

(a) All panels over 6 feet in width shall be supported on each side by chases, not less than 1½ inches in depth, of metal or other incombustible material.

(b) Approved continuous metal bond ties shall be provided in each horizontal mortar joint for block of nominal 12 x 12 inch size and in at least every third joint for block of smaller dimension.

(c) Provision shall be made in all panels for expansion, using approved expansion material not less than ½ inch thick for heads and lintels and not less than ¼ inch thick for jambs.

Ind 51.12 Height of building. The height of a building is measured at the center line of its principal front, from the sidewalk grade (or, if setting back from the sidewalk, from the grade of the ground adjoining the building) to the highest part of the roof, if a flat roof, or to a point 2/3 of the height of the roof, if a gabled or hipped roof. If the grade of the lot or adjoining sidewalk in the rear or alongside of the building falls below the grade at the front, the height shall be measured at the center of the lowest side.

Ind 51.13 Basement; first floor; number of stories. A basement is a story whose floorline is below grade at any entrance or exit and whose ceiling is not more than 5 feet above grade at any such entrance or exit. The first floor is the floor next above the basement, or the lowest floor if there is no basement. The number of stories of a building includes all stories except the basement.

Ind 51.14 Street; alley; court. (1) A street is any public thoroughfare 30 feet or more in width.

(2) An alley is any public thoroughfare less than 30 feet, but not less than 10 feet, in width.

(3) A court is an open, unoccupied space other than a street or alley and bounded on one or more sides by the walls of a building.

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 and 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 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 exit doorways.

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

(a) *Glass doors.* All glass doors shall be provided with a push bar or plate inside and outside. The push bar or plate shall be within 32 inches to 44 inches above the floor.

(b) *Glass walls panels.* Glass wall panels having a curb or sill less than 24 inches in height shall be protected by a horizontal bar or rail at least 1½ inches wide and located within 3 feet 6 inches to 4 feet 6 inches above the floor. The bar or rail assembly shall be capable of withstanding a lateral force of 100 pounds applied at any point.

(7) Safeguards for physically handicapped persons:

(a) Any place of employment or public building, the initial construction of which is commenced after July 1, 1970, shall be so designed and constructed as to provide reasonable means of ingress and egress by the physically handicapped with the exception of:

1. Apartment houses with less than 20 units, row houses and rooming houses;

2. Convents and monasteries;

3. Jails or other places of detention;

4. Garages, hangars and boathouses;

5. All buildings classified as hazardous occupancies;

6. Warehouses, and

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

8. University residence halls at universities which have at least three residence halls for men and three residence halls for women so constructed as to allow physically handicapped persons reasonable means of ingress and egress to such buildings.

(b) The requirements of section Ind 51.15 (7) (a) may be accomplished by at least one ground or street level entrance and exit without steps.

The entrance and exit shall be by:

1. Ramps with slopes not more than one foot of rise in 12 feet coated with a nonskid surface, or

2. By elevator or such other arrangements as may be reasonably appropriate under the circumstances and which meets with the approval of the department of industry, labor and human relations or

in lieu thereof with the approval of the municipality wherein the building is located.

3. Doors having a clear opening of at least 40 inches in width and shall otherwise conform to the department of industry, labor and human relations building code.

(c) If any ground or street level entrance or exit is not so designed or constructed a sign shall be placed at such entrance or exit indicating the location of the entrance or exit available for wheel chair service.

(d) Where requirements of section Ind 51.15 (7) (a) apply, there shall be reasonable means of access from a parking lot, if any, ancillary to such buildings and reasonable means of ingress and egress to at least one floor on which the primary business of such building is located.

(e) The ramp shall be at least 4 feet 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.

1. Handrail shall be not 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 feet intervals and shall have a level platform at least 6 feet in length wherever they turn.

(j) The requirements of section Ind 51.15 (7) (a) through (i) shall apply to buildings presently exempt or existing should there be a change in occupancy of such building to that of a place of employment or public building not otherwise exempt after July 1, 1970.

Note: See section Ind 52.59 for further requirements.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63; am. (5) and cr. (7), Register, November, 1963, No. 95, eff. 12-1-63; r. and recr., Register, October, 1967, No. 142, eff. 11-1-67; am. (7) (j), Register, May, 1968, No. 149, eff. 6-1-68; r. and recr. (7), Register, December, 1970, No. 180, eff. 1-1-71.

Ind 51.16 Stairways. (1) **DEFINITION.** By a stairway is meant one or more flights of steps and the necessary platforms connecting them to form a continuous passage from one level to another within a building or structure, except as provided in subsection (3) (b).

(2) **WIDTH.** Every required exit stairway, whether enclosed or not, shall be not less than 3 feet 8 inches wide of which not more than 4 inches on each side may be occupied by a handrail. Every platform shall be at least as wide as the stairway, measuring at right angles to the direction of travel. Every straight run platform shall measure at least 3 feet in the direction of travel. Wherever a door opens onto a stairway, a platform shall be provided extending at least the full width of the door in the direction of travel. *Exception:*

(a) In apartment buildings not more than 2 stories in height and having not more than 2 apartments on a floor and in rooming houses,

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hospitals, hotels and similar buildings not more than 2 stories in height and having not more than 6 living or sleeping rooms on a floor, such stairways shall not be less than 3 feet wide.

(b) If other stairways are provided in addition to those required by this code, such additional stairways need not conform to the width requirements of this code.

(3) **HANDRAILS.** All stairways and steps of more than 3 risers shall have at least one handrail. Stairways and steps 5 feet or more in width, or open on both sides, shall have a handrail on each side. Stairways and steps which are less than 5 feet in width shall have a handrail on the left hand side as one mounts the stairs and on the open side, if any.

(a) Stairways which are more than 8 feet wide shall be divided by center rails into widths not more than 8 feet nor less than 3 feet 8 inches. Rails shall be not less than 2 feet 6 inches above the nose of the treads or 3 feet 6 inches above the platform except as specified in Wis. Adm. Code section Ind 51.20. Railings on the open sides of stairways and platforms shall be provided with an intermediate member at midheight or with vertical members having a maximum spacing of 11 inches, or its equivalent in safety.

(b) Stairways on the outside of buildings and an integral part thereof, having more than 3 risers, shall have a handrail at each side, and if the stairway is more than 50 feet wide, one or more intermediate handrails shall be provided.

(c) Where an exit door leads to an outside stairway, platform or sidewalk, the level of the platform or sidewalk shall not be more than 7 $\frac{3}{4}$ inches below the door sill except as provided in section Ind 51.20 (4) (g).

(4) **RISERS AND TREADS.** All stairways and steps required as exits by this code shall have a uniform rise of not more than 7 $\frac{3}{4}$ inches and a uniform tread of not less than 9 $\frac{1}{2}$ inches, measuring from tread to tread, and from riser to riser. No winders shall be used. There shall not be more than 18, nor less than 3 risers between platforms or between floor and platform and not more than 22 risers from floor to floor with no platform.

(a) Stairways and steps not required as exits by this code shall have a uniform rise of not more than 8 inches and a uniform tread of not less than 9 inches. If winders are used, the tread shall be at least 7 inches wide at a point one foot from the narrow end.

(b) For stairways to elevated walks, platforms and runways in places of employment see section Ind 1.17 of the general orders on safety issued by the department of industry, labor and human relations.

(c) The edges of all treads and the edges of all stairway landings shall be finished with a non-slippery surface not less than 3 inches in width.

History: 1-2-56; am. (2); (2) (a); (2) (b); Register, June, 1956, No. 6, eff. 7-1-56; r. and recr. Register, September, 1959, No. 45, eff. 10-1-59.

Ind 51.17 Smokeproof stair tower. (1) A smokeproof stair tower shall be an enclosed stairway which is entirely cut off from the build-

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ing and which is reached by means of open balconies or platforms. The stairways, landings, platforms and balconies shall be of incombustible material throughout. The enclosing walls shall be of not less than 4-hour fire-resistive construction as specified in section Ind 51.05, and the floors and ceilings of not less than 2-hour fire-resistive construction as specified in section Ind 51.06.

(2) The doors leading from the buildings to the balconies and from the balconies to the stairways shall be fire-resistive doors as specified in section Ind 51.09, and all openings within 10 feet of any balcony shall be protected with fire-resistive windows as specified in section Ind 51.10, or fire-resistive doors.

(3) Each balcony shall be open on at least one side, with a railing not less than 3'6" high on all open sides.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63.

Ind 51.18 Interior enclosed stairway. (1) An interior enclosed stairway shall be completely enclosed with walls of not less than 2-hour fire-resistive construction as specified in section Ind 51.05, except that in ordinary or frame buildings and in mill or fire-resistive buildings not more than 3 stories in height one-hour fire-resistive enclosures may be used. All doors opening into such enclosures shall be as specified in section Ind 51.09.

(2) The enclosure shall include at each floor level a portion of such floor which will be at least as wide as the stairway; and such enclosure shall also include the passageway of the first floor level (if