

CR 87-109

RULES CERTIFICATE

STATE OF WISCONSIN)
) SS
DEPT. OF INDUSTRY,)
LABOR & HUMAN RELATIONS)

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JUN 21 1988
4:00pm
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Bureau

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, John T. Coughlin, Secretary of the Department of Industry, Labor and Human Relations, and custodian of the official records of said department, do hereby certify that the annexed rule(s) relating to elevators were duly approved and adopted by this department on June 21, 1988.
(Subject) *(Date)*

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

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the department at 2:00 pm in the city of Madison, this 21st day of June A.D. 1988.

John T. Coughlin
Secretary

9-1-88

ORDER OF ADOPTION

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JUN 21 1988

Revisor of Statutes
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Pursuant to authority vested in the Department of Industry, Labor and Human Relations by section(s) 101.02, 101.12 and 101.13, Stats., the Department of Industry, Labor and Human Relations creates; amends; repeals and recreates; repeals and adopts rules of Wisconsin Administrative Code chapter (s):

ILHR 18 Elevator Code
(Number) (Title)

The attached rules shall take effect on the first day of the month following publication in the Wisconsin Adm. Register pursuant to section 227.22, Stats.

Adopted at Madison, Wisconsin, this

date: June 21, 1988

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN
RELATIONS


Secretary



RULES in FINAL DRAFT FORM

Rule: Chapter ILHR 18

Relating to: Elevators

Clearinghouse Rule No.: 87-109

The Wisconsin Department of Industry, Labor and Human Relations proposes to repeal chapter Ind 4; to create chapter ILHR 18; and to repeal and recreate ILHR 52.04 (4) (b), relating to elevators.

Analysis of Proposed Rules

The proposed rules consist of the update of chapter Ind 4, Elevator Code, through the repeal of chapter Ind 4 and the creation of chapter ILHR 18. Chapter ILHR 18 covers the design, construction, installation, operation, inspection, testing, maintenance, alteration and repair of elevators and related devices, including lifts for the physically disabled.

Chapter ILHR 18 incorporates by reference the American National Standards Institute (ANSI) Safety Code for Elevators and Escalators, ANSI/ASME A17.1. In addition, this chapter includes amendments which clarify or supplement the elevator standards outlined in the ANSI standard. By incorporating the most current edition of the ANSI standard, the proposed rules will allow the Wisconsin Elevator Code to remain up-to-date with nationally accepted materials, installation methods and operation practices related to elevators.

The following is a summary of the major changes being considered for chapter ILHR 18 as compared to chapter Ind 4.

1. Deleting several rules in the current Wisconsin code which are now covered in the latest edition of the ANSI A17.1 standard.
2. A new requirement specifying minimum qualifications of inspectors for renewal of inspector certification. [ILHR 18.15 (2)].
3. Accepting the ANSI requirement relating to protection of recesses, projections and setbacks on hoistway enclosure sides not used for loading and unloading.
4. Requiring openings in machinery room floors through which cables pass to be fitted with suitable guards to prevent contact with the cables and to prevent parts from falling through the openings. [ILHR 18.25 (3)]
5. Accepting the ANSI requirement relating to guarding of exposed equipment in machine rooms and secondary machinery spaces, and deleting the state requirement for guarding of sheaves and idlers for counterweight and governor cable.
6. Accepting the ANSI requirements relating to bottom car clearances and top car clearances.

7. Deleting the state exemption for two-way conversation devices in buildings less than 70 feet high and accepting the ANSI requirement to install these devices in all buildings.

8. Allowing the use of residential-type elevators as "limited access lifts" in certain buildings and with specified restrictions. [ILHR 18.36 to 18.40 and 52.04 (4)]

9. Deleting the state requirements relating to car clearances for power dumbwaiters.

10. Requiring hoistway access door panels on power dumbwaiters to be equipped with an interlock to prevent the dumbwaiter from operating if the access panel is open. [ILHR 18.42 (6)]

11. Requiring persons performing periodic tests and inspections of elevators to possess a minimum of 2 years of elevator construction, elevator service or elevator inspection experience. [ILHR 18.46 (2)]

12. Requiring an inspection and test of an elevator installation that is being put back in service. [ILHR 18.47 (2)]

13. Requiring the removal, instead of bypassing, of the emergency stop switch in an elevator car when phase I and II operation is installed as an alteration. [ILHR 18.60 (3) and 18.62]

14. Accepting the ANSI requirement for hand elevators that prohibits repair by welding of parts subject to tension, torsion or bending, or that support the elevator car.

15. Requiring all installed safety-related devices to be code-complying, regardless of whether or not the device is required to be installed. [ILHR 18.63]

16. Including requirements for elevators temporarily used for construction or demolition of a building. [Part 19 in ANSI]

17. Accepting the ANSI requirement limiting the travel of vertical wheelchair lifts to 12 feet instead of the current 7 feet.

18. Requiring continuous guarding to prevent use of stairways with inclined lifts when less than 24 inches of clear stairway is provided. [ILHR 18.73 (2) and 18.74 (2)]

19. Allowing the bottom half of the access gate to be omitted on enclosed inclined wheelchair lifts to provide more length for footrests. Unenclosed lifts may be provided with automatic, retractable security arms. [ILHR 18.75]

20. Accepting the ANSI requirements for unenclosed inclined wheelchair lifts and specifying a 6-inch retractable metal guard on the upper access end of enclosed and unenclosed inclined lifts. [ILHR 18.76 (1)]

21. Requiring inclined lifts to be provided with a folding seat and seatbelt. [ILHR 18.77]

22. Limiting inclined lifts to serve 3 stops and 2 consecutive stories [ILHR 18.78 and 18.79]

23. Clarifying the required size of new elevators when installing them in existing buildings. [ILHR 18.81 (4)]

24. Allowing the use of unenclosed lifts, chairlifts and residential-type elevators in churches and lodge halls. [ILHR 52.04 (4)]

The proposed rules have been reviewed and approved by the Elevator Code Project Committee. The members of that citizen advisory committee are as follows.

<u>Name</u>	<u>Representing</u>
Warren R. Bauer	Wis. Society of Architects
Russel G. Beisenstein	Wis. Elevator Inspectors Assoc.
Ted C. Cheney	National Assoc. of Elevator Contractors
Ellen D. Daly	Governor's Committee for People with Disabilities
William C. Dries	Wis. Society of Professional Engineers
Darrell Fleming	Public
Kenneth M. Gelder	Material Handling Institute, Inc.
Robert E. Graeff	National Elevator Industry, Inc.
Richard R. Griffith	Building Owners & Managers Assoc.

James Hildebrand	Wis. Hospital Engineers Association
Larry Huber	Wis. State Fire Chiefs Association
Roy A. Hughes	American Institute of Plant Engineers
Lew Stark	DOA-State 504 Coordinator
Richard Young	Internat'l. Union of Elevator Constructors
John A. Zalewski	City of Milwaukee

* * * * *

Pursuant to the authority vested in the state of Wisconsin's Department of Industry, Labor and Human Relations by ss. 101.02, 101.12 and 101.13, Stats., the department hereby repeals and recreates and creates rules interpreting ss. 101.12, 101.13 and 101.17, Stats., as follows:

SECTION 1. Chapter Ind 4 is repealed.

SECTION 2. Chapter ILHR 18 is created to read:

CHAPTER ILHR 18
ELEVATOR CODE

Subchapter I
Administration and Enforcement

[NOTE: The Ind numbers in the brackets refer to the current code section numbers and will not appear in the published code.]

ILHR 18.01 [Ind 4.01] 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.

ILHR 18.02 [Ind 4.02] SCOPE. (1) COVERED EQUIPMENT. This chapter shall apply 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 ANSI/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 the physically disabled.

(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 chs. Ind 1000-2000.

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 chs. Ind 1000-2000.

ILHR 18.03 [Ind 4.03 (1) (2) (4)] 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 applicable sections in this chapter and 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 sections of this chapter.

ILHR 18.04 [Ind 4.04] 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 rule being petitioned. The department may impose specific conditions in granting a variance to promote the protection of the health, safety and welfare of the employes or the public. Violation of those conditions under which the variance is granted shall constitute a violation of this chapter

Note 1: Copies of the petition for variance (form SB-8) are available at no charge from the Safety and Buildings Division, P.O. Box 7969, Madison, Wisconsin 53707.

Note 2: 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.

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

Note 1: Section 101.02 (13) (a), Stats., indicates penalties will be assessed against any employer, employe, 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 employe, 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 2: Section 101.02 (12), Stats., indicates that every day during which any person, persons, corporation or any officer, agent or employe thereof, fails to observe and comply with an order of the department will constitute a separate and distinct violation of such order.

ILHR 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 provision of this chapter. All appeals shall be acted on and a decision in writing shall be issued by the department within 30 business days of receiving an appeal.

Note: Section 101.01 (1) (f), Stats., defines "local order" as any ordinance, order, rule or determination of any common council, board of aldermen, 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.

ILHR 18.07 FEES. Fees for plan examination, installation application, inspection, certificate of operation and other services performed by the department pertaining to elevators and related equipment shall be submitted as specified in ch. Ind 69.

Note: See Appendix for a reprint of fees for elevators and related equipment.

ILHR 18.08 [Ind 4.05] 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 ANSI/ASME A17.1 standard, and for the approval of equipment and material.

Subchapter II
General Requirements

ILHR 18.11 [Ind 4.06, 4.10] PLAN EXAMINATION AND APPROVAL. (1) PLAN SUBMITTAL. Plans and specifications for all new installations and the following alterations shall be submitted to the department or city of the 1st class for examination and approval:

Note: Section 101.12 (3), Stats., provides for examination of plans and specifications by cities of the 1st class.

- (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;
- (g) Replacement of an existing driving machine by a new driving machine; and
- (h) Replacement of an existing controller by a new controller.

(2) INFORMATION REQUIRED ON PLANS. At least 3 sets of plans, including specifications, shall be submitted by the manufacturer's representative or the distributor who furnishes the equipment. The plans shall include the following:

- (a) A plan of car, hoistway and machine room showing all clearances, including all inside car dimensions specified in s. ILHR 18.81 (4);
- (b) A section through hoistway, pit and car showing all applicable dimensions. All landings shall be clearly shown, indicating types of hoistway doors or gates used;
- (c) Working clearances around machine, controller and disconnecting means showing dimensions to adjacent or opposite walls and equipment, or both; and
- (d) The size and weight per foot of guiderails and details of their support, including reinforcement where required.

(3) APPLICATION FOR INSTALLATION OR ALTERATION. Prior to commencing work, at least 2 completed copies of the department application form shall be submitted to the department or city of the 1st class for all new installations, alterations listed in sub. (1) (a) to (h) and the following alterations:

Note: See Appendix for an example of the application to erect or remodel form (SB-22).

- (a) Change in type of operation or control;
- (b) Addition of phase I emergency recall and phase II emergency in-car operation specified in ANSI/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; and
- (j) Change in size or type of guiderails.

(4) APPROVAL OF PLANS AND APPLICATION. All approvals of plans and applications for installation or alteration shall be performed by certified department or city of the 1st class 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.

(5) OWNER'S RESPONSIBILITY. The submission of plans, specifications and applications 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 all elevator plans, specifications and applications for approval of an installation or an alteration within 15 business days of receiving the required information.

ILHR 18.12 [Ind 4.07, 4.11] TESTS AND INSPECTIONS. (1) NEW INSTALLATIONS. (a) General requirements. New installations shall be tested and inspected by an authorized representative of the department or municipality to determine whether or not the installations conform to the conditionally approved plans and the provisions of this chapter. The installations shall not be placed in service until a certificate is issued in accordance with s. ILHR 18.14.

Note: Tests and inspections are specified in ANSI/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. ILHR 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. Every installation of equipment specified in s. ILHR 18.02 (1) shall be inspected at least once every 12 months, except inclined wheelchair lifts and stairway chairlifts shall be inspected at least once every 3 years. All inspections required by this chapter shall be performed by certified inspectors.

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

(4) MAJOR ALTERATIONS. Every major alteration specified in ANSI/ASME A17.1 Rule 1200.1a and s. ILHR 18.59, 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: See Appendix for examples of the elevator inspection form (SB-2D) and the test report form (SB-2E).

(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. Ind 69.06 shall be charged for each inspection.

Note: See Appendix for a reprint of fees for elevators and related equipment.

ILHR 18.13 [Ind 4.03 (3)] PROHIBITED INSTALLATIONS. (1) NEW AND EXISTING INSTALLATIONS. The following requirements shall apply to both new and existing installations:

(a) Belt or chain driven machines. Belt or chain driven machines shall not be used for any passenger elevator installation, except oil hydraulic elevators.

(b) Friction gearing or clutch mechanism. 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) Continuous pressure operation. Continuous pressure button operation from the landings shall not be used for passenger elevators.

(d) Drum type installations. Drum type freight elevator installations equipped with a mechanical brake shall not have hoistway limit switches, car door or gate electric contacts, hoistway landing door or gate electric contacts or any combination thereof.

(e) 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.

ILHR 18.14 [Ind 4.08] CERTIFICATE OF OPERATION. (1) ISSUANCE. If the department, after inspection, determines that the installation conforms with the provisions of this chapter, the department shall issue a certificate of operation. The department shall issue the certificate within 15 business days after the determination that the installation meets the applicable requirements of this chapter.

(2) EXPIRATION. Certificates of operation shall be effective from the date of issuance until 60 days after the next scheduled periodic inspection.

(3) REVOCATION. The department may revoke the certificate of operation if the equipment is found to be in noncompliance with the applicable safety standard. Upon revocation of the certificate of 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.

Note: See Appendix for an example of the certificate of operation form.

ILHR 18.15 [Ind 4.09] CERTIFICATION OF INSPECTORS. (1) INITIAL CERTIFICATION. A person employed by the department, a municipality or an insurance company may be certified by the department as an inspector, under the scope of this chapter, upon submittal of job qualifications on completed form SB-88, payment of the required fees and successful passage of a written examination given by the department. The inspector certification shall be issued within 15 business days after passage of the written examination.

Note: Copies of form SB-88 are available at no charge from the Safety and Buildings Division, P.O. Box 7969, Madison, Wisconsin 53707.

(2) RENEWAL OF CERTIFICATION. To qualify for renewal of certification, applicants shall submit no less than 10 complete valid inspection reports each 12 months.

ILHR 18.16 [Ind 4.20] ADOPTION OF STANDARDS BY REFERENCE. (1) CONSENT TO INCORPORATE. (a) Pursuant to s. 227.21, Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the American National Standard Safety Code for Elevators and Escalators, ANSI/ASME A17.1-1984, subject to those changes, additions and omissions specified in subch. III.

(b) The American National Standard Safety Code for Elevators and Escalators, ANSI/ASME A17.1-1984, subject to the changes, additions and omissions specified in subch. III is hereby incorporated by reference into this chapter.

(2) INTERIM SUPPLEMENTS. Interim supplements to the ANSI/ASME A17.1-1984 standard shall have no effect in this state until such time as this chapter is correspondingly revised to reflect those changes.

Note #1: Copies of the ANSI/ASME A17.1-1984 standard can be obtained from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, N.Y. 10017.

Note #2: Copies of the standard in reference are on file in the offices of the department, the secretary of state, and the revisor of statutes.

ILHR 18.17 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, ANSI/ASME A17.1-1984, subject to those changes, additions and omissions specified in subch. III.

Subchapter III
Changes or Additions to or Omissions from
Adopted Standards

ILHR 18.21 CHANGES OR ADDITIONS TO OR OMISSIONS FROM ANSI/ASME A17.1.
Changes or additions to or omissions from the ANSI/ASME A17.1 standard are specified in this subchapter and are rules of the department and are not requirements of the ANSI/ASME A17.1 standard.

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

INTRODUCTION

ILHR 18.22 [A17.1 Section 1 and Section 2] SCOPE AND PURPOSE. A17.1 Section 1 - Scope and Section 2 - Purpose and Exceptions do not apply in Wisconsin.

ILHR 18.23 [A17.1 Section 3] DEFINITIONS. (1) ADDITIONS. The following are department definitions in addition to the definitions in A17.1 Section 3:

(a) "Department" means the department of industry, labor and human relations.

(b) "Fire-resistive rating" means a rating as defined in s. ILHR 51.01 (50).

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

(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 chapters ILHR 50 to 64 of the Wisconsin Administrative Code.

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

(d) "Existing installations" means equipment that has been completed or for which the contract was let before the effective date of any applicable rule change.

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

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

PART 1 HOISTWAYS, HOISTWAY ENCLOSURES AND RELATED
CONSTRUCTION FOR ELECTRIC ELEVATORS

ILHR 18.24 [A17.1 100] CONSTRUCTION OF HOISTWAYS AND HOISTWAY ENCLOSURES. (1) [A17.1 100.1c] OBSERVATION ELEVATORS. 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) [A17.1 100.3f] DIFFERENCE IN FLOOR LEVELS. 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) [A17.1 100.4] CONTROL OF SMOKE AND HOT GASES. This is a department rule in addition to the requirements of A17.1 100.4:

Ventilation openings in hoistway walls, 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.

ILHR 18.25 [A17.1 101] MACHINE ROOMS AND MACHINERY SPACES. (1) [A17.1 101.1a] ENCLOSURES REQUIRED FOR ELEVATORS HAVING FIRE-RESISTIVE HOISTWAY ENCLOSURES. This is a department exception in addition to the exceptions of A17.1 101.1a:

Exception No. 4: Where phase II emergency in-car operation covered by A17.1 211.3c is provided, the elevator machinery space shall be separated from all other equipment by construction having at least a 2-hour fire-resistive rating.

(2) [A17.1 101.5] LIGHTING AND VENTILATION OF MACHINE ROOMS AND MACHINERY SPACES. This is a department rule in addition to the requirements of A17.1 101.5:

At least one 120 volt, single phase, 15- or 20-ampere duplex receptacle shall be installed in each machine room and machinery space.

(3) [A17.1 101] GUARDING OF FLOOR OPENINGS. This is a department rule in addition to the requirements of A17.1 101:

The openings in machinery room floors, through which cables pass, shall be fitted with suitable guards at least 2 inches high to prevent any loose material from coming in contact with the cables, and to prevent any loose parts from dropping through the openings.

ILHR 18.26 [A17.1 102.2] INSTALLATION OF PIPES OR DUCTS CONVEYING GASES, VAPORS OR LIQUIDS IN HOISTWAYS, MACHINE ROOMS OR MACHINERY SPACES. (1)
[A17.1 102.2 (c)] SPRINKLER HEADS. Substitute the following wording for A17.1 102.2 (c):

Sprinkler heads shall not be installed in any hoistway, machine room or machinery space.

(2) [A17.1 102.2] PIPING FOR SUMP PUMPS. This is a department rule in addition to the requirements of A17.1 102.2:

Piping for sump pumps located in elevator machine rooms shall serve only the elevator pit or elevator machine room or both.

ILHR 18.27 [A17.1 106] PITS. (1) [A17.1 106.1b] DESIGN AND CONSTRUCTION OF PITS. Substitute the following wording for A17.1 106.1b (3) Exception:

Exception: Where water cannot be kept out of a pit with ordinary construction, drains or sumps with metal covers shall be provided. Where a pump is required to remove water, the pump shall be located outside the elevator hoistway.

(2) [A17.1 106.1e] ILLUMINATION OF PITS. This is a department rule in addition to the requirements of A17.1 106.1e:

At least one 120 volt, single phase, 15- or 20-ampere duplex receptacle outlet shall be installed in the hoistway approximately level with the lowest terminal landing floor.

ILHR 18.28 [A17.1 111] HOISTWAY-DOOR LOCKING DEVICES, CAR DOOR OR GATE ELECTRIC CONTACTS, HOISTWAY ACCESS SWITCHES, AND ELEVATOR PARKING DEVICES.

(1) [A17.1 111.9e] LOCATION AND DESIGN OF HOISTWAY DOOR UNLOCKING DEVICES. Substitute the following wording for A17.1 111.9e (2):

The device shall be installed at all landings.

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

The unlocking device operating key shall be located adjacent to the lowest landing, or be readily available within the building, and kept in a box having a breakable red cover marked "Fire Department And Emergency Use Only."

PART 2 MACHINERY AND EQUIPMENT FOR ELECTRIC ELEVATORS

ILHR 18.29 [A17.1 204] CAR ENCLOSURES, CAR DOORS AND GATES, AND CAR ILLUMINATION. (1) [A17.1 204.2a] MATERIAL FOR ENCLOSURES AND ENCLOSURE LININGS. This is a department exception in addition to the exception of A17.1 204.2a (2):

Exception No. 2: Wall-covering material having a Class A interior finish as defined in s. ILHR 50.01 (75a) (a) shall be permitted to be used on car walls.

(2) [A17.1 204.2d] SIDE EMERGENCY EXITS. Substitute the following wording for A17.1 204.2d:

Side emergency exits are not permitted in Wisconsin.

(3) [A17.1 204.2] SIGNS OR ADVERTISEMENTS IN ELEVATOR CARS. This is a department rule in addition to the requirements of A17.1 204.2:

No signs, plaques or advertisements may be posted in any elevator car, except:

(a) Those signs required for the operation of the elevator; or

(b) Permanently affixed signs or plaques, or sign enclosures not exceeding 1/2 inch in thickness, made of noncombustible materials and which have smooth edges and flush securing means.

Note: See s. ILHR 51.01 (86) for definition of noncombustible material.

(4) [A17.1 204.7a] ILLUMINATION AND OUTLETS REQUIRED. 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.

ILHR 18.30 [A17.1 205] CAR AND COUNTERWEIGHT SAFETIES. (1) [A17.1 205.7] GOVERNOR-ACTUATED SAFETIES AND CAR-SAFETY-MECHANISM SWITCHES REQUIRED. Section A17.1 205.7 (a) Exception does not apply in Wisconsin.

(2) [A17.1 205.14] MARKING PLATES FOR SAFETIES. 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. ILHR 18.11, shall also be marked on the metal plate.

(3) [A17.1 205] REQUIRED DROP TEST. These are department rules in addition to the requirements of A17.1 205:

(a) Drop test. Every car safety device and speed governor 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.

ILHR 18.31 [A17.1 206] SPEED GOVERNORS. (1) [A17.1 206.1] SPEED GOVERNORS REQUIRED AND LOCATION. Section A17.1 206.1 (a) Exception does not apply in Wisconsin.

(2) [A17.1 206.8] SPEED-GOVERNOR MARKING PLATE. This is a department rule in addition to the requirements of A17.1 206.8:

The manufacturer of the governor and the manufacturer's identification number shall also be marked on the metal plate.

ILHR 18.32 [A17.1 210] OPERATING DEVICES AND CONTROL EQUIPMENT. (1) [A17.1 210.1d] TOP-OF-CAR OPERATING DEVICE. Section A17.1 210.1d (4) does not apply in Wisconsin.

(2) [A17.1 210.2 (e)] EMERGENCY STOP SWITCH. (a) Substitute the following wording for the first sentence of A17.1 210.2 (e):

An emergency stop switch shall be prohibited in the car, except freight elevators without power-operated doors.

(b) This is a department rule in addition to the requirements of A17.1 210.2 (e):

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.

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

ILHR 18.33 [A17.1 211] EMERGENCY OPERATION AND SIGNALING DEVICES.

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

Note: See s. ILHR 52.01 for special emergency standby power requirements for elevators in high rise buildings, and NEC 517 as adopted by reference in ch. ILHR 16 for nursing home requirements.

(2) [A17.1 211.3] FIREFIGHTERS SERVICE - AUTOMATIC ELEVATORS. (a) This is a department rule in addition to the requirements of A17.1 211.3b:

1. The lobby smoke detectors shall be visible and located within 15 feet from all elevator hoistway doors.

2. If smoke detectors are located in hoistways, they shall activate the phase I emergency recall operation.

(b) Substitute the following wording for A17.1 211.3c (1) (f):

Buttons shall be provided to cancel registered car calls.

(c) This is a department rule in addition to the requirements of A17.1 211.3d:

An additional set of keys intended 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 main 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 squads.

(3) [A17.1 211.7] FIREFIGHTERS SERVICE OPERATING PROCEDURES. Section A17.1 211.7 does not apply in Wisconsin.

PART 3 HYDRAULIC ELEVATORS

ILHR 18.34 [A17.1 302.3e] COLLECTION OF OIL LEAKAGE. Substitute the following wording for A17.1 302.3e:

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.

ILHR 18.35 [A17.1 305.1b] LOCATION OF STOPPING SWITCHES. Substitute the following wording for A17.1 305.1b:

Stopping switches shall be located on the car or in the hoistway and shall be operated by the movement of the car.

ILHR 18.36 [A17.1 306.3] ANTI-CREEP LEVELING DEVICES. 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.

PART 4 POWER SIDEWALK ELEVATORS

Note: There are no changes, additions or omissions to A17.1 Part 4.

PART 5 PRIVATE RESIDENCE ELEVATORS
USED AS LIMITED ACCESS LIFTS

ILHR 18.37 [A17.1 Part 5 Scope] SCOPE. Substitute the following wording for A17.1 Part 5 Scope:

This part applies to residential-type passenger elevators installed in or at public buildings and places of employment for use only by persons with disabilities. The elevators covered in this part may be referred to as "Limited Access Lifts".

Note: See chs. ILHR 50 to 64 for occupancies where limited access lifts are allowed.

ILHR 18.38 [A17.1 500.1] HOISTWAY ENCLOSURE CONSTRUCTION. (1) [A17.1 500.1] FIRE-RESISTIVE CONSTRUCTION. Substitute the following wording for A17.1 500.1, first paragraph, last sentence:

The fire resistance rating shall be in accordance with the requirements of Rule 100.1.

(2) [A17.1 500.1] HOISTWAY ENCLOSURE REQUIRED. Section A17.1 500.1 (a) through (d) does not apply in Wisconsin.

ILHR 18.39 [A17.1 508.3] KEY-OPERATED SWITCHES. Substitute the following wording for A17.1 508.3, first sentence:

Any car exterior to a building shall be operated by means of a key switch.

ILHR 18.40 [A17.1 509.1] EMERGENCY SIGNAL. Substitute the following wording for A17.1 509.1:

A telephone connected to a central telephone exchange shall be installed in the car or an emergency signaling device operable from inside the car and audible outside the building shall be provided.

ILHR 18.41 [A17.1 510.1] CAPACITY. Substitute the following wording for A17.1 510.1:

The rated load shall not exceed 700 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. The minimum rated load shall be not less than that based on 36 pounds per square foot of inside net platform area or 450 pounds, whichever is greater.

PART 6 HAND ELEVATORS

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

PART 7 POWER DUMBWAITERS

ILHR 18.42 [A17.1 Part 7 Scope] SCOPE. Substitute the following wording for A17.1 Part 7 Scope:

This part applies to power dumbwaiters.

ILHR 18.43 [A17.1 700] HOISTWAYS, HOISTWAY ENCLOSURES AND RELATED CONSTRUCTION. (1) [A17.1 700.4] TYPES OF ENTRANCES. (a) This is a department rule in addition to the requirements of A17.1 700.4a:

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.

(b) Section A17.1 700.4b does not apply in Wisconsin.

(2) [A17.1 700.5] CLOSING HOISTWAY DOORS OF HAND DUMBWAITERS. Section A17.1 700.5 does not apply in Wisconsin.

(3) [A17.1 700.6] SIGNS ON HOISTWAY DOORS OF HAND DUMBWAITERS. Section A17.1 700.6 does not apply in Wisconsin.

(4) [A17.1 700.7] SIZE AND LOCATION OF HOISTWAY-DOOR OPENINGS. Section A17.1 700.7b does not apply in Wisconsin.

(5) [A17.1 700.10] HOISTWAY-DOOR LOCKING DEVICES. Section A17.1 700.10b does not apply in Wisconsin.

(6) [A17.1 700.11] HOISTWAY ACCESS DOORS. This is a department rule in addition to the requirements of A17.1 700.11:

(a) All terminal landing doors shall be provided with means to open the door irrespective of the position of the dumbwaiter car. The opening means shall be mounted adjacent to the door and shall be provided with a removable cover or other means to restrict access for unauthorized persons.

(b) 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.

ILHR 18.44 [A17.1 704.4] DRIVING-MACHINE BRAKES. Section A17.1 704.4 (b) does not apply in Wisconsin.

ILHR 18.45 [A17.1 707.4] HAND DUMBWAITERS. Section A17.1 707.4 does not apply in Wisconsin.

PART 8 ESCALATORS

Note: There are no changes, additions or omissions to A17.1 Part 8.

PART 9 MOVING WALKS

Note: There are no changes, additions or omissions to A17.1 Part 9.

PART 10 ROUTINE, PERIODIC AND ACCEPTANCE INSPECTIONS AND TESTS

ILHR 18.46 [A17.1 1000.1] PERSONS AUTHORIZED TO MAKE INSPECTIONS AND TESTS. (1) [A17.1 1000.1a] ROUTINE INSPECTION AND TESTS. Section A17.1 1000.1a does not apply in Wisconsin.

(2) [A17.1 1000.1b] PERIODIC INSPECTION AND TESTS. Substitute the following wording for A17.1 1000.1b:

Periodic inspections and tests shall be performed by persons possessing a minimum of 2 years of elevator construction, elevator service or elevator inspection experience. Proof of experience qualifications shall be submitted to the department upon request. The department may require witnessing of inspections and tests or retests.

ILHR 18.47 [A17.1 1000.3] INSTALLATION PLACED OUT OF SERVICE. 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 switch.

(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 service, it shall be subject to the required annual inspection and 5-year test as specified in s. ILHR 18.50.

ILHR 18.48 [A17.1 1001.1] INSPECTION AND TEST PERIODS. 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 of not longer than one year.

ILHR 18.49 [A17.1 1002.2] ONE-YEAR INSPECTION AND TEST REQUIREMENTS. 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.

ILHR 18.50 [A17.1 1002.3] FIVE-YEAR INSPECTION AND TEST REQUIREMENTS.
(1) [A17.1 1002.3a] SAFETY AND GOVERNOR SYSTEMS. (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.

Note: See Appendix for an example of the test report form SB-2E. Tags are available from the Safety and Buildings Division, P.O. Box 7969, Madison, Wisconsin 53707.

(2) [A17.1 1002.3b] GOVERNORS. Section A17.1 1002.3b second paragraph does not apply in Wisconsin.

(3) 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.

ILHR 18.51 [A17.1 1004.1] INSPECTION AND TEST PERIODS. 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 of not longer than one year.

ILHR 18.52 [A17.1 1005.3] THREE-YEAR INSPECTION AND TEST REQUIREMENTS. Section A17.1 1005.3 does not apply in Wisconsin.

ILHR 18.53 [A17.1 1007.1] INSPECTION AND TEST PERIODS. Substitute the following wording for A17.1 1007.1:

The routine inspection and tests of escalators and moving walks shall be made at intervals of not longer than one year.

ILHR 18.54 [A17.1 1010.1] SIDEWALK ELEVATOR. Substitute the following wording for A17.1 1010.1 second sentence:

Routine inspections shall be performed at intervals of not longer than one year.

ILHR 18.55 [A17.1 1010.2] PRIVATE RESIDENCE ELEVATORS AND LIFTS. Section A17.1 1010.2 does not apply in Wisconsin.

ILHR 18.56 [A17.1 1010.3] HAND ELEVATORS. Substitute the following wording for A17.1 1010.3 second sentence:

Routine inspections shall be performed at intervals of not longer than one year.

ILHR 18.57 [A17.1 1010.6] SPECIAL PURPOSE PERSONNEL ELEVATORS. Substitute the following wording for A17.1 1010.6 second sentence:

Routine inspections shall be performed at intervals of not longer than one year.

ILHR 18.58 [A17.1 1010.7] INCLINED ELEVATORS. Substitute the following wording for A17.1 1010.7 second sentence:

Routine inspections shall be performed at intervals of not longer than one year.

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

ILHR 18.59 [A17.1 1200.1] GENERAL REQUIREMENTS FOR ALTERATIONS. This is a department rule in addition to the requirements of A17.1 1200.1a:

The addition of phase I emergency recall operation and phase II emergency in-car operation shall be considered major alterations under s. ILHR 18.60.

ILHR 18.60 [A17.1 1200.2] REQUIREMENTS FOR MAJOR ALTERATIONS. (1)
[A17.1 1200.2c] INCREASE OR DECREASE IN TRAVEL AND CHANGE IN LOCATION OF THE DRIVING MACHINE. This is a department rule in addition to the requirements of A17.1 1200.2c:

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) [A17.1 1200.2d] CHANGE IN TYPE OF OPERATION OR CONTROL. Substitute the following wording for A17.1 1200.2d (1) (f):

Emergency signal devices. Emergency signal devices and phase I and II operation where required by A17.1 211.3 shall be provided and shall conform to the requirements of A17.1 211.

(3) [A17.1 1200.2] ADDITION OF EMERGENCY RECALL AND EMERGENCY IN-CAR OPERATION. These are department rules in addition to the requirements of A17.1 1200.2:

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, if provided in the car, shall be removed.

ILHR 18.61 [A17.1 1200.5] SPLICING AND REPLACEMENT OF SUSPENSION ROPES. This is a department rule in addition to the requirements of A17.1 1200.5:

When replacing wire ropes, the ropes shall comply with the manufacturer's specifications as stated on the wire rope data plate provided on the crosshead, except for a change in rope size or number or both. All changes shall be included on the data plate.

ILHR 18.62 [A17.1 1201.1] GENERAL REQUIREMENTS FOR ALTERATIONS. This is a department rule in addition to the requirements of A17.1 1201.1a (7) (f):

Emergency stop switches, if provided in the car, shall be removed.

ILHR 18.63 [A17.1 1203.4] MAKING SAFETY DEVICES INOPERATIVE. This is a department rule in addition to the requirements of A17.1 1203.4:

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

ILHR 18.64 [A17.1 1203.5] MAINTENANCE OF HYDRAULIC ELEVATORS AND DUMBWAITERS. Substitute the following wording for A17.1 1203.5b (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.

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

ILHR 18.66 [A17.1 Part 19 Scope] SCOPE. This is a department rule in addition to the requirements of Part 19 Scope, first paragraph:

Elevators used for construction shall not be used by the public.

ILHR 18.67 [A17.1 1901.2] OPERATION AND OPERATING DEVICES. This is a department rule in addition to the requirements of A17.1 1901.2:

All elevators shall have an assigned operator.

PART 20 INCLINED STAIRWAY CHAIRLIFTS, AND INCLINED
AND VERTICAL WHEELCHAIR LIFTS

ILHR 18.70 [A17.1 Part 20 Scope] SCOPE. Substitute the following wording for Part 20 Scope:

This part applies to vertical wheelchair lifts, inclined wheelchair lifts, and inclined stairway chairlifts installed in or at a public building or place of employment for use only by persons with disabilities.

ILHR 18.71 [A17.1 2000.1] RUNWAYS FOR VERTICAL LIFTS. This is a department rule in addition to the requirements of A17.1 2000.1:

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.

ILHR 18.72 [A17.1 2000.6] CARS AND PLATFORMS. Substitute the following wording for A17.1 2000.6c:

(1) LIFTS INSTALLED IN EXISTING BUILDINGS. For vertical wheelchair lifts installed in existing buildings, the inside net platform area shall not exceed 18 square feet and shall have a minimum clear width of 32 inches.

(2) LIFTS INSTALLED IN NEW BUILDINGS. For vertical wheelchair lifts installed in new buildings before [...the first day of the 19th month following publication (Revisor to insert date)...], the inside net platform area shall not exceed 18 square feet and shall have a minimum clear width of 32 inches. For vertical wheelchair lifts installed in new buildings after [...the first day of the 19th month following publication (Revisor to insert date)...], the inside 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.

ILHR 18.73 [A17.1 2001.1a] MEANS OF EGRESS. Substitute the following wording for A17.1 2001.1a:

(1) LIFTS INSTALLED IN REQUIRED EXIT STAIRWAYS. Inclined wheelchair lifts installed in required exit stairways 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 lift in its operational position.

(2) LIFTS INSTALLED IN NON-REQUIRED STAIRWAYS. Inclined wheelchair lifts installed in non-required stairways shall comply with the following:

(a) Where less than 24 inches of clear stairway area is provided in addition to the lift in its operational position, the entire stairway may not be used by pedestrians. Gates, guardrails, barriers and similar devices may be used to prevent the use of the stairway by pedestrians.

(b) Where a minimum of 24 inches of clear stairway area is provided in addition to the lift in its operational position and the stairway area is guarded in accordance with s. ILHR 18.74 (2), the stairway may be used by pedestrians.

ILHR 18.74 [A17.1 2001.1b] CLEARANCES. These are department rules in addition to the requirements of A17.1 2001.1b:

(1) LIFTS INSTALLED ON STAIRWAYS. All inclined wheelchair lifts shall be installed on stairways.

(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 stairways 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.

ILHR 18.75 [A17.1 2001.6a] CONSTRUCTION. Substitute the following wording for A17.1 2001.6a (2):

(1) LIFTS INSTALLED IN EXISTING BUILDINGS. For inclined wheelchair lifts installed in existing buildings, the inside net platform area shall not exceed 12 square feet and shall have a minimum clear width of 32 inches.

(2) LIFTS INSTALLED IN NEW BUILDINGS. For inclined wheelchair lifts installed in new buildings before [...the first day of the 19th month following publication (Revisor to insert date)...], the inside net platform area shall not exceed 12 square feet and shall have a minimum clear width of 32 inches. For inclined wheelchair lifts installed in new buildings after [...the first day of the 19th month following publication (Revisor to insert date)...], the platform area shall have a clear width of 32 inches and a clear length of 54 inches.

(3) DESIGN MODIFICATIONS. For enclosed lifts, the bottom half of the access gate may be omitted in order to provide more length for foot rests. Unenclosed lifts may be provided with automatic, retractable security arms.

ILHR 18.76 [A17.1 2001.6c] PLATFORM GUARDING. (1) ROLL-OFF PROTECTION. 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). For units complying with 2001.6c(1), the metal guard is not required if a 42-inch high door is installed. When in use, the incline of the ramp shall not be greater than:

- (a) 1 in 6 for heights up to 2 1/2 inches.
- (b) 1 in 8 for heights greater than 2 1/2 inches and less than 3 inches.
- (c) 1 in 12 for heights 3 inches or greater.

(2) HAND GRIP. Substitute the following wording for A17.1 2001.6c (2), third paragraph:

A hand grip shall be provided at a height of not less than 36 inches from the platform on the sides not used for access or exit.

ILHR 18.77 [A17.1 2001.6d] SEATS. Substitute the following wording for A17.1 2001.6d:

A lift shall be provided with a folding seat and a seatbelt to accommodate a person not in a wheelchair. The seat in its folded position shall not infringe upon the required clear platform space.

ILHR 18.78 [A17.1 2001.7] CAPACITY, LOAD, SPEED AND ANGLE OF INCLINATION. These are department rules in addition to the requirements of A17.1 2001.7:

(1) LIMITATION ON TRAVEL. Inclined wheelchair lifts 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.

ILHR 18.79 [A17.1 2002.7] CAPACITY, SPEED AND ANGLE OF INCLINATION. These are department rules in addition to the requirements of A17.1 2002.7:

(1) LIMITATION ON TRAVEL. Inclined stairway chairlifts 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.

PART 21 PRIVATE RESIDENCE INCLINED STAIRWAY CHAIRLIFTS,
AND INCLINED AND VERTICAL WHEELCHAIR LIFTS.

ILHR 18.80 [A17.1 Part 21] PRIVATE RESIDENCE LIFTS. The entire A17.1 Part 21 does not apply in Wisconsin.

Subchapter IV
Accessibility Requirements for Elevators

ILHR 18.81 ACCESSIBILITY REQUIREMENTS FOR ELEVATORS. (1) GENERAL. The requirements of this section apply to all new passenger elevator installations used to provide access for the physically disabled as required by ch. ILHR 52. All accessibility modifications to existing elevator installations shall comply with the applicable requirements of this section.

(2) OPERATION AND LEVELING. The elevator operation shall be automatic and self-leveling within 1/2 inch of floor levels under normal use conditions.

(3) DOOR OPERATION AND REOPENING. (a) Automatic, power-operated horizontal-sliding car and hoistway doors shall be provided.

(b) Doors shall be provided with a door reopening device which stops and fully reopens a car door and adjacent hoistway door in case the car door is obstructed while closing.

1. The reopening device shall be capable of sensing an object or person in the path of a closing door at 5 and 29 inches, plus or minus one inch, above the floor without requiring contact for activation.

2. Door reopening devices shall remain effective if obstructed for a period of not less than 20 seconds. After that time period, doors may be closed in accordance with A17.1 112.3c.

(4) PLATFORM AREA AND DOOR OPENING WIDTH. (a) Except as provided in par. (b), the clear distance between walls or between wall and door shall be not less than 54 inches and the net inside platform area shall be not less than 24 square feet. The clear distance from wall to return panels and from return panel to return panel shall be not less than 51 inches.

(b) 1. Exception No. 1: When elevators are provided in health care facilities, including medical clinics, and in all buildings over 3 stories in height, at least one elevator shall have the combination of car size and door opening which accommodates a 76 inch by 24 inch ambulance type stretcher in the horizontal position with no tilting at any time.

2. Exception No. 2: If an elevator is installed in an existing building and the car size specified in par. (a) cannot be provided, the minimum clear distance shall be not less than 54 inches by 51 inches.

(c) The minimum clear width of the door opening shall be not less than 36 inches, except a minimum clear width of 32 inches shall be permitted for elevators installed and sized in accordance with par. (b) 2.

(5) CAR CONTROLS, SIGNALING AND COMMUNICATIONS SYSTEMS. (a) The center line of the highest elevator control buttons shall be no higher than 54 inches above the car floor.

(b) The emergency alarm or signaling buttons shall be grouped at the bottom of the control panel and shall have their center lines no less than 35 inches above the car floor.

(c) The highest operable part of a two-way communication system shall be a maximum of 54 inches above the car floor.

(d) Floor registration buttons shall be provided with visual indication lights. The visual indicators shall be extinguished when each call is answered.

(6) HANDRAILS. (a) A graspable handrail shall be provided on one wall of the car, preferably the rear.

(b) The top of the rail shall be located at a height of 32 inches from the floor with its inside surface at least 1-1/2 inches clear of the wall. The rail shall not project more than 4 inches into the clear space.

Note: See Chs. ILHR 50 to 64 Appendix A for handrail examples.

(7) LOBBY BUTTONS. (a) The center line of the lobby or hall call button fixture shall be a maximum of 42 inches above the floor.

(b) There shall be no obstruction that interferes with the operation of the lobby call button by a person in a wheelchair.

(c) Lobby or hall call buttons shall have visual signals to indicate when each call is registered and shall be extinguished when each call is answered.

(d) The button designating the up direction shall be on top.

(8) LOBBY VISUAL AND AUDITORY CUES. (a) A visual and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call.

(b) Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal annunciators that state the direction of the car.

(c) Visual signals shall have the following features:

1. Lobby or hall direction fixtures shall be mounted so that their center line is at least 72 inches above the lobby floor.

2. Visual elements shall be at least 2-1/2 inches in the smallest dimension.

3. Signals shall be visible from the vicinity of the lobby or hall call button. Lanterns located in cars, visible from the vicinity of lobby or hall call buttons, and conforming to subds. 1 and 2, shall be acceptable.

(9) RAISED NUMERALS AND LETTERS. (a) Except as provided in par. (b), all car operating panels shall have raised letters and arabic numerals identifying the floor, open, close, hold-open and emergency alarm buttons, and the telephone or other emergency signaling means.

(b) Nationally recognized symbols approved by the department may replace words to identify essential controls.

Note: See ANSI A17.1 Rule 210.13 for examples of symbols. In addition to the required raised letters and numerals, braille identification is recommended.

(c) All characters on the car operating panel shall be:

1. A minimum of 5/8 inch in height;
2. Raised to a height of not less than 1/32 inch;
3. Printed vertical capital with the width-to-height ratio between 3:5 and 1:1 and the stroke-width-to-height ratio between 1:5 and 1:10;
4. Of contrasting color with either light characters on a dark background or dark characters on a light background;
5. Made of durable material;
6. Securely affixed, and where used to identify a control button, located immediately to the left of the button or switch to which they apply; and
7. Arranged so that multiple character sequences are readable from left to right.

(d) Raised letters or arabic numerals shall be provided at each hoistway entrance on both sides of the door frame jamb to identify the floor designation.

1. The letter or numerals shall be centered on the jamb at a height of 60 inches on center above the floor.
2. The dimension of the letter or numeral on the frame shall be a minimum of 1-1/4 inches and a maximum of 2 inches in height.

APPENDIX

The material contained in this Appendix is for clarification purposes only. The following are examples of forms SB-22 - Application to Erect or Remodel, SB-2D - Elevator Inspection, SB-2E - Test Report, and SB-252 - Certificate of Operation. Also included is the fee schedule for elevators, power dumbwaiters, escalators, moving walks and ramps, and lifts for the physically disabled.

Wisconsin Department of Industry,
Labor and Human Relations
Safety & Buildings Division

ERECT OR REMODEL LIFT EQUIPMENT APPLICATION

Elevator Section
P.O. Box 7969
Madison, WI 53707
(608)267-9606

s. 101.12(1)(c)

PASSENGER ELEVATOR	FREIGHT ELEVATOR	LIFT FOR PHY. DIS.	STAGE LIFT	DUMBWAITER	SPEEDWALK	ESCALATOR	SPL. PURPOSE ELEVATOR	MATERIAL LIFT
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Application is now made to the Department of Industry, Labor and Human Relations for permission to ERECT REMODEL the item checked above in accordance with the following detailed statement and attached plans, and subject to the orders of the Department. The installation will include details set forth below and is also to include all orders as required by the elevator code of the Department.

- NOTE:** Plans MUST include ALL of the following:
- 1) sectional plan of car and hoistway;
 - 2) sectional elevation of hoistway, penthouse (showing machinery) and pit;
 - 3) Plans of machine and supports, showing details of materials, size and bearing size of beams, etc. If the hoistway has more than one entrance on any floor, all entrances must be clearly shown. (Typical entrances must be so noted.)
- DATE OF CONTRACT _____

1	Name of User:	IF USER IS NOT THE OWNER → COMPLETE THIS SECTION	Name of Owner:
2	Street Address:		Street Address:
3	City:	Zip Code:	City: State: Zip Code:
4	Building Used for (Occupancy):	Which Floor is Main Floor?	Basement? <input type="checkbox"/> Yes <input type="checkbox"/> No No. of Landings:
5	Total Travel: Ft. In.	Rated Load:	Rated Speed: Hoistway Size: Car Size: Hoistway, Enclosure of: Basement, Enclosure of:
6	Hoistway Door Type:	No. of Doors:	How Doors Operated? Locking Devices for Doors: Hoistway Door Unlocking Device:
7	Stationary or Retiring Com?	Height of Landing gates:	No. of Landing Gates: Locking Device for Gate: No. of Car Entrances: <input type="checkbox"/> 1 <input type="checkbox"/> 2
8	Car Gates or Doors?	Electric Contacts:	Power Operated: <input type="checkbox"/> Yes <input type="checkbox"/> No Toeguards: Facia Plates: Pit Depth: Ft. In.
9	Top-run by: Inches	Bottom-run by: Inches	Overhead Clearance: Pit Switch: Pit Ladder: No. of Buffers:
10	Type of Buffers:	Size of Buffers:	Counterweight Guards: Guide Rails of: Size of Guide Rails: Car Cnt.
11	Signal Systems <input type="checkbox"/> Phone Compartment <input type="checkbox"/> Emergency Call Bell <input type="checkbox"/> 2-Way Conversation Outside Hoistway <input type="checkbox"/> Bell Outside Building <input type="checkbox"/> Communicate or Signal Fire, Police or Dispatch Service		Emergency Control <input type="checkbox"/> Key Return <input type="checkbox"/> Control In Car <input type="checkbox"/> Smoke Sensing Control
12	Machine Location:	Type and Make:	Accessibility Requirements Provided For? <input type="checkbox"/> Yes <input type="checkbox"/> No Kind of Power: H.P. Current
13	Volts: Amperes: Cycles:	Phase:	Type of Operation: Service Disconnect Switch:
14	Brake Type:	Limit Switches:	Car Top Operating Device? <input type="checkbox"/> Yes <input type="checkbox"/> No Slack Cable Switch:
15	No. of Hoisting Cables:	Size Cables:	Material of Cables:
16	Safety Devices, Type: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C	Manufacturers No.	Speed Governor Type: Manufacturers No. Approved Capacity:
17	Car Weight:	Car Weight with Rated Load:	Hydraulic Pressure: Elevator Manufacturer:
18	Unit To Be Installed By:		Wisconsin Registration number:
19	Name and Address of Architect, if Any:		
20	Total Cost to Purchaser: \$	Plan Examination Fee = 1% of Total TOTAL COST × .01 = →	Fee Submitted \$ Minimum Fee \$35.00
21	I certify that the above statements are true and accurate to the best of my knowledge. ▶	Signed	Date Signed:

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS
SAFETY AND BUILDINGS DIVISION
P.O. BOX 7969
MADISON, WISCONSIN 53707

TEST REPORT
OF
SAFETY DEVICE AND GOVERNOR IN COMPLIANCE
WITH
ELEVATOR CODE SECTIONS IND 4.48 and A17.1 1001.4(b)

SAFETY TEST RUN-AWAY TEST

City	Premises	State Registration No.
Occupant		
Owner or Agent	Address	

- Rated capacity _____ lbs. Rated Speed _____ F.P.M. Pass. (_____) Frt. (_____)
- Type of Machine Drum (_____) Traction (_____) Manufacturer of Safety _____
Manufacturer of Governor _____
- Type safety: (Instantaneous), (Wedge-clamp), (Gradual-wedge-clamp), (Flexible-guide-clamp), (Combination Instantaneous and Oil Buffer).
- Before the safety test is made the governor shall be checked for correct tripping speed. Governor set to trip at _____ F.P.M. Actual Car Speed _____
- Was safety tested with contract load in the car? _____ If not, Pounds Tested? _____
- Governor Rope: (Manila), (6 x 19), (8 x 19), (x), (Iron or Steel), Size _____
Condition of governor rope or cable after test _____
- Length of marks on guide rails made by safety jaws (R. H. Rail _____").
(L.H. Rail _____").
- Did car set out of level? _____ Inches out of level _____
- Did governor set satisfactorily? _____ Remarks _____
- Did safety test prove satisfactory? _____ Remarks _____
- Was the tag fastened to the governor release carrier? _____

The above safety and governor tests were made in compliance with the Wisconsin Administrative Code Sections Ind 4.48 and A17.1 1001. 4(b) and proved satisfactory.

Date _____ Firm performing test _____
Signature _____

REPORTS SHALL BE FILED WITH THE DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS WITHIN FIFTEEN (15) DAYS AFTER DATE OF TEST.

DEPARTMENT OF INDUSTRY, LABOR & HUMAN RELATIONS
CERTIFICATE OF OPERATION
FOR

SAFETY & BUILDINGS DIVISION
P.O. Box 7969
Madison, WI 53707



THIS IS TO CERTIFY THAT THE EQUIPMENT DESCRIBED MEETS APPLICABLE STANDARDS OF THE
WISCONSIN ADMINISTRATIVE CODE CHAPTER IND.

ISSUED TO

DESCRIPTION OF EQUIPMENT

WISCONSIN REGISTRATION NUMBER	E NUMBER

INSPECTED BY

AUTHORIZED INSPECTOR	
DATE OF INSPECTION	CERTIFICATION EXPIRES

ISSUED BY

--

FEEES FOR ELEVATORS
AND RELATED EQUIPMENT

Ind 69.06 Elevators, power dumbwaiters, escalators, moving walks and ramps, personnel hoists, lifts for the physically disabled and material lifts.
(1) PLAN EXAMINATION AND APPLICATION FEES. Fees for the examination of plans or application or both submitted in accordance with the requirements of ch. Ind 4, shall be determined at the rate of 1% of the cost to the purchaser, excluding building construction. The minimum fee shall be \$35.00.

(2) INSPECTION FEES. Inspection fees for new installations, alterations, periodic inspections, and reinspections shall be determined in accordance with Table 69.06-1.

Table 69.06-1

Type of Inspection	Fee
Initial Inspection of New Installation	
Class 1, 2, 3, 6, 7 and 8 (4 landings or less)	\$70.00
Each additional landing	\$ 5.00
Each unit with phase I emergency recall operation.....	\$38.00
Class 2A and 5.....	\$38.00
Class 4 (see fees for special inspections specified in s. Ind 69.14)	
Reinspections of New Installations to Determine Compliance	
Class 1, 2, 3, 4, 6, 7 and 8	\$38.00
Class 2A and 5.....	\$22.00
Inspection of Alterations	
Class 1, 2, 3, 6, 7 and 8 (4 landings or less)	\$27.00
Each additional landing	\$ 5.00
Class 2A and 5.....	\$22.00
Class 4 (see fees for special inspections specified in s. Ind 69.14)	
Periodic Inspections	
Class 1, 2, 3, 6, 7 and 8 (4 landings or less)	\$27.00
Each additional landing	\$ 5.00
Class 5.....	\$22.00
Class 4 (see fees for special inspections specified in s. Ind 69.14)	
Reinspection of Alterations and Periodic Inspections to Determine Compliance	\$22.00

Note #1: The following is an identification of the various classes used in Table 69.06-1.

- Class 1—Freight elevators (single belt, double belt and cable controlled elevators) sidewalk elevators, sidewalk type elevators and grade level elevators;
- Class 2—Passenger and all other freight elevators not in Class 1;
- Class 2A—Lifting devices used by the physically disabled;
- Class 3—Material lifts;
- Class 4—Personnel hoists;
- Class 5—Hand power elevators;
- Class 6—Dumbwaiters (power);
- Class 7—Escalators, moving walks and moving ramps per unit. A single section having a travel of one floor defines an escalator unit;
- Class 8—Special purpose personnel elevators.

Note #2: Any elevator or dumbwaiter classification may be identified by number of landings. Example: A 6-landing passenger elevator would be classified as class 2-6.

(3) CERTIFICATE OF OPERATION. The certificate fee shall be determined in accordance with Table 69.06-2.

Table 69.06-2

Inspection Performed by	Fee per certificate
Authorized inspector employed by the department	\$16.00
Certified inspector employed by an insurance company or agency	\$22.00

SECTION 3. ILHR 52.04 (4) (b) is repealed and recreated to read:

ILHR 52.04 (4) (b)* Interior circulation. Access shall be provided to all areas of the building as specified in Table 52.04. Interior circulation between floor levels shall be accomplished as follows:

1. In any public building or place of employment, the following methods of interior circulation may be used:

- a. Ramps complying with s. ILHR 52.04 (7);
- b. Elevators complying with ch. ILHR 18;
- c. Vertical lifts complying with ch. ILHR 18; and
- d. Enclosed inclined wheelchair lifts complying with ch. ILHR 18.

2. The following lifts may be installed in new or existing places of worship and lodge halls of fraternal organizations as defined in ch. 614, Stats., if interior circulation between floor levels is not required by this section:

- a. Unenclosed inclined wheelchair lifts complying with ch. ILHR 18;
- b. Stairway chairlifts complying with ch. ILHR 18; and
- c. Residential-type elevators complying with ch. ILHR 18.

EFFECTIVE DATE

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.



State of Wisconsin \ Department of Industry, Labor and Human Relations

Office of the Secretary
201 E. Washington Avenue
P.O. Box 7946
Madison, Wisconsin 53707
Telephone 608/266-7552

June 21, 1988

Gary Poulson
Assistant Revisor of Statutes
Suite 904
30 West Mifflin Street
Madison, Wisconsin 53703

Douglas LaFollette
Secretary of State
Room 271, GEF-1
201 East Washington Avenue
Madison, Wisconsin 53702

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO. 87-109

RULE NO. Chapter ILHR 18

RELATING TO Elevators

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,

John T. Coughlin
Secretary