Clearinghouse Rule 97-093

RULES CERTIFICATE Department of Commerce

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, William J. McCoshen , Secretary of the Department of Commerce,

and custodian of the official records of said department, do hereby certify that the annexed rule(s) relating to

Elevators and Mechanical Lifting Devices (Subject)

were duly approved and adopted by this department.

I further certify that said copy has been compared by me with the original on file in the department and that the same is a true copy thereof, and of the whole of such original.



5-1-98

ORDER OF ADOPTION Department of Commerce

Pursuant to authority vested in the	Department of Commerce by section(s) 101.02, 101.12, 101.13, 101.17
and 145.02 S	itats., the Department of Commerce X creates; X amends;
Chapter Comm 18	Elevator Code
Chapter Comm 82	Uniform Plumbing Code
Chapter ILHR 50, 51 and 55	Building and Heating, Ventilating and Air Conditioning Code
(number)	(Title)
The attached rules shall take effect	on The first day of the month following publication in the Wisconsin
Administrative Register	pursuant to section 227.22, Stats.



Adopted at Madison, Wisconsin this	
date: 2 25 98	
DEPARTMENT OF COMMERCE	
Secretary	



State of Wisconsin \ Department of Commerce

RULES in FINAL DRAFT FORM



Rule No.:Chapters Comm 18 and 82 and ILHR 50, 51 and 55Relating to:Elevators and mechanical lifting devicesClearinghouse Rule No.:97-093

COM-10535 (N.03/97)

The Wisconsin Department of Commerce proposes an order to repeal ss. Comm 18.07 Note, Comm 18.12 (3) Note, Comm 18.73 (5) Note, Comm 18.77 (3), ILHR 51.02 (22) 5. and ILHR 55.20; to amend ss. Comm 18.02 (1) (h), Comm 18.09 (3) (intro.), (j) and (k) and ILHR 51.23 (3); to repeal and recreate ss. Comm 18.09 (2), Comm 18.09 (3) Note, Comm 18.10 (5) Note, Comm 18.14, Comm 18.18 (1) (e) and (f), Comm 18.20, Comm 18.21, Comm 18.23, Comm 18.24 (1), Comm 18.31, Comm 18.362 (3) (b) and (c), Comm 18.41, Comm 18.58, Comm 18.69 (2) (a), Comm 18.70 (4) (b), Comm 18.71, Comm 18.73 (6), Comm 18.74 (2), Comm 18.75 (2) and (3), Comm 18.80, Comm 18.82, Comm 18 Appendix A and B, Comm 82.33 (9) (f), Comm 82.36 (11) (a) 2. and 5.; ILHR 50.12 (4) (dm), ILHR 51.03 Table 51.03-A footnote p, ILHR 51.161 (7) and ILHR 51.23 (3), and to create ss. Comm 18.09 (3) (1), Comm 18.69 (2) (e), Comm 18.73 (7) and ILHR 51.08 (2) Note relating to the design and construction of elevators and other mechanical lifting devices.

ANALYSIS OF RULES

Statutory Authority: ss. 101.02, 101.12, 101.13, 101.17 and 145.02 Stats. Statutes Interpreted: ss. 101.12, 101.13, 101.17 and 145.02 Stats.

Various code sections within chapters Comm 18 and 82 and chapters ILHR 50-64 relating to elevators and mechanical lifting devices are being modified.

The purpose of the changes is to improve clarity, eliminate duplicative rules in chapter Comm 18 and cross-reference the appropriate chapters. The following is a summary of the major changes being considered for these chapters.

1. Adopt by reference the National Fire Protection Association (NFPA), National Fire Alarm Code, NFPA 72-1993. [Comm 18.14]

2. Eliminate the requirement that all elevator shafts and machine rooms be constructed of 2-hour fire-resistive material. The fire-resistive ratings specified in s. ILHR 51.03-A, Classes of construction fire-resistive ratings in hours, will be used as the minimum ratings for elevator shafts. A sign will be required to identify the entrance to the machine room. [Comm 18.20, ILHR 51.02 (22) 5., ILHR 51.03-A and ILHR 55.20]

3. Require sprinklers in elevator shafts to be installed in accordance with NFPA 13 and require heat or smoke detectors in elevators to be installed in accordance with NFPA 72-1993. This change will simplify and make the installation of sprinklers in elevator shafts and machine rooms consistent with current national standards. [Comm 18.21, ILHR 51.23 (3), ILHR 51.24, intro. par. and ILHR 51.245 (1)]

4. Eliminate the requirement that just a drain must be provided in the pit of sprinklered elevators. The proposed rules will permit drains or sumps to be installed in elevator pits. However, sumps may not be installed in the elevator machine room. The elevator machine rooms are insufficient in size to provide the necessary clearances for all equipment, especially the electrical equipment. These changes were made to create a safe working environment. [Comm 18.21, Comm 18.23, Comm 82.33 (9) (f) and Comm 82.36 (11) (a) 2. and 5.]

5. Clarify that fire fighters' service is not required on elevators that travel less than 6 feet 8 inches and where the hoistway does not penetrate a floor. [Comm 18.31]

6. Clarify the door operation requirements for residential elevators and vertical wheelchair platform lifts. Depending on how a person enters and exits the units, maneuverability space for manually-opening doors must comply with ch. ILHR 69, ADAAG 4.13. [Comm 18.362 (3) (b) and Comm 18.69(2) (a)]

7. Clarify accessibility requirement by cross referencing ch. ILHR 69. [Comm 18.09 (2), Comm 18.71, Comm 18.85 and ILHR 50.12 (4) (dm)]

8. Modify the handrail requirements for elevators and wheelchair platform lifts to permit other shapes of handrails besides round. The handrails must still be installed with a clearance between the rail and the wall of 1-1/2 inches [Comm 18.70 (4) (b)]

9. Modify the handrail requirements in the Commercial Building Code to be consistent with the model code requirements. [ILHR 51.161 (7)]

10. Eliminate the additional requirements for handgrips in inclined wheelchair platform lifts. The requirements in the adopted ASME A17.1 will be used. [Comm 18.77 (3)]

11. Clarify that attendant operation is prohibited in Wisconsin. [Comm 18.74 (2)]

12. Clarify plan submittal requirements for elevators and other mechanical lifting equipment. [Comm 18.09 (3) and 50.12 (4) (dm)]

13. Modify sections in the plumbing code to be consistent with the elevator code relative to drains and sumps in elevator pits. [Comm 82.33 (9) (f) and 86.36 (11) (a) 2. and 5.]

14. Require the drains and sumps located in the elevator hoistway pit to accept only clearwater and storm water waste from the elevator hoistway pit. [Comm 82.36 (9) (f)]

SECTION 1. Comm 18.02 (1) (h) is amended to read:

Comm 18.02 (1) (h) Lifts for the physically disabled use by people with disabilities.

SECTION 2. Comm 18.07 Note is repealed.

SECTION 3. Comm 18.09 (2) is repealed and recreated to read:

Comm 18.09 (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. ILHR 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. ILHR 50 to 64, 66 and 69. This information shall include the location of the elevators or mechanical lifting devices and the name and address of the owner.

SECTION 4. Comm 18.09 (3) (intro.), (j) and (k) are amended to read:

Comm 18.09 (3) APPLICATION FOR INSTALLATION OR ALTERATION. Prior to commencing work, at least 2.3 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:

(j) Change in size or type of guiderails; and

(k) Replacement of valves-; and

SECTION 5. Comm 18.09 (3) (1) is created to read:

Comm 18.09 (3) (1) Replacement of hydraulic jacks.

SECTION 6. Comm 18.09 (3) Note is repealed and recreated to read:

-1-

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.

SECTION 7. Comm 18.10 (5) Note is repealed and recreated to read:

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.

SECTION 8. Comm 18.12 (3) Note is repealed.

SECTION 9. Comm 18.14 is repealed and recreated to read:

<u>Comm 18.14</u> 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) <u>Safety code for elevators</u>. 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) <u>National fire alarm code</u>. 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, Quincey, MA 02169.

SECTION 10. Comm 18.18 (1) (e) and (f) are repealed and recreated to read:

Comm 18.18 (1) (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 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)."

SECTION 11. Comm 18.20 is repealed and recreated to read:

<u>Comm 18.20 ENCLOSURE OF MACHINE ROOMS AND MACHINERY SPACES.</u> [A17.1 101] (1) MACHINE ROOMS. These are department rules in addition to the requirements of A17.1 101.1a:

(a) <u>Related equipment</u>. 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) <u>Guarding of floor openings</u>. 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 ROOMS 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."

SECTION 12. Comm 18.21 is repealed and recreated to read:

<u>Comm 18.21 INSTALLATION OF PIPES OR DUCTS CONVEYING GASES,</u> VAPORS OR LIQUIDS IN HOISTWAYS, MACHINE ROOMS OR MACHINERY SPACES. [A17.1 102.2] (1) HOISTWAY 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) <u>Fire fighters' service</u>. 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) <u>Sprinklers in hoistway or machine room</u>. 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. ILHR 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 requirements of NFPA 72.

(b) <u>Acceptance test</u>. 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.

SECTION 13. Comm 18.23 is repealed and recreated to read:

<u>Comm 18.23 DESIGN AND CONSTRUCTION OF PITS. [A17.1 106.1b]</u> 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).

SECTION 14. Comm 18.24 (1) is repealed and recreated to read:

Comm 18.24 (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 on the car to the highest projection in the pit.

SECTION 15. Comm 18.31 is repealed and recreated to read:

<u>Comm 18.31</u> 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. ILHR 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 healthcare facilities are found in the National Electrical Code, Article 517 as adopted under ch. ILHR 16 and for high-rise buildings these requirements are found in ILHR 52.01.

(3) FIRE FIGHTERS' SERVICE. [A17.1 211.3] (a) <u>Application. [A17.1 211.3, intro.</u> 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 the hoistway, is not required to be fire-resistive construction.

(b) <u>Smoke detectors. [A17.1 211.3b]</u> 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 A17.1 102.2 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.

SECTION 16. Comm 18.362 (3) (b) and (c) are repealed and recreated to read:

Comm 18.362 (3) (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 selfclosing 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.

-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. ILHR 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. ILHR 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. ILHR 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. ILHR 69, ADAAG 4.13.10 and 4.13.11.

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

SECTION 17. Comm 18.41 is repealed and recreated to read:

<u>Comm 18.41 PRIVATE RESIDENCE INCLINED ELEVATORS. [A17.1 513]</u> Substitute the following wording for A17.1 Section 513: Private residence inclined elevators shall not be installed in public buildings or places of employment.

SECTION 18. Comm 18.58 is repealed and recreated to read:

<u>Comm 18.58 PRIVATE RESIDENCE ELEVATORS AND LIFTS. [A17.1 1010.2]</u> 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.

SECTION 19. Comm 18.69 (2) (a) is repealed and recreated to read:

Comm 18.69 (2) (a) <u>Door operation</u>. 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. ILHR 69, ADAAG 4.10.7 and ADAAG 4.108.

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

SECTION 20. Comm 18.69 (2) (e) is created to read:

Comm 18.69 (2) (e) <u>Door size</u>. The doors to the hoistway shall provide a minimum clear opening of 32 inches.

SECTION 21. Comm 18.70 (4) (b) is repealed and recreated to read:

Comm 18.70 (4) (b) <u>Height, size and spacing</u>. 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.

SECTION 22. Comm 18.71 is repealed and recreated to read:

<u>Comm 18.71 LOWER LEVEL ACCESS RAMPS AND PITS. [A17.1 2000.1e]</u> 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. ILHR 69, ADAAG 4.8.

SECTION 23. Comm 18.73 (5) Note is repealed.

SECTION 24. Comm 18.73 (6) is repealed and recreated to read:

Comm 18.73 (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.

SECTION 25. Comm 18.73 (8) is created to read:

Comm 18.73 (8) ACCESSIBILITY FEATURES. A platform lift shall be designed with all of the following accessibility features:

(a) Raised and braille characters complying with ch. ILHR 69, ADAAG 4.10.5.

(b) Hall call buttons complying with ch. ILHR 69, ADAAG 4.10.3 and ADAAG 4.27.

(c) Floor surfaces complying with ch. ILHR 69, ADAAG 4.10.10.

(d) Illumination levels complying with ch. ILHR 69, ADAAG 4.10.11.

(f) Emergency communication systems complying with ch. ILHR 69, ADAAG 4.10.14.

SECTION 26. Comm 18.74 (2) is repealed and recreated to read:

Comm 18.74 (2) ATTENDANT OPERATION. [A17.1 2000.10b] Attendant operation is prohibited in Wisconsin.

SECTION 27. Comm 18.75 (2) and (3) are repealed and recreated to read:

-8-

<u>Comm 18.75 MEANS OF EGRESS. [A17.1 2001.1a]</u> Substitute the following wording for A17.1 2001.1a:

(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.

SECTION 28. Comm 18.77 (3) is repealed.

SECTION 29. Comm 18.80 is repealed and recreated to read:

<u>Comm 18.80 STAIRWAY CHAIRLIFT RUNWAYS. [A17.1 2002.1]</u> 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. ILHR 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.

SECTION 30. Comm 18.82 is repealed and recreated to read:

<u>Comm 18.82 PRIVATE RESIDENCE LIFTS. [A17.1 Part 21]</u> 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.

SECTION 31. Comm 18, Appendix A and B are repealed and recreated to read:

APPENDIX

The material contained in this appendix is for clarification purposes only. The material is numbered to correspond to the number of the rule as it appears in the text of the rule.

A-18.21 INSTALLATION OF PIPES OR DUCTS CONVEYING GASES, VAPORS OR LIQUIDS IN HOISTWAYS, MACHINE ROOMS OR MACHINERY SPACES. The following information provides the intent of the requirements relating to the installation of sprinklers in the elevator machine rooms and elevator hoistways.

The intent of s. Comm 18.21 and the following adopted national standards, ASME A17.1, NFPA 13 and NFPA 72 as they relate to fire sprinklers installed in elevator machine rooms and elevator hoistways is threefold and sequential. When smoke and rapid temperature rise from a fire is detected in either the machine room or the hoistway, the following sequence of events must occur:

1. Smoke detectors are provided in machine rooms and elevator hoistways to initiate fire fighters' service. A smoke detector is required because it is a type of fire detector that has a fast response time in reaction to fire growth. The purpose of fire fighters' service is to dispatch elevators to a specific floor designated by the fire department when the smoke detector alarm is activated. The elevator cars will remain at the designated floor for use by emergency personnel only.

2. Heat detectors are provided to initiate the disconnection of the primary electrical power source to the elevator. The heat detector responds to a specific temperature by tripping an automatic circuit breaker, which must be of the manual reset type. Heat detectors used to initiate the elevator shutdown must have both a lower temperature rating and a faster response time index (RTI) as compared to the automatic fire sprinklers installed in the hoistway or in the machine room.

3. Fire sprinklers are provided to control and suppress the fire. When the fire sprinkler responds to a specific temperature, water is released and distributed over the fire, thereby wetting, smothering, cooling and extinguishing the fire.

Summary:

1. Prior to water flow from the fire sprinklers, the power must be disconnected. This is the reason a heat detector must be located within two feet of each sprinkler installed in the hoistway or in the machine room.

2. A preaction sprinkler system may be installed to comply with Comm 18.21, but the use of a preaction system is not required.

3. The required acceptance test should be performed in the presence of the owner's representative, the local fire inspector and the elevator inspector who will be issuing the certificate to operate the elevator. The owner's representative may be the responsible design professional or the elevator contractor. The local building inspector may also want to witness this acceptance test. Bringing all interested parties together for one acceptance test will help avoid delays in the required approval process.

4. The acceptance test must verify that each smoke detector installed in the hoistway, in the machine room, and in the elevator lobbies will initiate fire fighters' service. The heat detectors installed in the hoistway and in the machine room must disconnect the power to the elevator. If these actions are verified, the requirements have been met and the systems may be accepted and placed into operation. If deficiencies are discovered, corrections must be made and followed by another acceptance test.

5. For elevators without sprinklers see the requirements of Comm 18.31.

SECTION 32. Comm 82.33 (9) (f) is repealed and recreated to read:

Comm 82.33 (9) (f) <u>Elevator drains</u>. 1. All drains serving elevator pits shall discharge to the storm drain system as specified in s. Comm 82.36 (3).

2. Drains serving elevator pits shall not connect directly with the storm drain system by means of gravity flow piping.

3. A sump may not be located in an elevator machine room.

4. A drain serving an elevator pit that discharges to a sump shall have a submerged inlet constructed to maintain a minimum 6 inch trap seal.

5. A sump located in an elevator pit may only receive storm or clearwater waste from the elevator pit or the elevator machine room, or both.

SECTION 33. Comm 82.36 (11) (a) 2. and 5. are repealed and recreated to read:

Comm 82.36 (11) (a) 2. 'Construction and installation.' a. Except as specified in subd. 2. b., the sump shall have a rim extending at least one inch above the floor immediately adjacent to the sump. The sump shall have a removable cover of sufficient strength for anticipated loads. The sump shall have a solid bottom.

b. Where the sump is installed in an exterior meter pit or elevator pit, the rim shall be level with the floor.

5. 'Removable covers.' a. Except as specified in subd. 5. b., penetrations through the top of removable sump covers shall be limited to those for the electrical supply, the vent piping and the discharge piping for the pump or pumps.

b. A sump installed in an exterior meter pit or an elevator pit may be provided with an open grate cover.

Note: In accordance with s. Comm 18.21, a sump may not be located in an elevator machine room.

SECTION 34. ILHR 50.12 (4) (dm) is repealed and recreated to read:

ILHR 50.12 (4) (dm) <u>Elevator and mechanical lift data</u>. When an elevator, limited-use elevator, residential elevator, vertical wheelchair lift, inclined wheelchair lift, stairway chairlift or other mechanical lifting device is to be installed in a public building or place of employment, the following information, when applicable, shall be included on the building plans and submitted to the department for review:

1. Size of cabs or platforms for elevators, limited-use elevators, residential elevators and wheelchair platform lifts.

Note: See chs. Comm 18 and ILHR 69 for the minimum cab and platform sizes.

2. Rating and construction of vertical shafts for elevators, limited-use elevators, residential elevators and vertical wheelchair lifts.

3. Door clearances to elevators, limited-use elevators, residential elevators and vertical wheelchair lifts.

4. Maneuverability clearances at elevators, limited-use elevators, residential elevators and wheelchair platform lifts.

Note: See chs. Comm 18 and ILHR 69 for maneuverability clearances at doors.

5. The accessible route to the methods of vertical circulation provided in a building or facility.

6. Location and width of all exits and stairways in a building or facility when an inclined wheelchair platform lift or stairway chairlift is installed. The mechanical lifting devices in their operational position shall not infringe into the minimum exit width required for the building or facility.

Note: The minimum exit width required for a building or facility is based on the capacity of the building or facility. See the applicable sections of chs. ILHR 50 to 64 for determining the capacity and exit width.

SECTION 35. ILHR 51.02 (22) 5. is repealed.

SECTION 36. ILHR 51.03, Table 51.03-A, footnote p is repealed and recreated to read:

Table 51.03-A, footnote p The elevator machine rooms shall have the same fire-resistive rating specified in line 20 for fire enclosures. Where the elevator machine room is the only room located above the roofline of a building, the fire-resistive rating for fire enclosures is not required.

SECTION 37. ILHR 51.08 (2) Note is created to read:

Note: See Table 51.03-A, footnote p for elevator machine room ratings.

SECTION 38. ILHR 51.161 (7) is repealed and recreated to read:

ILHR 51.161 (7) HANDRAIL DIMENSIONS. (a) Except as specified in par. (b), handrails serving stairways or ramps shall have a circular cross-section with an outside diameter of at least 1-1/4 inches and not greater than 2 inches. Handrails shall be graspable along the entire length.

(b) Any other shape handrail with a perimeter of at least 4 inches, but not greater than 6-1/4 inches and with the largest cross-sectional dimension not exceeding 2-1/4 inches may be used.

SECTION 39. ILHR 51.23 (3) is repealed and recreated to read:

ILHR 51.23 (3) BASEMENT SPRINKLERS. In buildings where sprinklers are installed in the basement only, sprinklers shall also be provided in all of the following:

(a) All shafts leading to the story above.

(b) All elevator hoistways as required by NFPA 13.

SECTION 40. ILHR 51.23 (6) (c) Note 1 is amended to read:

Note 1: Section ILHR 51.23 (6) (c) does not limit or preclude other individuals from conducting the daily, weekly, monthly, quarterly or semi-annual activities relating to inspection and testing of automatic fire sprinkler systems required under NFPA 25 and NFPA 72.

SECTION 41. ILHR 55.20 is repealed.

(END)

Pursuant to s. 227.22 (2) (intro.) Stats., these rules shall take effect on the first day of the month following publication in the Wisconsin Administrative Register.

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201 West Washington Avenue P.O. Box 7970 Madison, Wisconsin 53707 (608) 266-1018

Tommy G. Thompson, Governor William J. McCoshen, Secretary

February 25, 1998

Gary Poulson Assistant Revisor of Statutes Suite 800 131 West Wilson Street Madison, Wisconsin 53703-3233 Douglas LaFollette Secretary of State 10th Floor 30 West Mifflin Street Madison, Wisconsin 53703

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO.: 97-093

RULE NO.: Chapters Comm 18 and 82 and ILHR 50, 51 and 55

RELATING TO: Elevators and mechanical lifting devices

Pursuant to section 227.20, Stats., agencies are required to file a certified copy of every rule adopted by the agency with the offices of the Secretary of State and the Revisor of Statutes.

At this time, the following material is being submitted to you:

- 1. Order of Adoption.
- 2. Rules Certificate Form.
- 3. Rules in Final Draft Form.

Pursuant to section 227.114, Stats., a summary of the final regulatory flexibility analysis is also included.

Respectfully submitted, illiam⁄ J Secretar

