure.

(2) **ATTENDANT OPERATION [A17.1 2000.10b].** Attendant operation is prohibited in Wisconsin.

(3) **EMERGENCY SIGNALS [A17.1 2000.11].** This is a department rule in addition to the requirements of A17.1 2000.11: If the lift is installed in an area not visible to personnel at all times, emergency signaling devices shall be provided in accordance with the requirements of Rules 211.1 (a) and 211.1 (b).

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. (2), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.75 Means of egress [A17.1 2001.1a]. Substitute the following wording for A17.1 2001.1a:

(1) **LOCATIONS.** An inclined wheelchair lift may be installed in a public building or place of employment only as permitted in ch. Comm 69.

(2) **INSTALLATION IN REQUIRED EXIT STAIRWAY.** When an inclined wheelchair lift is installed in an exit stairway, the minimum exit width required for the stairway under chs. ILHR 50 to 64 shall be provided in addition to the space required to install the lift in its operational position. The clear width of a stairway shall be measured from the side of the inclined wheelchair lift guard, in its operational position, to the nearest edge of the opposite handrail or stringer.

(3) **INCLINED WHEELCHAIR LIFT INSTALLED IN A NONREQUIRED STAIRWAY.** An inclined wheelchair lift installed in a nonrequired stairway shall comply with the following:

(a) Where less than 24 inches of clear stairway area, measured from the side of the inclined wheelchair lift or guard adjacent to the lift to the nearest edge of the opposite handrail or stringer, is provided in addition to the inclined wheelchair lift in its operational position, the entire stairway shall not be used by pedestrians. Gates, guardrails, barriers and similar devices shall be used to prevent the use of the stairway by pedestrians.

(b) Where a minimum of 24 inches of clear stairway area, measured from the side of the inclined wheelchair lift guard, in its operational position, to the nearest edge of the opposite handrail or stringer, is provided and the stairway area is guarded in accordance with s. Comm 18.76 (2), the stairway may be used by pedestrians.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; am. (1), Register, December, 1997, No. 504, eff. 1-1-98; r. and recr. (2), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.76 Clearances [A17.1 2001.1b]. These are department rules in addition to the requirements of A17.1 2001.1b:

(1) **LIFTS INSTALLED ON STAIRWAYS.** An inclined wheelchair lift shall be installed on a stairway.

(2) **GUARDING.** Guarding shall be provided to comply with the following:

(a) Solid guarding shall be provided between the lift runway and the stairway usable by pedestrians.

(b) The guarding shall have no openings and shall be of sufficient height to prevent any pinching or shearing points.

(c) On a stairway having less than 24 inches of clear space for pedestrians, the guarding shall be continuous so that the stairway cannot be used by pedestrians.

(3) **OVERHEAD CLEARANCE.** A minimum overhead clearance of 6 feet 8 inches shall be provided between any point on the platform and the lowest overhead obstruction during the entire distance of travel.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

Comm 18.77 Cars and platforms [A17.1 2001.6]. (1) **CONSTRUCTION [A17.1 2001.6A].** Substitute the following wording for A17.1 2001.6a (2): The platform area of a lift shall have a minimum clear width of 32 inches and a minimum clear length of 54 inches. The net inside platform area shall not exceed 18 square feet.

(2) **PLATFORM GUARDING [A17.1 2001.6C].** (a) **General [A17.1 2001.6c intro paragraph].** Substitute the following wording for

A17.1 2001.6c intro paragraph: Platform guarding shall be in accordance with Rule 2001.6c (1).

(b) *Roll off protection [A17.1 2001.6c (2)]*. 1. A17.1 2001.6c (2) the first sentence does not apply in Wisconsin.

2. Substitute the following wording for A17.1 2001.6c (2), second paragraph: A retractable metal guard at least 6 inches high shall be provided on the upper access end for units complying with A17.1 2001.6c (1) and (2). When in use, the incline of the ramp shall not be greater than:

- a. 1 in 6 for heights up to 2½ inches.
- b. 1 in 8 for heights greater than 2½ inches and less than 3 inches.
- c. 1 in 12 for heights 3 inches or greater.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. (3), Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.79 Capacity, load, speed and angle of inclination [A17.1 2001.7]. These are department rules in addition to the requirements of A17.1 2001.7:

(1) **LIMITATION ON TRAVEL.** An inclined wheelchair lift shall be limited to serve 3 stops and 2 consecutive stories.

(2) **VISIBILITY.** The lift shall be visible from all landing control stations during its entire length of travel.

(3) **RATED LOAD.** The rated load shall be 750 pounds.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94

Comm 18.80 Stairway chairlift runways [A17.1 2002.1]. This is a department rule in addition to the requirements of A17.1 2002.1: When a stairway chairlift is installed in an exit stairway, the minimum exit width required for the stairway under chs. LHR 50 to 64 shall be provided in addition to the space required to install the chairlift in its operational position. The clear width of the stairway shall be measured from the side of the lift in its operation position to the nearest edge of the opposite handrail or stringer.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

Comm 18.81 Capacity, speed and angle of inclination [A17.1 2002.7]. These are department rules in addition to the requirements of A17.1 2002.7:

(1) **LIMITATION ON TRAVEL.** An inclined stairway chairlift shall be limited to serve 3 stops and 2 consecutive stories.

(2) **OVERHEAD CLEARANCE.** A minimum overhead clearance of 6 feet 8 inches shall be provided between any point on the footrest and the lowest overhead obstruction during the entire distance of travel.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94.

*Part 21—Private Residence Inclined Stairway
Chairlifts, and Inclined and Vertical Wheelchair Lifts*

Comm 18.82 Private residence lifts [A17.1 Part 21]. The entire A17.1 Part 21 does not apply in Wisconsin, since a private residence lift is not permitted to be installed in a public building or place of employment.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, April, 1998, No. 508, eff. 5-1-98.

**Subchapter IV—Accessibility Requirements for
Elevators**

Comm 18.83 Accessibility requirements for elevators. (1) NEW ELEVATORS. All new elevators shall comply with the applicable accessibility requirements specified in ch. Comm 69 and ADAAG 4.10.

(2) **ALTERED ELEVATORS.** All altered elevators shall comply with the applicable requirements specified in ch. Comm 69, ADAAG 4.1.6 and ADAAG 4.10.

History: Cr. Register, March, 1994, No. 459, eff. 4-1-94; r. and recr. Register, December, 1997, No. 504, eff. 1-1-98; corrections made under s. 13.93 (2m) (b) 7, Stats., Register, December, 1997, No. 504.

Subchapter V—Limited-use Elevators

Comm 18.85 Limited-use elevators. (1) SCOPE. This subchapter applies to limited-use elevators installed in public buildings or places of employment to provide circulation between floor levels.

(2) **WHERE PERMITTED.** A limited-use elevator may be installed in a public building or place of employment to provide vertical circulation between floor levels as specified in ch. Comm 69.

(3) **HOISTWAY ENCLOSURE.** Hoistway enclosure construction shall be in accordance with the requirements of A17.1, Section 100 and the applicable sections of chs. LHR 50 to 64 which reference vertical shaft construction.

(4) **MACHINE ROOMS.** A separate machine room shall be provided and shall comply with A17.1, Section 101.

(5) **ELECTRICAL.** All electrical equipment and wiring shall comply with A17.1, Section 102.

(6) **LOCATION AND GUARDING OF COUNTERWEIGHTS.** The location and guarding of counterweights shall conform to the requirements of A17.1, Section 103.

(7) **GUARDING OF EXPOSED AUXILIARY EQUIPMENT.** The guarding of exposed auxiliary equipment shall conform to the requirements of A17.1, Section 104.

(8) **MACHINERY AND SHEAVE BEAMS, SUPPORTS AND FOUNDATIONS.** Machinery and sheave beams, supports and foundations shall conform to the requirements of A17.1, Section 105.

(9) **PITS.** (a) *General.* A pit shall be installed in accordance with A17.1, Section 106 and s. Comm 18.23.

(b) *Floor level.* If a pit is created over an existing floor and the floor of the limited-use elevator is not at the same level as the floor level, then a level platform complying with s. LHR 52.04 (9) shall be provided at the entrance to the unit. The ramp to the level platform area shall comply with the applicable provisions of ch. Comm 69.

(10) **BOTTOM CAR CLEARANCES.** (a) Except as specified in pars. (b) and (c), the bottom car clearances shall comply with A17.1, Section 107.

(b) When the car rests on its compressed buffer, no part of the car or equipment attached thereto shall strike the pit or any part of the equipment located therein.

(c) The bottom runby of uncounterweighted elevators shall be not less than 3 inches.

(11) **TOP CAR CLEARANCE.** The top car clearance shall be not less than 24 inches when the car has reached its maximum limit of upward travel including a minimum of 3 inches to a maximum of 6 inches of runby.

(12) **HORIZONTAL CAR CLEARANCES.** Horizontal car clearances shall comply with A17.1, Section 108 and s. Comm 18.25.

(13) **PROTECTION OF SPACES BELOW HOISTWAYS.** The protection of spaces below hoistways shall conform to the requirements of A17.1, Section 109.

(14) **PROTECTION OF HOISTWAY OPENINGS.** (a) *General.* Except as specified in par. (d), the protection of hoistway openings shall comply with A17.1, Section 110.

(b) *Hoistway door.* A hoistway door shall comply with s. Comm 18.26.

(c) *Swing door.* Where a limited-use elevator is used which has a swing type door, the door shall not swing into or obstruct the required exit passageway.

(d) **Exceptions.** 1. The entrances specified under A17.1 Rule 110.2 shall be of the horizontal slide or single section swing type.

2. A17.1 Rules 110.10c, 110.10d, 110.12, 110.13e and 110.15c do not apply.

(15) HOISTWAY DOOR LOCKING DEVICES AND ELECTRICAL CONTACTS. (a) Except as specified in par. (b), hoistway door locking devices, hoistway door and car door electric contacts and hoistway access switches shall conform to the requirements of A17.1, Section 111 and s. Comm 18.26.

(b) Hoistway-unit system combination mechanical locks and electric contacts specified under A17.1 Rule 111.1b are not permitted.

(c) Truck zoning devices as specified in A17.1 Rules 111.3a (1) and 111.5a (1) are not permitted.

(d) A17.1 Rule 111.4 does not apply.

(e) A17.1 Rule 111.9c (2) does not apply, since the car cannot be operated at a speed greater than 30 feet per minute.

(f) The 18 inch dimension as specified in A17.1 Rule 111.12 for the unlocking zone shall be reduced in accordance with sub. (24).

(16) POWER OPERATION OF HOISTWAY DOORS AND CAR DOORS. (a) Except as specified in par. (b), car doors shall be power-opening and power-closing and hoistway doors shall be power-opening and may be self-closing. The car doors and hoistway doors shall also comply with the requirements of A17.1, Section 112.

(b) A17.1 Rules 112.2b (3), 112.3b and 112.3d do not apply.

(17) CLEARANCE BETWEEN HOISTWAY DOORS AND LANDING SILLS AND CAR DOORS. The clearance between the hoistway doors and the hoistway edge of the landing sill shall not exceed 1/4-inch. The distance between the hoistway face of the landing door and the car door or gate shall not exceed 2-1/4 inches.

(18) SAFETY FACTOR. All component parts of a limited-use elevator shall have a safety factor of at least 5 when the unit is in its normal use configuration.

(19) CAR AND COUNTERWEIGHT GUIDE RAILS. (a) Except as specified in par. (b), car and counterweight guide rails, guide rail supports and fastenings shall conform to the requirements of A17.1, Section 200.

(b) 1. The same set of guide rails may be used for both car and counterweight

2. A17.1 Rules 200.3 (a) and 200.3 (b) (1) do not apply. Guide rails, supports, joints, fishplates and fastenings which are not covered by Section 200 may be used, provided that the strengths, stresses and deflections are consistent with the requirements of A17.1, Section 200 for the loads imposed.

3. Where guide rail sections other than those specified in A17.1 Rule 200.3 (a) are used:

a. Rules 200.7b and 200.10b do not apply.

b. The rail joints shall be designed in accordance with Rule 200.5a and shall adequately maintain the accuracy of the rail alignment.

c. The allowable deflection of the guide rail shall be limited to prevent the safety device from disengaging the rail during application of the load.

(20) CAR AND COUNTERWEIGHT BUFFERS. Car and counterweight buffers shall comply with A17.1, Section 201.

(21) COUNTERWEIGHTS. Counterweights where used shall comply with A17.1, Sections 103 and 202.

(22) INDEPENDENT CAR COUNTERWEIGHTS. A17.1 Rule 202.1d applies, except that the counterweight may utilize the same guide rails as the car.

(23) CAR FRAMES AND PLATFORMS. Car frames and platforms shall comply with A17.1, Section 203.

(24) PLATFORM GUARDS. Platform guards shall be provided and shall be equal to the leveling zone plus 3 inches.

(25) CAR ENCLOSURE. Car enclosures shall comply with A17.1, Section 204 and s. Comm 18.27.

(26) CAR SAFETIES. (a) Except as provided in par. (c), car and counterweight safeties shall comply with A17.1, Section 205 and s. Comm 18.28.

(b) The force providing the stopping action shall conform to the requirements of Rule 205.9d or the following: Where guide rail sections other than those specified in Rule 200.3a are used, the application of safety stopping forces shall not cause deformation of the guide rail section [upon] whose dimensional stability the stopping capability is dependent.

(c) Car and counterweight safety devices shall be actuated by over speed governors complying with A17.1, Section 206.

(27) DRIVING MACHINE SHEAVES. Driving machines, sheaves and their supports shall comply with A17.1, Section 208.

(28) CAPACITY. (a) *Capacity or rated load.* The capacity or rated load shall be at least 750 pounds with a minimum of 80 pounds per square foot, but in no case shall the capacity or rated load exceed 1500 pounds.

(b) *Capacity plate.* The capacity plate and data plate shall comply with A17.1 Rule 207.3.

(c) *Exceptions.* A17.1 Rules 207.1a and 207.1b do not apply.

(29) MAXIMUM PLATFORM AREA. The maximum platform area shall not exceed 18.9 square feet and shall have a minimum clear dimension of 36 inches in width and 54 inches in length.

(30) RATED SPEED. The rated speed of these units shall not exceed 30 feet per minute.

(31) TRAVEL DISTANCE. The total travel distance shall be less than 25 feet.

(32) TYPES OF DRIVING MACHINES. The following driving machines are acceptable for installation:

(a) Traction complying with A17.1 Rule 208;

(b) Direct plunger hydraulic and roped hydraulic complying with the applicable sections of A17.1 Rule 300;

(c) Rack and pinion complying with A17.1 Rule 1600.

(33) TERMINAL STOPPING DEVICE. Terminal stopping devices shall comply with A17.1, Section 209.

(34) OPERATING DEVICES. Operating devices and control equipment shall be automatic and comply with A17.1, Section 210 and s. Comm 18.30.

(35) EMERGENCY SIGNAL DEVICES. Emergency signaling devices shall comply with A17.1 Rule 211.1.

(36) SUSPENSION MEANS. (a) Except as specified in par. (b), the suspension means shall comply with A17.1, Section 212.

(b) 1. The minimum factor of safety as specified in Rule 213.3 shall not be less than 7.0.

2. Approved wire rope may be used.

(37) HYDRAULIC LIMITED-USE ELEVATORS. Hydraulic type limited-use elevators shall comply with A17.1, Part III and ss. Comm 18.32 to 18.34.

(38) ACCESSIBILITY REQUIREMENTS. (a) Except as specified in par. (b), a limited-use elevator shall comply with the accessibility requirements specified in ch. Comm 69, ADAAG 4.10.

(b) 1. The requirements of ADAAG 4.10.4 do not apply to single automatic operation elevators.

2. The minimum floor area and door size specified in ADAAG 4.10.9 to not apply.

History: Cr Register, March, 1994, No. 459, eff. 4-1-94; am. (1) and (2), r. and recr. (38), Register, December, 1997, No. 504, eff. 1-1-98; correction in (9) made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1997, No. 504.