

## 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; a.m. 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.

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 51.04<sup>1</sup> 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."

(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.

Register, December, 1974, No. 228  
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and air conditioning code

Ind 56.06 Type, location and number of exits. (1) TYPE OF EXITS.  
(a) Exit corridors requiring a fire-resistive rated enclosure to satisfy limitations on travel distance stated in (2) below shall satisfy the following conditions:

1. Enclosure shall satisfy one-hour fire-resistive construction unless classes of construction requirements are more restrictive or requirements for (2) (c) 2. must be satisfied.

2. In one-hour enclosures of corridors, all openings shall be protected with no less than  $\frac{3}{4}$ -hour approved fire doors with automatic closing devices or approved fire-resistive windows satisfying requirements for moderate fire exposure.

Note: See Ind 51.047 for fire doors and windows.

3. Corridors requiring more than one-hour fire-resistive construction shall have all openings protected with approved fire doors corresponding to required fire-resistive wall ratings covered in Ind 51.047. Fire doors shall be equipped with automatic closing devices. ✓

(b) Stairways shall satisfy:

1. Required exit stairways shall have a uniform rise of not more than  $7\frac{1}{2}$  inches measuring from tread to tread, and a uniform tread of not less than 10 inches measuring from nosing to nosing of tread.

2. Handrails shall be provided on both sides.

3. There shall be no winders used in required exit stairways.

4. Ramps other than those required for the physically handicapped may be used in lieu of stairways providing the slope is not greater than one foot of rise in 8 feet.

a. Exits serving areas noted under Ind 56.06 (2) (c) involving a change of elevation between floor levels or platforms not exceeding 3 feet shall be provided with an approved ramp. ✓

5. Requirements other than those specified in 1., 2., 3. and 4. shall satisfy applicable sections of Ind 51.16. ✓

6. All required exit stairways shall be identified with approved exit lights.

7. Stairways shall be enclosed as specified in sections Ind 51.02, Table 51.03-A, and Ind 51.18. ✓

a. Stairways serving basement areas shall be enclosed at that level as specified in section Ind 51.18. ✓

(c) All required exterior exit doors and those required interior exits serving each floor, and enclosed areas serving more than 100 persons, shall be identified by an approved exit light. Approved exit lights and any additional directional lights shall be as required by subsection Ind 51.15 (5). ✓

(d) Fire escapes are not acceptable in meeting the standards for required exits. Where used for other purposes, the design of fire escapes shall satisfy the requirements of section Ind 51.20. ✓

(2) LOCATION OF EXITS, (a) The required exits at the exterior and those interior exits serving enclosed areas requiring more than one exit as covered in (3) shall be located as remote from each other as practicable.

(b) Travel distance to an exterior exit door or a required fire-resistive rated enclosure, from any point in a building, shall not exceed 150 feet.

1. Exception. For building service areas such as pipe chases, tunnels, catwalks, ducts or similar spaces not accessible to the general public, the travel distance may be increased to 300 feet.

(c) Auditoriums, gymnasiums or field houses, whose capacity exceeds 600 persons, shall have exits satisfying one of the following requirements:

1. Where there is at least one wall directly exposed to the exterior, at least one-half of the required exits shall be located in this exterior wall.

2. If no wall serving these areas is exposed to the exterior, the exit passageways leading to the exits at the exterior of the building shall be enclosed with no less than 2-hour fire-resistive construction.

(d) Interior exit doors or openings serving an enclosed area, at or above ground floor levels, may be located so as to allow the occupants only one direction of travel, providing:

1. The distance from the farthest required interior exit is not more than 10 feet to the following area:

a. The opening to a public corridor permitting the occupant to choose one of 2 directions of travel to reach the required exits at the exterior of building.

2. The area served when satisfying conditions stated in 1. above, has at least one exterior wall exposure and does not exceed 1,800 square feet total net area.

3. The distance from the farthest required interior exit is not more than 20 feet to the exit at the exterior of the building and the total net area served does not exceed 1,800 square feet.

(3) NUMBER OF EXITS. The total number of required exits shall satisfy the requirements for total width specified in section Ind 56.07.

(a) *Exits at the exterior of a building.* There shall be at least 2 exits located at the exterior of every building which serve the first floor and those levels above or below the first floor.

(b) *Exits within the interior of a one-story building.*

1. There shall be at least 2 exits serving an enclosed area having a capacity of more than 50 persons.

a. Regular academic classrooms, administrative and office space areas having an exterior wall opening providing emergency ingress or egress as described in subsection Ind 52.02 (2) will be accepted in meeting the requirement for one exit, provided the capacity of the area does not exceed 100 persons.

b. Exits serving above areas may discharge directly to the outside or to a public passageway or corridor that leads to the required exits at the exterior of the building.

2. There shall be at least 2 means of exiting from an enclosed area without exterior wall exposure whose capacity exceeds 20 persons.

a. The means of exiting from the above area may be by means of direct access to a public corridor permitting 2 directions of travel that will lead to the exits at the exterior of the building; or

b. One such exit leading directly to a public corridor from the immediate area and the second exit by way of a connecting door leading into the adjoining area, providing that a clear passageway is maintained from the connecting door to the required exit or exits serving the adjoining area.

(c) *Exits within the interior of a building more than one story.*

1. Every floor and balcony shall be provided with not less than 2 exits that will lead occupants to the required exits at the exterior of the building.

2. There shall be at least 2 exits serving enclosed areas above the first floor having a capacity of more than 40 persons.

a. Regular academic classrooms, administrative and office space areas having an exterior wall opening providing emergency ingress or egress as described in subsection Ind 52.02 (2), will be accepted in meeting the requirement for one exit, provided the capacity of the area does not exceed 100 persons.

b. Exits serving above areas may discharge directly to a public passageway or corridor that leads to the required exit stairways.

3. There shall be at least 2 means of exiting from an enclosed area without exterior wall exposure whose capacity exceeds 20 persons.

**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.

**Ind 56.07 Required exit width.** (1) The total required exit width from a building level shall be in accordance with the requirements of subsections 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 subsection (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 Square Feet 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 (fixed seating) -----	6
6. Gymnasiums, field houses, multipurpose rooms, cafe- terias, study halls, commons and other level floor areas with nonfixed individual 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.** Exit doors shall comply with the requirements of Wis. Adm. Code 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.

**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 renun. (2) to be (1), Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.10 Access to attic and roof.** Every building more than one story in height shall have permanent means of access to the roof and attic space from inside the building. Where a scuttle opening is provided, the opening shall be not less than 20 x 30 inches, with a permanent enclosure for a stairway or ladder leading thereto.

**Ind 56.11 History:** 1-2-56; am. (3), Register, September, 1959, No. 45, eff. 10-1-59; am. Register, January, 1961, eff. 2-1-61; r. Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 56.12 History:** 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63; am. (1) (Intro. par.) Register, October, 1967, No. 142, eff. 11-1-67; r. 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 subsection Ind 56.07 (3) (b) 3. 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)✓

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  $\frac{1}{4}$  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) 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.

**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 the 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.

**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.