Filed Oct 31, 1963
8:30 a.m.

Ind 51 to 56

STATE OF WISCONSIN )
) ss.
DEPT. OF INDUSTRIAL COMMISSION )

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Stephen J. Reilly, Administrative Officer-Secretary of the Industrial Commission of Wisconsin and custodian of the official records of said commission, do hereby certify that the attached copies of amendments to orders Ind 51.15, Ind 51.24, Ind 52.59, Ind 55.56 and Ind 56.17 of the Building Code were adopted by the Industrial Commission on October 23, 1963.

I further certify that said copy has been compared by me with the original on file in this commission 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 the Capitol, in the City of Madison, this

29th day of October,

A.D., 1963.

Stephen J. Reilly
Administrative Officer-Secretary

Pursuant to authority vested in the Industrial Commission of Wisconsin by Section 101.01-101.29 Wisconsin Statutes, and pursuant to Chapter 227, the Industrial Commission on October 23, 1963 voted to amend safety order Ind 51.15 (5) and adopt (7) (a) (b) (c) (d) (e) (f) (g) (h)(i) (j) 1. 2. 3. 4. 5. 6. 7. 8.; amend safety order Ind 51.24 (4) (a) (Exception) ; amend safety order Ind 52.59 (3) and adopt (4) (a) (b) (c); adopt safety order Ind 55.56 (8) (a) (b) (c) (d) (e) (f) (g), and adopt safety order Ind 56.17 (3) (a) (b) (c) and (d) of the Building Code.

The amendments and created subsections shall become effective on the first day of the month following their publication in the Wisconsin Administrative Code as provided in Section 227.

INDUSTRIAL COMMISSION OF WISCONSIN

Stephen J. Reilly,
Administrative Officer-Secretary

October 29, 1963

Ind 51.15 Standard exit. (1) Every door which serves as a required exit from a public passageway, stairway or building shall be a standard exit door unless exempted by the occupancy requirements of this code.

Note. For required exits see Wis. Adm. Code sections Ind 54.06, 55.10, 56.08, 57.09.

(2) Every standard exit door shall swing outward or toward the natural means of egress (except as below). It shall be level with the floor, and shall be so hung that, when open, it will not block any part of the required width of any other doorway, passageway, stairway or fire escape. No revolving door, and no sliding door except where it opens onto a stairway enclosure or serves as a horizontal exit, shall be considered as a standard exit door.

(3) A standard exit door shall have such fastenings or hardware that it can be opened from the inside without using a key, by pushing against a single bar or plate, or turning a single knob or handle; it shall not be locked, barred, or bolted at any time while the building is occupied.

(4) A standard exit doorway shall not be less than 6 feet 4 inches high by 3 feet 4 inches wide, except where especially provided under occupancy classifications and in Wis. Adm. Code section Ind 51.20. Where double doors are provided with or without mullions, the width of each single door may be reduced to 2 feet 6 inches.

(5) All exit doors, unless otherwise exempted by the occupancy requirements of this code, shall be plainly marked by a red illuminated translucent exit sign bearing the word EXIT or OUT in plain letters not less than 5 inches in height and in such other places as may be necessary to direct the occupants to the exit doorways.

(6) Doors, windows or other openings which are not exits but which give the appearance of exits shall be effectively guarded.

(7) Safeguards for physically handicapped persons. (a) Every public building, the construction of which is commenced after January 1, 1964, shall be so designed and constructed to provide a reasonable means of ingress and egress for physically handicapped persons with the exception of those listed in subsection (j).

(b) There shall be at least one grade or street level entrance without steps. The door shall be at least 6 feet 4 inches high and not less than 3 feet 4 inches wide and shall comply with all other requirements of this section.

(c) Where the door sill or floor is above or below grade or street level, the difference in elevation shall be accomplished by a ramp with a slope of not more than one foot of rise in 12 feet, and shall be finished with a non-slippery surface.

(d) Other grade or street level entrances not so designed or constructed shall be marked with a sign indicating the location of the entrance or exit available for wheel chair service.

(e) The ramp shall be at least 3 feet 8 inches in width of which not more than 4 inches on each side may be occupied by a handrail.

(f) All ramps shall have a handrail on each side. Handrail shall not be less than 2 feet 6 inches in height with an intermediate rail at mid-height.

(g) The floor on the inside and outside of each ramp doorway shall be level for a distance of 6 feet from the door.

(h) Every ramp shall have at least 6 feet of level clearance at the bottom.

(i) All ramps shall have a level platform at 30-ft. intervals and shall have a level platform at least 6 feet in length wherever they turn.

(j) Exceptions:

1. Apartment buildings with less than 20 living units.

2. Row houses.

3. Convents and monasteries.

4. Jails and other places of detention.

5. Garages, service stations, hangars, boathouses, and other buildings in the hazardous occupancy classification.

6. Factories and mercantile buildings.

7. State owned buildings built for field service purposes such as, but not limited to, conservation commission fire towers, fish hatcheries, tree nursery buildings, and warehouses.

8. Existing buildings to be remodeled or changed in use where compliance cannot reasonably be obtained.

Ind 51.24 Fire alarm systems. (1) Interior fire alarm systems required under Wis. Adm. Code sections Ind 54.16, Ind 56.19 and Ind 57.22 shall be designed and constructed in conformity with the following requirements:

(2) All such alarm systems shall consist of operating stations on each floor of the building, including the basement, with bells, horns, or other approved sounding devices which are effective throughout the building. The system shall be so arranged that the operation of any one station will actuate all alarm devices connected to the system except in the case of a presignal system. Fire alarms shall be readily distinguishable from any other signaling devices used in the building. A system designed for fire alarm and paging service may be used if the design is such that fire alarm signals will have precedence over all others.

(3) Every fire alarm system shall be electrically operated except as provided in Wis. Adm. Code section Ind 56.19 and shall be operated on closed circuit current under constant electrical supervision, so arranged that upon a circuit opening and remaining open, or in case of a ground or short circuit in the ungrounded conductor, audible trouble signals will be given instantly.

(4) In buildings more than 3 stories in height, coded fire alarm systems shall be provided, and the systems shall be so arranged that the code transmitted shall indicate the location and the story of the structure in which the signal originated. Exception:

(a) In apartment buildings, non-coded electrically supervised continuous sounding fire alarm systems will be approved.

(5) Operating stations shall be prominently located in an accessible position at all required exit doors and required exit stairways. Operating stations shall be of an approved type and shall be conspicuously identified. All such operating stations shall be of a type, which after being operated, will indicate that an alarm has been sent therefrom until reset by an authorized means. (Operating stations having a "Break Glass" panel will be acceptable. On coded systems having a device to permanently record the transmission of an alarm, "Open Door" type stations may be used.) The fire alarm operating stations shall be mounted approximately 5 feet above the finished floor as measured from the floor to the center of the box.

(6) All such alarm systems shall be tested at least once a week and a record of such tests shall be kept.

(7) Existing fire alarm systems that are effective in operation will be accepted if approved by the industrial commission.

Note: The following sections are taken from the Wisconsin state electrical code.

(8) The energy for operation of fire alarm systems shall be taken from sources suited to the design of the system. Primary batteries shall not be used.

(9) A 3-wire 120-240 or 120-208 volt (3 phase 4 wire) service will be accepted for supervised systems provided the operating current is secured from one ungrounded conductor and the neutral, or grounded conductor, and the current for operating trouble signal or signals is secured from the other ungrounded conductor and the neutral or grounded conductor.

(10) Electrical wiring in connection with fire alarm systems shall be installed in rigid metal conduit, flexible metal conduit, electrical metallic tubing or surface metal raceway. Armored cable (metal) may be used where it can be fished in hollow spaces of walls or partitions in apartments or rooming houses not over 3 stories in height. Where the wiring is subject to excessive moisture or severe mechanical injury, rigid metal conduit shall be used. The smallest size conductor to be used in any fire alarm system in a building over 3 stories in height shall be #14 AWG or #16 AWG for buildings not over 3 stories in height. The wires shall be provided with insulation suitable for use on circuits not exceeding 600 volts. Fire alarm systems shall be connected to the line side of the service switch or to the emergency bus, where available, through an approved fire alarm cutout or equivalent.

Ind 52.59 Enclosure of Fixtures. (1) The fixtures (closets and urinals) in every toilet room shall be arranged to secure privacy in use. Water-closets shall be enclosed with partitions. Urinals shall be placed against walls and arranged individually. Individual floor type urinals shall be placed not less than 24 inches center to center and the space between urinals shall be filled flush with the front and top with non-absorbent material. Exception:

(a) The above requirements need not apply to toilet rooms accommodating only a single closet or urinal.

(2) A space of 6 to 12 inches shall be left between the floor and the bottom of each partition. The top of the partition shall be from 5½ to 6 feet above the floor. Doors with the top 5½ to 6 feet above the floor, and the bottom 6 to 12 inches above the floor, shall be provided for all water-closet compartments. All partitions and doors shall be of material and finish required for walls and ceilings under Wis. Adm. Code section Ind 52.58.

(3) The water-closet compartments in toilet rooms shall be not less than 30 inches in width, and shall be not less than 54 inches in depth with a clearance of not less than 24 inches between the fixture and the compartment door when closed except as specified in subsection (4). Compartment doors which are hung to swing inward shall clear the fixture not less than 2 inches.

Note: Section 146.085, Wis. Stats., provides that not more than 50% of the toilet compartments of any public toilet room of any public building, other than licensed hotels and resorts, shall be kept locked.

(4) Water closet compartments for physically handicapped persons. (a) One toilet room for each sex in every public building or place of employment except those exempted in section Ind 51.15 (j) shall have at least one water closet compartment that is not less than 36 inches in width and at least 54 inches in depth.

(b) The door shall be not less than 32 inches in width and shall be hung to swing outward.

(c) A grab bar or handrail 33 inches high and parallel to the floor shall be provided on each side of the compartment.

Ind 55.56 Portable grandstands or bleachers. (1) Portable grandstands or bleachers shall be self-contained units having all necessary parts to withstand and restrain all forces which may be developed during occupancy. They shall be so designed and constructed that if any structural member essential to the strength and stability of the structure is omitted during erection, the presence of unused connections or fittings will make the omission self-evident.

(2) A portable grandstand shall not be used for public occupancy until it has been securely assembled in accordance with this requirement.

(3) Portable grandstands shall be provided with base plates, sills, floor runners, or sleepers of sufficient area and strength to support safely the total live and dead loads.

(4) Where portable grandstands rest directly on the ground, mud sills of suitable material and having sufficient area to prevent dangerous settlement shall be provided under the base plates or sleepers. All mud sills shall be properly anchored to the ground and all bearing surfaces shall be in contact.

(5) A-frames or other supports and seat stringers for portable grandstands or bleachers shall be secured to prevent accidental displacement during occupancy.

(6) Field connections to wood members shall be by means of rivets, bolts, connectors, lag screws, friction or other approved devices. Lag screws shall not be used for direct tension. The use of nails and wood screws is permissible for holding wood posts together except that they shall not be used for demountable connections.

(7) Wood members in tension shall be connected at each end by not less than 2 bolts or lag screws or by approved connectors or other approved devices. Adequate provision shall be made to prevent the splitting or shearing of wood at such connections.

(8) The following requirements shall apply to folding and movable bleachers used in places of assembly in addition to the other requirements of sections Ind 55.56 and Ind 55.57.

(a) Shop drawings, specifications and calculations or a test report made by a recognized testing agency covering each bleacher model shall be submitted to the industrial commission by an architect or professional engineer registered in Wisconsin, for approval.

(b) No required exit doors or exit passageways shall be obstructed by any bleacher installation. Floor plans, elevations, and typical structural information showing the location of bleachers, exit doors, and exit passageways, for each installation shall be submitted to the industrial commission in triplicate for approval before work on the installation is commenced. The plans shall be made by and bear the seal of an architect or professional engineer registered in Wisconsin.

(c) All bleachers shall be designed to resist a horizontal swaying force applied to the seats in a direction parallel to the length of the seats of at least 24 pounds per lineal foot of seats and in a direction perpendicular to the seats of not less than 10 pounds per lineal foot of seats.

(d) Seat board and foot boards shall be designed to safely support a live load of not less than 120 pounds per lineal foot.

(e) All bleachers shall be equipped with sockets or holders along the back and ends to support guard rails. A guard rail not less than 42 inches in height and having two intermediate rails shall be provided along the back of the top row of seats. Guard rails not less than 42 inches in height above foot boards and having an intermediate rail at mid-height shall be providcd at the open end of all bleachers where the seats are more than 4 feet above the floor.

(f) The highest level of seat platforms of any forward folding or movable bleachers shall not be more than 12 rows or 11 feet above the floor.

(g) Forward folding bleachers shall be securely anchored to the floor with bolts, lag screws, or other approved devices.

Ind 56.17 Lighting. (1) Electric lighting. Every class, study or recitation room shall be equipped with sufficient electrical lighting units to maintain the illumination required in the Wisconsin illumination code.

(2) All other rooms and spaces in school buildings shall be equipped with means for supplying electric illumination in the quantity required for the purpose for which the room or space is used. All electrical work shall be installed to conform to the requirements of the Wisconsin state electrical code.

(3) Windows. (a) All classrooms and spaces in elementary school buildings used for instruction or study purposes shall be provided with side wall clear glass or other approved transparent material, vision panels or windows opening directly upon a street, alley, or open court as specified in section Ind 56.05 except gymnasiums, auditoriums, cafeterias, lunch rooms, libraries, audio-visual rooms, science rooms, homemaking rooms, art rooms, music rooms, vocational shops and similar areas.

(b) The windows or vision areas shall have a total glass area of not less than 40 square feet. The sill height shall not exceed 3'6" above the floor and the horizontal width of the vision area shall not be less than 5 feet. A minimum of 10 square feet of the aggregate glass area shall be arranged to open.

(c) Glass block construction conforming with the requirements of section Ind 51.11 may be used in classrooms and spaces used for instruction purposes except as specified in (a) and (b).

(d) Glass block wall panels which are exposed to direct sun rays and are 5 feet or more above the floor level shall be of a type capable of directing the light rays horizontally or upward.

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