

## Chapter Ind 56

### SCHOOLS AND OTHER PLACES OF INSTRUCTION

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**Ind 56.001 Scope.** The requirements of this chapter, sections Ind 56.001 to Ind 56.19 inclusive, shall apply to all public and private schools, universities, colleges, academies, seminaries, libraries, museums and art galleries; including all buildings or parts of buildings used primarily for instructional purposes.

**History:** 1-2-56; am. Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.01 Maximum height.** (1) Buildings occupied primarily by pupils up to and including grade 12 shall not exceed 4 stories or 48 feet in height.

(a) *Exception.* Buildings provided with complete automatic sprinkler or automatic smoke detection systems, occupied primarily by students of grades 9 through 12, shall be no more than 6 stories or 72 feet in height.

**Note:** Also see requirements for classes of construction.

**History:** 1-2-56; r. Register, May, 1971, No. 185, eff. 6-1-71; cr. Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 56.02 Classes of construction.** (1) Every building not more than one story in height may be of type No. 7 or No. 8 construction as specified in section Ind 51.03.

(2) Every 2-story building shall be not less than type No. 6 construction as specified in section Ind 51.03 with the exception that all floors and their supports shall be at least noncombustible one-hour fire-resistive rating.

(3) Every building 3 or more stories in height shall be of type No. 1 or No. 2 construction as specified in section Ind 51.03.

(4) Auditoriums, gymnasiums or field houses, or those parts of buildings similarly used, shall comply with the following:

(a) Limitations when occupancy is restricted to first story or ground floor only.

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| Type of Construction | Maximum Number of Occupants in Any Room Used for Auditorium, Gymnasium, or Field House Purposes |               |
|----------------------|---|---------------|
|                      | With Stage  | Without Stage |
| Type No. 1 and No. 2 | No limit  | No limit      |
| Type No. 3 and No. 4 | 750   | 1500          |
| Type No. 5 and No. 6 | 500   | 1000          |
| Type No. 7 and No. 8 | 300   | 750           |

1. Exception. For unlimited capacity, the fire protection of structural steel supporting the roof may be omitted for one-story buildings meeting type No. 1, 2 and 3 construction provided the building has no ground or basement floors. Heavy timber columns and roof framing may be substituted for structural steel framing. The roof decking shall be of noncombustible construction meeting the fire-resistive ratings of Table 51.03-A.

(b) Limitations when occupancy is above the first story.

| Type of Construction  | Maximum Number of Occupants | No. of Stories    |
|-----------------------|-----------------------------|-------------------|
| Type No. 1 and No. 2  | No limit                    | See Ind 56.01†    |
| Type No. 3 thru No. 6 | 400                         | 2nd story         |
| Type No. 3 thru No. 6 | 200                         | 3rd and 4th story |

†One smokeproof stair tower from the level of the assembly hall leading directly to the exterior at street grade shall be provided for every 750 persons capacity, or fraction thereof. These stairways shall be at least 44 inches wide and shall be in addition to other required stairways in the building.

**History:** 1-2-56; r. and recr. Register, May, 1971, No. 185, eff. 6-1-71; am. (1) and (2) and r. and recr. (3), Register, June, 1972, No. 198, eff. 1-1-73; cr. (4), Register, September, 1973, No. 213, eff. 10-1-73; r. and recr. (4) (a) 1., Register, May, 1974, No. 221, eff. 6-1-74.

**Ind 56.03 History:** 1-2-56; am. Register, February, 1971, No. 182, eff. 7-1-71; r. Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.04 Subdivisions and fire stops.** Every building of this classification which is built in connection with a building of a lower grade of construction shall be separated from such other building by walls of 4-hour fire-resistive construction as specified in section Ind 51.04, and all communicating openings shall be protected by fire-resistive doors as specified in section Ind 51.047 or equal. If such openings are used as a means of egress, they shall be kept normally open during the occupancy of the building.

**History:** 1-2-56; am. Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. eff. 8-1-71 and exp. 1-1-72; cr. eff. 1-1-72, Register, July, 1971, No. 187.

**Ind 56.05 Exterior wall openings.** (1) One-story buildings with no floor levels below the first floor need not be provided with exterior wall openings other than required exits.

(2) Buildings with basements shall at such levels be protected with an approved automatic sprinkler system (Ind 51.23) or an approved automatic smoke detection system, either of which shall be connected to the required fire alarm (Ind 56.19).

**Note:** See section Ind 51.01 for definitions of "automatic" and "basement."

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(3) Buildings more than one story shall be provided with wall openings for emergency purposes above the first story as specified in subsection Ind 52.02(2) except as follows:

(a) The requirements for wall openings is waived in buildings provided throughout with an approved automatic sprinkler system (Ind 51.23) or an approved automatic smoke detection system, either of which shall be connected to the required fire alarm (Ind 56.19).

**History:** 1-2-56; am. Register, January, 1961, No. 61, eff. 2-1-61; r. and recr., Register, May, 1971, No. 185, eff. 6-1-71; r. and recr., Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 56.06 Exits.** (1) **TOTAL NUMBER OF EXITS.** The total number of exits from each floor level and each building shall be determined on the basis of total aggregate exit width and distances to exit. Each building and each floor level shall be provided with at least 2 exits.

(2) **TYPE OF EXITS.** At least 2 exits from all floor levels shall lead directly to grade through standard exit doors, stairs, interior enclosed stairs, smokeproof stair towers, fire-rated exit corridors, passageways, or ramps. One-half of the remaining required exits may be horizontal exits or fire escapes. Fire escapes are prohibited as required exits in pre-school, elementary, middle, and high schools. In no case will fire escapes be permitted above the second story.

(a) *Standard exit doors.* Standard exit doors shall be provided in accordance with the requirements of sections Ind 51.15 and Ind 56.08.

(b) *Exit stairs.* Stairs shall conform to the requirements of section Ind 51.16, except that the stairs shall have a uniform rise of not more than 7½ inches, measured from tread to tread, and a uniform tread of not less than 10 inches, measured from nosing to nosing of tread. Handrails shall be provided on both sides. All stairs serving basements shall be in accordance with the requirements of subsection Ind 51.02 (11). No closets or rooms may be placed under a stairway or landing.

(c) *Interior enclosed stairs and smokeproof stair towers.* Interior stairs and smokeproof stair towers shall be constructed in accordance with the requirements of sections Ind 51.17 and Ind 51.18.

(d) *Fire-rated exit corridors.* All rated exit corridors required to satisfy limitations on exit distance shall be of not less than one-hour fire-resistive construction, unless the fire-resistive ratings indicated in Table 51.03-A for required exit corridor enclosures are more restrictive.

(e) *Exit ramps.* The minimum width of exit ramps shall be determined in accordance with the requirements of section Ind 56.07. The minimum width shall be not less than 3 feet 8 inches. Exit ramps, other than those required for the physically disabled, shall have a slope not exceeding 1:8. Ramp slopes exceeding 1:12 shall be provided with handrails. Ramps shall be provided with a slip-resistant finish. Ramps shall be provided from areas noted under subsection Ind 56.06

(3) (c) involving a change of elevation between floor levels or platforms not exceeding 3 feet.

(f) *Fire escapes.* Fire escapes shall be constructed in accordance with the requirements of section Ind 51.20.

(g) *Horizontal exits.* Horizontal exits shall be constructed in accordance with the requirements of section Ind 51.19 and shall be of at least 4-hour rated construction.

(3) LOCATION OF EXITS. (a) *Exit distance.* Travel distance to an exterior exit door, a required fire-resistive rated exit corridor, interior enclosed stairs, smokeproof stair tower, horizontal exit, or fire escape, from any point in a building accessible to the public, shall not exceed 150 feet. Building service areas, including pipe chases and tunnels, catwalks, ducts or similar spaces not accessible to the public, shall not exceed 300 feet from an exit.

(b) *Distribution of exits.* All exits shall be distributed to provide the best possible means of egress. The exits shall be located so that in case any exit is blocked at any point some other exit is accessible through public passageways at all times. Locked security gates and doors shall not be placed so as to block required exit passageways or create dead-end corridors.

(c) *Auditorium, gymnasium and field house exits.* This rule shall apply only to auditoriums, gymnasiums and field houses which have a capacity exceeding 600 persons. One-half of the required exits shall discharge directly to a street(s), alley(s) or open court(s) connected with a street(s), unless a 2-hour rated exit corridor(s) is provided, wide enough to accommodate one-half of the occupants, which extends from the interior wall of the auditorium, gymnasium or field house to an exterior exit. The remaining required exits shall discharge directly to the exterior or to a public passageway which permits 2 directions of travel to the exits at the exterior of the building. The exiting shall be direct and unobstructed.

(4) CLASSROOM EXITS. (a) *Exits serving 50 persons or less.* At least one exit shall be provided from all rooms serving a capacity of 50 persons or less. The exit shall discharge directly to the exterior of the building or to a public passageway which permits 2 directions of travel to the exterior.

(b) *Exits serving 51-100 persons.* At least 2 exits shall be provided from all rooms serving a capacity of 51-100 persons. One exit shall discharge directly to the exterior of the building or to a public passageway which permits 2 directions of travel to the exterior. One exit may discharge through an adjacent room provided a clear passageway is maintained from the connecting door to a required exit(s) serving the adjacent room.

(c) *Exits serving more than 100 persons.* At least 2 exits shall be provided from all rooms serving a capacity of more than 100 persons. The exits shall discharge directly to grade or to a public passageway which permits 2 directions of travel to the exterior.

(5) WIDTH OF EXITS. The total required exit width shall be provided in accordance with the requirements of section Ind 56.07.

(6) **EXIT LIGHTS.** All required exits indicated in section Ind 56.06 (2), and exits from areas serving a capacity of more than 100 persons, shall be identified by an approved exit light. Directional exit lights shall be provided to direct occupants to an exit. Exit lights and directional exit lights shall be in accordance with the requirements of section Ind 51.15 (5).

**History:** 1-2-56; am. (1), cr. (1) (a), Register, September, 1959, No. 45, eff. 10-1-59; am. Register, January, 1961, No. 61, eff. 2-1-61; r. and recr. (1) (a), renum. (2) to be (3), (3) to be (4), (4) to be (5), (5) to be (6) and (6) to be (7), and cr. (2) and (8), Register, May, 1971, No. 185, eff. 6-1-71; r. and recr., Register, September, 1973, No. 213, eff. 10-1-73; am. (1) (a) 2., Register, December, 1974, No. 228, eff. 1-1-75, r. and recr. Register, December, 1975, No. 240, eff. 1-1-76; am. (2), intro. and cr. (2) (g), Register, December, 1976, No. 252, eff. 1-1-77.

**Ind 56.07 Required exit width.** (1) The total required exit width from a building level shall be in accordance with the requirements of sections Ind 51.15 (6) and Ind 51.16 (3).

(2) The capacity of educational buildings or any individual story or section thereof for the purpose of determining exits shall be the maximum capacity designated on approved plans.

(a) The maximum capacity shall not exceed the requirements of paragraph (b).

(b) The maximum capacities of all rooms and spaces as listed below shall be determined on the basis of the minimum net square feet area per person shown for that occupancy unless otherwise designated on the plans.

|   | Minimum<br>Square Feet<br>Per Occupant |
|---|--|
| 1. Academic classrooms—Regular .....  | 20                                     |
| 2. Administrative and office space.....   | 75                                     |
| 3. Arts, crafts, drafting .....   | 30                                     |
| 4. Bleachers (one seat per 18 inches of bench length)   |  |
| 5. Gymnasiums, field houses, auditoriums, theatres, lecture rooms<br>(fixed seating) .....  | 6                                      |
| 6. Gymnasiums, field houses, multipurpose rooms, cafeterias, study<br>halls, commons and other level floor areas with nonfixed individual<br>seating..... | 10                                     |
| 7. Home economics, business education.....  | 30                                     |
| 8. Industrial arts-vocational shop .....  | 50                                     |
| 9. Laboratories-Science (fixed lab. tables) .....   | 30                                     |
| 10. Libraries and resource centers .....  | 20                                     |
| 11. Museums and art galleries .....   | 40                                     |
| 12. Music   |  |
| a. Vocal.....   | 10                                     |
| b. Instrumental.....  | 20                                     |
| 13. Special education   |  |
| a. Mentally retarded, physically handicapped, etc.....  | 35                                     |

**History:** 1-2-56; r. and recr. (3), Register, May, 1971, No. 185, eff. 6-1-71; am. (1), Register, June, 1972, No. 198, eff. 1-1-73; r. and recr., Register, September, 1973, No. 213, eff. 10-1-73; r. and recr. (1), r. (2), (3) and (4), renum. (5) to be (2), Register, December, 1974, No. 228, eff. 1-1-75.

**Ind 56.08 Exit doors.** (1) **STANDARD EXIT DOORS.** Exit doors shall comply with the requirements of section Ind 51.15, except that in elementary schools the width may be reduced to 3 feet. The aggregate width of exit doors shall be as required in section Ind 56.07. No single door or leaf of a double door shall be more than 42 inches wide.

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(2) **CLASSROOM EXIT DOORS.** (a) *Doors serving 50 persons or less.* Classroom doors serving a capacity of 50 persons or less shall be not less than 3 feet 0 inches in width. The doors may swing into the classroom.

(b) *Doors serving a capacity of 51-100 persons.* Classroom doors serving a capacity of 51 to 100 persons shall be not less than 3 feet 0 inches in width and shall swing outward toward the means of egress.

(c) *Doors serving more than 100 persons.* Classroom doors serving a capacity of more than 100 persons shall be standard exit doors and shall swing outward toward the means of egress.

**History:** 1-2-56; r. and recr. Register, December, 1975, No. 240, eff. 1-1-76.

**Ind 56.09 Passageways.** (1) The minimum unobstructed width of corridors and passageways which are used by the public or by the occupants generally, shall be determined in the same manner as specified for stairways in section Ind 56.07, but in no case shall this width be less than 4 feet. Corridors and passageways serving as a means of egress shall be at least equal in combined width to the required width of the stairways or passageways leading to them.

**History:** 1-2-56; r. (1) and renum. (2) to be (1), Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.13 Auditoriums, gymnasiums and field houses.** (1) AUDITORIUMS, GYMNASIUMS, field houses and other large group occupancy areas shall comply with the requirements of chapter 56. Where any area of building in this category has a stage loft in excess of 25' 0" in height above the stage floor and is equipped with permanent or movable scenery, it shall comply with sections Ind 55.21 to 55.24 inclusive.

**Note:** It is the intent to differentiate between a theatre and an auditorium, gymnasium, field house or other large group occupancy area.

(2) **SEATING.** (a) All seats, chairs and benches shall be placed so as to provide a minimum unobstructed passage of 12 inches measured horizontally between plumb lines at the farthest projection of the back of one seat and the front of seat immediately behind.

**Note:** 1. Above measurements are relative to the furthest projection when seat is in its normal unseated position such as self-rising seat. 2. See allowable occupant space capacity under section Ind 56.07 (2) (b). For exception see Ind 56.13 (2) (b) 3.

(b) The maximum number of seats in a row. 1. With aisles on both sides of row the maximum number of seats shall be 14.

2. With an aisle on only one end of row the maximum number of seats shall be 7.

3. The number of seats in a row may be increased to 100 where:

a. A minimum unobstructed passage of 18 inches between rows of seats measured horizontally between plumb lines at the farthest projection of the back of one seat and the front of seat immediately behind.

**Note:** For measurements see "Note No. 1" under Ind 56.13 (2) (a).

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b. The unobstructed passage between rows leads to a side aisle on each end of row where exit doors are located at no more than 20 feet intervals leading to an exit corridor or exit court.

(c) No platform on which seats are placed shall be more than 22 inches in height of riser.

(d) The highest level of any floor or platform whether level, tiered or sloped, shall provide no less than 7 feet vertical clearance between floor and any ceiling construction or projection beneath the ceiling.

(3) **WIDTH OF AISLES.** (a) Aisles having seats on both sides shall not be less than 2 feet 10 inches wide at the beginning and shall increase in width toward the exits at the rate of ¼ inch per foot of run; or the aisle may have a uniform width not less than the average width of the foregoing calculation. No wall aisle shall be less than 3 feet wide and no other straight aisle shall be less than 3 feet 6 inches wide.

(b) There shall be a cross aisle leading to each required side exit. Cross aisles shall not be less than 6 feet 8 inches back to back of adjacent rows of seats.

**History:** 1-2-56; r. and recr., Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.14 Seats, desks and aisles.** (1) Seats, desks, tables and other loose equipment need not be fastened to the floor or to each other provided that any seating arrangement use, will maintain during occupancy, free and unobstructed intermediate, cross and wall aisles leading to the exit.

(a) Stepped floors or tiered platforms shall be no less than 48 inches in width to permit the above arrangement.

(b) Seats, desks, tables and other loose equipment used in instructional occupancies shall be of a durable type of construction to assure safety and stability.

**History:** 1-2-56; r. and recr., Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.15 Heating plants.** (1) In every building more than one story in height, all heating plants and fuel rooms shall be enclosed with not less than 4-hour fire-resistive construction as specified in Wis. Adm. Code section Ind 51.04. All openings shall be protected with self-closing fire-resistive doors as specified in section Ind 51.047.

(2) In one story buildings all heating plants and fuel rooms shall be enclosed with not less than 2-hour fire-resistive construction as specified in section Ind 51.04, except that this requirement shall not apply to buildings where jacketed stoves or school room heaters are permitted. All openings shall be protected by self-closing fire-resistive doors as specified in section Ind 51.047.

**History:** 1-2-56; am. Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. eff. 8-1-71 and exp. 1-1-72; cr. eff. 1-1-72, Register, July, 1971, No. 187.

**Ind 56.16 Sanitary facilities.** (1) **TOILET ROOMS.** Separate toilet rooms for each sex shall be provided for all occupancies included under the scope of this chapter. The toilet rooms shall be completely enclosed and arranged to ensure privacy, except that in elementary schools (kindergarten through grade 8) the doors to the toilet rooms

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may be eliminated if the entrance to the toilet room is located in the wall of a public corridor.

(2) **SANITARY FIXTURES.** The following tabulated groups or combinations thereof shall be provided with one fixture of each type in accordance with the ratio given in chart to serve the total number of persons designated on the plans.

| Type of Fixture          | K-6   | 7-12 | Post High School | Large Group Occupancy Areas | Administrative Areas |
|--------------------------|---|------|------------------|-----------------------------|----------------------|
| Water Closets (F) .....  | 35  | 50   | 100              | 200                         | 10                   |
| Water Closets (M) .....  | 75  | 100  | 200              | 300                         | 15                   |
| Urinals.....             | 35  | 50   | 100              | 150                         | 40                   |
| Lavatories .....         | 75  | 100  | 100              | 150                         | 15                   |
| Drinking Fountains ..... | 1 per 6,000 sq. ft. floor area and/or 1 per floor |      |                  |                             |                      |

(a) When fixtures required for a designated group are not available to another designated group the number of fixtures shall be provided according to the ratio indicated in the chart and independent of other group requirements.

(b) Where a theatre is a part of an educational facility the requirements listed under "large group occupancies" shall apply.

**History:** 1-2-56; am. (2), (3), (4) and (4) (a), Register, September, 1959, No. 45, eff. 10-1-59, r. and recr. (4), intro. par., Register, December, 1967, No. 144, eff. 1-1-68; r. and recr. Register, May 1971, No. 185, eff. 6-1-71; am. (1) (intro.), r. and recr. (1) (a), cr. (1) (b), Register, September, 1973, No. 213, eff. 10-1-73; renum. (1) to be (2) and cr. (1), Register, December, 1976, No. 252, eff. 1-1-77.

**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 Wis. Adm. Code chapter Ind 19, Illumination Code.

(2) **GENERAL.** 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.

**History:** 1-2-56; am. Register, January, 1961, No. 61, eff. 2-1-61; cr. (3), Register, November, 1963, No. 95, eff. 12-1-63; am. (3) (c), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.18 Fire extinguishers.** In every building, standard fire extinguishers, as specified in Wis. Adm. Code section Ind 51.22, shall be provided in the proportion of one extinguisher to each 2,500 square feet, or fraction, of floor area, but there shall be at least one fire extinguisher on each floor including basement. In addition to the fire extinguishers for general protection there shall be at least one extinguisher of appropriate type and size in each laboratory, art, shop or other vocational room. Every fire extinguisher shall be prominently exposed to view and always accessible.

**History:** 1-2-56; am. Register, May, 1971, No. 185, eff. 6-1-71; am. Register, December, 1976, No. 252, eff. 1-1-77.

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**Ind 56.19 Fire alarms.** Every building shall be provided with a proper alarm system complying with Wis. Adm. Code section Ind 51.24.

**History:** 1-2-56; am. Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.20 Standpipes.** (1) FIRE DEPARTMENT STANDPIPES. Fire department standpipes shall be provided in all buildings exceeding 60 feet in height.

(2) FIRST-AID STANDPIPES. First-aid standpipes shall be provided in all buildings 3 stories or more in height, unless an approved automatic sprinkler system is installed.

**History:** Cr. Register, December, 1976, No. 252, eff. 1-1-77.