

Chapter Ind 54

FACTORIES, OFFICE AND MERCANTILE BUILDINGS

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Ind 54.001 Scope. This classification includes all factories and workshops (including all places where manual labor is employed), office buildings, telegraph and telephone offices, mercantile establishments where commodities are bought or sold, warehouses, railroad stations, exhibition buildings, and places where not more than 100 persons assemble for recreation, entertainment, worship, or dining purposes.

History: 1-2-56; am. Register, December, 1981, No. 312, eff. 1-1-82.

Ind 54.01 Construction, height and allowable area. (1) Buildings in this classification shall be of the type of construction and shall not exceed the number of stories as specified in this section. The floor area of any such building shall not exceed that permitted for the corresponding type of construction and number of stories shown in Table 54.01.

Note: See s. Ind 51.03 for standards of classes of construction.

(2) ALLOWABLE INCREASE OF FLOOR AREAS. (a) When the entire building is protected by an approved automatic sprinkler system, the areas in Table 54.01 may be increased by 150% for one-story buildings and 75% for buildings of more than one story. (See example below.)

Note 1: See s. Ind 51.23 for approved automatic sprinkler system.

Note 2: Example

	(from Table 54.01)		(if sprinklered)		(total allowable)
1. One story	10,000 sq. ft.	+	(1.5 X 10,000)	=	25,000 sq. ft.
2. Two or more stories	10,000 sq. ft.	+	(.75 X 10,000)	=	17,500 sq. ft.

(b) There shall be no area restriction in one-story buildings satisfying one of the following conditions:

1. Construction meets the requirements for type No. 3 or 4 and is protected by an approved automatic sprinkler system.

TABLE 54.01
ALLOWABLE HEIGHT STORIES and AREA (Square Feet)
(Maximum gross floor area per floor)

Class of Construction	Building Frontage Street Exposure	Number of Stories									
		1	2	3	4	5	6	7	8	Over 8	
1. Fire-Resistive Type A	1	NO RESTRICTION									
	2	NO RESTRICTION									
	3	NO RESTRICTION									
	4	NO RESTRICTION									
2. Fire-Resistive Type B	1	NO RE-	20,000	17,000	14,000	11,000	9,000	7,000	6,000	N.P.	
	2	STRI-	25,000	22,000	18,500	15,500	13,000	11,000	10,000		
	3	TION	31,000	27,000	23,000	20,000	17,000	15,000	14,000		
	4		37,000	32,000	27,500	24,500	21,000	19,000	18,000		
3. Metal Frame Protected	1	21,000	18,000	15,000	12,000	N.P.	N.P.	N.P.	N.P.		
	2	26,500	23,000	19,500	16,000						
	3	32,000	28,000	24,000	20,000						
	4	37,500	33,000	28,500	24,000						
4. Heavy Timber	1	17,000	14,000	11,000	9,000	N.P.	N.P.	N.P.	N.P.		
	2	22,000	19,000	16,000	13,500						
	3	27,000	24,000	21,000	18,000						
	4	32,000	29,000	26,000	22,500						
5A. Exterior Masonry Protected	1	15,500	13,500	9,500	8,000	N.P.	N.P.	N.P.	N.P.		
	2	20,000	17,000	14,000	12,500						
	3	24,500	21,500	18,500	15,500						
	4	29,000	26,000	23,000	19,500						
5B. Exterior Masonry Unprotected	1	14,000	11,500	9,000	N.P.	N.P.	N.P.	N.P.			
	2	18,000	15,000	12,500							
	3	22,000	19,000	16,000							
	4	26,000	23,000	19,500							
6. Metal Frame Unprotected	1	14,000	11,500	9,000	N.P.	N.P.	N.P.	N.P.			
	2	18,000	15,000	12,500							
	3	22,000	19,000	16,000							
	4	26,000	23,000	19,500							
7. Wood Frame Protected	1	12,500	7,500	5,500	N.P.	N.P.	N.P.	N.P.			
	2	16,000	10,000	7,000							
	3	19,000	12,000	8,500							
	4	22,000	14,000	10,000							
8. Wood Frame Unprotected	1	10,000	5,000	N.P.	N.P.	N.P.	N.P.				
	2	12,000	6,000								
	3	14,000	7,000								
	4	16,000	8,000								

Note: N.P. means "not permitted."

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Building and heating, ventilating
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Ind 54.145* FIRE EXTINGUISHERS. Portable fire extinguishers shall be provided and maintained as specified in s. Ind 51.22. FP

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82.

Ind 54.15 Standpipes. (1) FIRE DEPARTMENT STANDPIPES. Fire department standpipes shall be provided in all buildings exceeding 60 feet in height. FP

(2) FIRST-AID STANDPIPES. First-aid standpipes shall be provided in all buildings 3 stories or more in height in which the floor area of each story is more than 3,000 square feet, unless the floor area is divided with noncombustible 0-hour or 3/4-hour or better rated partitions into areas of 3,000 square feet or less, or unless an approved automatic sprinkler system is installed.

History: 1-2-56; renum. from 54.14 and r. and recr. Register, December, 1976, No. 252, eff. 1-1-77; am. (2), Register, December, 1977, No. 264, eff. 1-1-78.

Ind 54.16 Automatic sprinklers.

History: 1-2-56; r. and recr., Register, December, 1970, No. 180, eff. 1-1-71; am. (1) (d), Register, June, 1972, No. 198, eff. 1-1-73; renum. from 54.15, Register, December, 1976, No. 252, eff. 1-1-77; r. Register, June, 1983, No. 330, eff. 7-1-83.

Note: See s. Ind 52.015 for requirements pertaining to automatic fire sprinkler systems.

Ind 54.17 Fire alarms. (1) FACTORY AND WORKSHOP. A manual fire alarm complying with the requirements of s. Ind 51.24 shall be provided in every factory or workshop where more than 10 persons are employed above the second story, except as follows: FP

- (a) Buildings provided with a complete automatic sprinkler system; or
- (b) Buildings of fire resistive type 1 or 2 construction whose contents are noncombustible.

(2) OFFICE BUILDINGS. A manual fire alarm complying with the requirements of s. Ind 51.24 shall be provided in office buildings complying with either of the following conditions:

- (a) Four stories or more in height; or
- (b) 15,000 square feet or more on any floor level above or below a floor of exit discharge.

History: 1-2-56; am. Register, June, 1972, No. 198, eff. 1-1-73; renum. from 54.16, Register, December, 1976, No. 252, eff. 1-1-77; r. and recr. Register, December, 1981, No. 312, eff. 1-1-82.

Ind 54.18 Floor load signs. (1) In every factory, workshop, warehouse, or other building where material is piled, notices of a permanent character shall be painted or otherwise prominently displayed, stating the live load in pounds per square foot which the floor is designed to carry. Such notices shall be placed in full view, on each floor.

*See Appendix A for further explanatory material.

(2) Where floors are always used for the storage of some particular material, the walls shall be marked to the height to which the material shall be piled without exceeding the safe load.

History: 1-2-56; renum. from 54.17, Register, December, 1976, No. 252, eff. 1-1-77.

Ind 54.19 Signs indicating number of persons. In all buildings of this classification where 50 or more persons are accommodated on any floor above the second, notices shall be prominently displayed stating the maximum number of persons on each floor for whom stairways and other exits have been provided according to ss. Ind 54.02—54.06. Such notices shall be placed in full view, on each floor.

History: 1-2-56; renum. from 54.18, Register, December, 1976, No. 252, eff. 1-1-77.

FP Ind 54.20 No smoking signs. Smoking shall not be permitted in retail establishments where flammable materials are handled or sold. Suitable signs bearing the words "No Smoking" shall be erected in all places where such hazard exists.

History: 1-2-56; renum. from 54.19, Register, December, 1976, No. 252, eff. 1-1-77.

Ind 54.21 Tents. All tents used for sales or storage purposes shall conform to the requirements specified in ss. Ind 62.42—62.51.

History: Cr. Register, September, 1959, No. 45, eff. 10-1-59; renum. from 54.20, Register, December, 1976, No. 252, eff. 1-1-77; am. Register, December, 1981, No. 312, eff. 1-1-82.

Ind 54.22 Mini-warehouses. (1) **SCOPE.** This section applies to mini-warehouses.

(2) **CLASS OF CONSTRUCTION.** Mini-warehouses shall be of at least type 8, wood frame unprotected construction.

(3) **CONTENTS.** Storage of hazardous materials or vehicles in mini-warehouses is prohibited. The owner shall submit an affidavit to the department stating that the building will not be used for this purpose.

(4) **NUMBER OF EXITS.** (a) Except as provided in par. (b), 2 exits shall be required from each storage compartment.

(b) One exit is permitted from compartments of 3,000 square feet or less.

(5) **TYPE OF EXITS.** (a) Standard exit doors shall be required from compartments with the capacity of 25 persons or more, using the capacity ratios established in s. Ind 54.05.