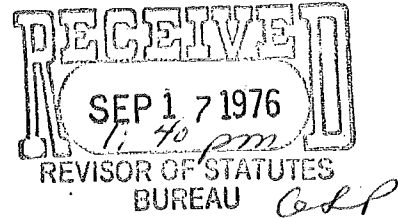


Ind 4

STATE OF WISCONSIN)
DEPARTMENT OF INDUSTRY,) ss.
LABOR & HUMAN RELATIONS)

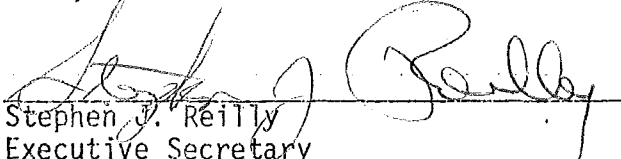


TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Stephen J. Reilly, Executive Secretary of the Department of Industry, Labor and Human Relations, and custodian of the official records of said Department, do hereby certify that the attached rules to Wisconsin Administrative Code, Chapter Ind 4 - Elevator Code, were adopted by the Department of Industry, Labor and Human Relations on September 16, 1976.

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 in the offices of the Department, in the City of Madison, this 16 day of September, A.D., 1976.


Stephen J. Reilly
Executive Secretary

ORDER OF

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by sections 101.01 to 101.25, Wis. Stats., the Department of Industry, Labor and Human Relations hereby amends, repeals, recreates, creates, renumbers and adopts rules of Wisconsin Administrative Code Chapter Ind 4--Elevator Code.

The rules attached hereto shall become effective on the first day of the month following publication in the Wisconsin Administrative Code as provided in section 227, Wis. Stats.

DRAFT #6 (AMENDED)
 FINAL RULES ADOPTED
 WISCONSIN ADMINISTRATIVE CODE
 CHAPTER IND 4 - ELEVATOR CODE

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24

Add to table of contents:

Ind 4.95 Emergency control of elevators under fire or other emergency conditions.

Subsections Ind 4.001 (60) and (61) are created to read:

(60) Emergency Control. Emergency control provides a means for authorized personnel to remotely take over the control of the elevator in cases of emergency such as assault, disaster, fire, illness, rape, security, and vandalism.

(61) Private Residence. A separate dwelling or a separate apartment in a multiple dwelling which is occupied only by the members of a single family unit.

Subsections Ind 4.03(1)(d) and (e) are repealed:

~~(d) For regulations relative to the use of elevators, hoists, derricks and similar equipment during the period of construction of a building or any other structure, see Wis. Adm. Code, chapters Ind-35, Safety in Construction and Ind-44, Personnel Hoists.~~

~~(e) For belt manlift requirements, see Wis. Adm. Code, chapter Ind-1, Safety.~~

1 Subsection Ind 4.03(2) is created to read:

2 (2) The applicable regulations of Wis. Adm. Code, Chapters Ind 1000-2000,
3 Safety and Health, including supplemental Wis. Adm. Codes, Chapter
4 Ind 35, Safety in Construction, Chapter Ind 44, Personnel Hoists, and
5 Chapter Ind 1, Safety, shall apply to:

6 (a) the use of elevators, hoists, derricks and similar equipment during
7 the period of construction of a building or any other structure;

8 (b) belt manlifts.

9 Note: Employers other than state and local government should check the
10 regulations of the U. S. Department of Labor, Occupational Safety
11 and Health Administration, which can be obtained from the Super-
12 intendant of Documents, U. S. Government Office, Washington, D. C.,
13 20402.

14 Subsection Ind 4.03(1)(f) is renumbered (3).

15 Subsection Ind 4.04(4) is amended to read:

16 (4) A plan examination fee in the amount established by Wis. Adm. Code
17 section Ind ~~69-20~~ 69.06 shall be paid for each installation requiring approval.

18 Section Ind 4.08 is amended to read:

19 Ind 4.08 Inspection by cities. In any city which provides a competent inspector,
20 the department of industry, labor and human relations will accept in-
21 spections by such city, provided the conditions of subsections Ind
22 4.09~~(2)~~ (4) (a), (b), (c), (d) and (e) are complied with, substituting
23 "city" for "insurance company".

24 Subsection Ind 4.09(4)(e) 1. is amended to read:

25 1. Evidence of approval noted under subsection ~~(2)~~ (4) (e) shall be confirmed
26 on form SB-12 "Certificate of Competency Elevator Inspector" issued by the
27 department to qualified inspectors after their competency has been examined
28 and approved.

1 Subsection Ind 4.09(7) is amended to read:

2 (7) Whenever the department under the authority of subsection ~~(4)~~ (6) revokes
3 a certificate, the department shall immediately notify the owner, defined
4 in section 101.01 ~~(13)~~ (2)(i), Wis. Stats., of the equipment in writing
5 and shall afford him an opportunity for a hearing within 30 days time
6 after revocation of certificate.

7 Subsection Ind 4.39(2)(b)1. is created to read:

8 (b) Power closing of vertically sliding hoistway doors or gates shall be
9 by means of continuous pressure operation from the car and/or at the
10 landing where the car is stationed.

11 1. Exception: The continous pressure operation shall be overridden by
12 an automatic operation as specified in Ind 4.95(1)(d).

13 Subsection Ind 4.70(7) is repealed and recreated to read:

14 ~~(7) The car of every electrically driven elevator shall be provided with an~~
15 ~~emergency stop switch located in or adjacent to the car operating panel.~~
16 ~~When opened, this switch shall cause the electric power to be removed from~~
17 ~~the elevator machine motor, brake or solenoid valve and shall conform~~
18 ~~with the following:~~

19 ~~(a) Be of the manually opened and closed type.~~

20 ~~(b) Have red operating handles or buttons.~~

21 ~~(c) Be conspicuously and permanently marked "stop".~~

22 ~~(d) Be positively opened mechanically and the opening shall not be~~
23 ~~solely dependent on springs.~~

24 ~~1. Exception: Existing hand cable controller elevators.~~

25

26

27

28

1 (7)(a) Existing installations. 1. The car of every elevator shall be permitted
 2 to have an emergency stop switch. This switch shall be located in or
 3 adjacent to the car operating panel and when opened, shall cause the
 4 electric power to be removed from the elevator-machine-motor, brake or
 5 solenoid valve. This switch shall conform with the following:

- 6 a. Be of the manually opened and closed type,
- 7 b. have red operating handles or buttons,
- 8 c. be conspicuously and permanently marked "stop", and
- 9 d. be positively opened mechanically and the opening shall not be
 10 soley dependent on springs.

11 2. Exception: Emergency stop switches shall be prohibited in install-
 12 ations required to have emergency control by section Ind 4.95.

13 (b) New installations. An emergency stop switch shall be prohibited.

14 1. Exception: Freight elevators without power operated doors.

15 Subsection Ind (8) is renumbered (9).

16 Subsection Ind (8) is created to read:

17 (8) A door hold-open keyed or toggle switch shall be permitted provided it
 18 is rendered inoperative when the elevator is under the emergency control
 19 required by subsections Ind 4.95 (1) and (2).

20 Subsection Ind 4.75(4) is created to read:

21 (4) NEW INSTALLATIONS. Elevators which are operated at any time without a designated
 22 operator in the car shall be provided with the following signal devices:

23 (a) In all buildings other than private residences, such elevators shall be
 24 provided with signal systems conforming to 1. and 2. .

- 25 1. An electric bell operable from the car, not less than six (6) inches
 26 in diameter, located inside the building and audible outside the hoist-
 27 way. One bell operable from all cars shall be permitted to be used for
 28 a group of elevators.

1 2. Means of two-way conversation from each elevator to a readily accessible
2 point outside the hoistway:

3 a. Exception: Elevators in buildings having a height from the lowest to
4 the highest elevator landing of not more than seventy (70) feet pro-
5 viding the distance between any adjacent landings does not exceed
6 fifteen (15) feet.

7 b. Exception: When the means of communication with an approved service
8 permits two-way conversation.

9 3. The bell and/or the means of two-way conversation required by 1. and 2.
10 shall automatically transfer from the normal building power supply to an
11 approved source of emergency power within ten (10) seconds after the normal
12 building power supply fails. The emergency power source shall be capable
13 of providing for the operation of the bell for at least one (1) hour and
14 the means of two-way conversation for at least four (4) hours.

15 (b) Elevators which are not provided with a telephone connected to a central
16 exchange system or internal exchange system which is manned 24 hours per day
17 shall in addition to (a) be provided with at least one of the emergency
18 signal devices specified in 1. or 2. .

19 1. An electrical alarm bell not less than six (6) inches in diameter
20 operable from inside the car and enclosed in a weatherproof enclosure
21 marked "ELEVATOR EMERGENCY - CALL POLICE", in letters not less than two (2)
22 inches high. The alarm bell shall be mounted on the outside of the build-
23 ing near the main entrance and located so that the sign can be read from
24 the adjacent sidewalk. One outside alarm bell operable from all cars shall
25 be permitted to be used for a group of elevators.

26 2. Means within the car for communicating with or signaling to a police, fire,
27 security or similar dispatch service which operates twenty-four (24) hours
28 each day.

1 3. An emergency power system conforming to the requirements of (a) 3.
2 shall be provided to supply the bell and/or means of communication
3 specified in 1. and 2. .

4 4. Exception: Subsection (b) shall not apply to apartment, hotel or
5 other buildings in which attendants or tenants are continuously in
6 the building and available to take action in case the emergency signal
7 required by (a) is operated.

8 (c) The signal and emergency system required by (a) and (b) shall be
9 checked during inspections required by sections Ind 4.05 and 4.09.

10 Section Ind 4.95 is created to read:

11 Ind 4.95 Emergency control of elevators under fire or other emergency conditions.

12 (1) All automatic-operation elevators serving three or more landings
13 and having a travel of thirty (30) feet or more shall conform to
14 the following:

15 (a) A three position (on, off and by-pass) key-operated switch
16 shall be provided at the main floor or other approved level for
17 each single and/or group of elevators.

18 1. The key shall be removable only in the "on" and "off" positions.

19 2. The keyed switch shall be located as follows:

20 a. In or at the left door jamb of the elevator entrance.

21 b. Where there is more than one elevator, the left elevator
22 shall have the switch.

23 c. Located not less than six (6) feet, six (6) inches above
24 the floor.

25 3. When the switch is in the "on" position, all elevators controlled
26 by this switch and which are on automatic service shall return
27 nonstop to the main floor or other approved level.
28

1 a. An elevator traveling away from the main floor or other
2 approved level shall reverse at or before the next avail-
3 able floor without opening its doors.

4 b. Elevators equipped with automatic power-operated doors and
5 standing at a floor other than the main floor or other
6 approved level, with the doors open, shall close the doors
7 without delay, and proceed to the main floor or other
8 approved level, and the doors shall open and remain open.

9 c. Door reopening devices for power-operated doors which are
10 sensitive to smoke, heat or flame shall be rendered inoperative.

11 d. All car and corridor call buttons shall be rendered inoperative
12 and all call registered lights and direction lanterns shall
13 be extinguished and remain inoperative.

14 4. When the switch is in the "by-pass" position, it shall render
15 the smoke detectors inoperative and restore normal operation
16 except that it shall not affect the operation of elevators that
17 are operating on emergency service.

18 5. A smoke detector in each elevator lobby, which when activated
19 prevents cars from stopping at that floor, shall not be sub-
20 stituted for any of the above requirements.

21 (b) In addition to the key-operated switch required in (a), smoke
22 detectors shall be installed in each elevator lobby at each floor,
23 except the main floor or other approved level. The activation
24 of a smoke detector in any elevator lobby, except the main floor
25 lobby or other approved level, shall cause all cars which are on
26 automatic service in all groups serving that lobby to return
27 nonstop to the main floor or other approved level. The operation
28 shall conform to the requirements of (a) 3. a. through d. .

- 1 1. Exception: Elevators in buildings which are completely pro-
2 tected by an automatic sprinkler system.
- 3 2. Exception: Freight elevators located in or at openings into
4 manufacturing areas.
- 5 3. Exception: Elevator lobbies at unenclosed landings outside the
6 building.

7 (c) Passenger elevators equipped with manually operated doors or with
8 power operated doors that do not close automatically shall operate
9 in accordance with the requirements of (4).

10 (d) Freight elevators equipped with power operated vertically sliding
11 doors that do not close automatically shall meet the requirements
12 of this subsection and operate as follows:

- 13 1. The continuous pressure operation required by Ind 4.39(2)(b) shall
14 be overridden by an automatic operation upon initiation of the
15 emergency controls of (a) or (b).
- 16 2. Car doors or gates shall be provided with a reopening device
17 which remains operative during emergency control.
- 18 3. Upon initiation of the the emergency signal specified in (a) or
19 (b) the automatic operation shall be as follows:
 - 20 a. A warning bell or other audible signal provided on the car
21 shall start to sound and shall continue to sound until the
22 hoistway door is closed;
 - 23 b. Car doors or gates shall begin to close no sooner than 5 seconds
24 after the bell or audible signal begins to sound;
 - 25 c. Hoistway doors shall begin to close when the car doors or gates
26 are fully closed;
 - 27 d. When the hoistway doors are closed the car shall proceed to the
28 main floor or other approved level without stopping for car or
 lobby calls, and the doors shall open and remain open.

1 (2) All elevators having a travel of seventy (70) feet or more and
2 elevators having a bottom terminal landing seventy (70) feet or
3 more above the lowest grade elevation surrounding the building
4 shall be provided with the following operation:

- 5 (a) A two position (off and on) key-operated switch shall be pro-
6 vided in or adjacent to an operating panel in each car.
- 7 1. The key shall be removable only in the "off" position.
 - 8 2. The switch shall be effective only when the main floor or
9 other approved level key-operated switch as required in (1)(a)
10 is in the "on" position or a smoke detector as required in
11 (1)(b) has been activated, and the car has returned to the
12 main floor or other approved level.
 - 13 3. When in the "on" position, it shall place the elevator on
14 emergency service with operation as follows:
 - 15 a. An elevator shall be operable only by a person in the car.
 - 16 b. Elevators shall not respond to elevator lobby calls.
 - 17 c. The opening of power-operated doors shall be controlled only
18 by continuous pressure "open" buttons or switches. If the
19 switch or button is released prior to the doors reaching the
20 fully open position, the doors shall automatically reclose.
 - 21 d. Open doors shall be closed by either the registration of a
22 car call or by pressure on "Door Close" switch or button.
 - 23 4. Elevator shall be removed from emergency service by moving
24 the emergency service key-operated switch in the car to the
25 "off" position with the car at the main floor or other approved
26 level.

27 (b) Exception: This subsection (2) shall not apply to elevators which
28 do not require the emergency control specified in (1).

1 (3) Keys shall be provided for the switches required by (1)(a) and (2)(a)
2 as follows:

3 (a) The keys shall be identical and not a part of a building master
4 key system.

5 (b) There shall be a key for the main floor or other approved level
6 switch and for each elevator in the group.

7 (c) Two (2) sets of the keys required by (b) shall be provided as
8 follows:

9 1. One set shall be kept on the premises by persons responsible
10 for maintenance and operation of the elevators in a location
11 readily available to authorized persons, but not where they
12 are accessible to the public.

13 2. One set intended for use by the fire departments, police
14 departments, and emergency squads shall be kept in a metal
15 box mounted in a conspicuous location at the main floor or
16 other approved level.

17 a. The box shall have a lock-type cover which can be opened only
18 by the fire and police department.

19 (4) Elevators operable only by a designated attendant in the car shall
20 be provided with a signal system consisting of both visual and
21 audible types actuated at the main floor or other approved level,
22 to alert the attendant to return nonstop to the main floor or other
23 approved level.

24 (5) Elevators arranged for dual operation shall, when on automatic oper-
25 ation, conform to (1), (2) and (3), and when on operation by a des-
26 ignated attendant in the car, conform to (4).

27
28

(a) Where an automatic-operation elevator is on attendant service (independent, hospital, service, inspection and other similar operation), it shall be considered as being on operation by a designated attendant in the car.

(6) Elevator operation required by this section shall be checked during inspections and tests required by section Ind 4.05 and 4.09.

(7) Elevator hoistways shall have floor numbers, not less than four (4) inches in height, placed on walls and/or doors of the hoistway at intervals where a person in a stalled elevator upon opening the car door, can determine the floor position.

(8) This section shall apply to:

(a) New installations of all passenger elevators, and freight elevators with power-operated doors.

Note: the 'main floor' for the purposes of this section is that floor level at which the emergency control function is to be performed and is not necessarily the 'first story' as defined in the Wisconsin Administrative Code, Chapters Ind 50-64, Building, Heating, Ventilation and Air Conditioning.

Virginia B. Hart
Virginia B. Hart, Chairman

John C. Zinos
John C. Zinos, Commissioner

William A. Johnson
William A. Johnson, Commissioner

Dated 9/16/76

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28