

Chapter ILHR 51

FACTORIES, OFFICE AND MERCANTILE BUILDINGS

ILHR 54.001	Scope (p. 193)	ILHR 54.11	Lighting (p. 202)
ILHR 54.01	Construction, height and allowable area (p. 193)	ILHR 54.12	Sanitary facilities (p. 202)
ILHR 54.02	Number and location of exits (p. 197)	ILHR 54.13	Change rooms and lunch-rooms (p. 207)
ILHR 54.03	Type of exits (p. 198)	ILHR 54.14	Isolation of hazards (p. 207)
ILHR 54.04	Required exit width (p. 199)	ILHR 54.145	Occupancy separations (p. 208)
ILHR 54.05	Capacity of buildings (p. 199)	ILHR 54.15	Fire protection systems (p. 208)
ILHR 54.06	Exit doors (p. 200)	ILHR 54.17	Fire alarms (p. 208)
ILHR 54.07	Exit access (p. 201)	ILHR 54.18	Floor load signs (p. 208)
ILHR 54.08	Enclosure of stairways and shafts (p. 201)	ILHR 54.19	Signs indicating number of persons (p. 209)
ILHR 54.10	Trap doors and floor openings (p. 202)	ILHR 54.20	No smoking signs (p. 209)
ILHR 54.105	Toeboards (p. 202)	ILHR 54.21	Tents (p. 209)
		ILHR 54.22	Mini-warehouses (p. 209)

Note: Chapter Ind 54 was renumbered to be chapter ILHR 54 effective January 1, 1984.

ILHR 54.001 Scope. This classification includes all factories and work-shops (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, public mausoleums, crematoriums, and places where not more than 100 persons assemble for recreation, entertainment, worship, or dining purposes.

Note 1: See ch. ILHR 7 for other provisions relating to setbacks and construction for a magazine within which explosives are stored.

Note 2: The department of health and social services may require additional provisions for the federal certification of ambulatory surgical offices and clinics which receive federal funding.

History: 1-2-56; am. Register, December, 1981, No. 312, eff. 1-1-82; am. Register, March, 1992, No. 435, eff. 4-1-92.

ILHR 54.01 Construction, height and allowable area. (1) GENERAL. Buildings and structures within the scope of this chapter may not exceed the height and area limitations specified in this section.

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

(2) **LIMITED AREA CH. ILHR 54 BUILDINGS.** (a) Chapter ILHR 54 buildings not protected by complete automatic fire sprinkler protection may not exceed the height and area limitations specified in Table 54.01-1.

(b) Chapter ILHR 54 buildings protected by complete automatic fire sprinkler systems may not exceed the height and area limitations specified in Table 54.01-2.

(c) Freezer warehouses complying with the requirements of s. ILHR 51.06 (6) (a) 3. b, may be designed and constructed with the allowable floor area as specified in par. (b) and with the allowable increase in exit distance as specified in s. ILHR 54.02 (4) (b) without being protected by a complete automatic fire sprinkler system.

(3) **FIRE DIVISION WALL SEPARATION.** (a) No building shall be limited in area when divided into sections which do not exceed the maximum

areas tabulated in this section by fire division walls specified in s. ILHR 51.02 (13).

(b) All openings in such walls shall be protected by fire-resistive door assemblies as specified in s. ILHR 51.047.

1. Except as provided in subd. 2, doors protecting such openings may be left open if equipped with an automatic closing device activated by products of combustion other than heat.

2. a. The automatic closing device may be installed to prevent accidental closing of the fire door in the event of a power outage to the building if it is installed with an approved or listed backup mechanism in addition to the smoke detection release device.

b. The automatic closing device on doors located in smoke- or contaminant-filled environments, such as but not limited to foundries, chemical plants and similar environments, may be activated by rate-of-rise heat detectors.

3. Doors used as required exits shall be standard exit doors and shall comply with the requirements of s. ILHR 51.19 (2).

(4) UNLIMITED AREAS. (a) The area of buildings completely protected by an automatic fire sprinkler system may be unlimited provided the following conditions are satisfied:

1. The maximum number of stories is limited as follows:

a. Type No. 2 construction — 9 stories;

b. Type No. 3 construction — 5 stories;

c. Type No. 4 and 5A construction — 3 stories; and

d. Type No. 5B and 6 construction — 2 stories involving not more than 4 floor levels.

2. Street access is provided as specified in sub. (5) (b).

(b) There shall be no area restriction in one-story buildings where the following conditions are satisfied:

1. Construction of all building elements listed in Table 51.03-A are of noncombustible materials. Built-up roof coverings may not be used;

2. a. The contents of the building are noncombustible;

b. Stored materials are not packed or crated in combustible materials; and

3. Street access is provided as specified in sub. (5) (b).

(5) **STREET ACCESS TO BUILDINGS.** (a) Streets shall be within 50 feet of the adjacent building side with no obstructions between the street and the building which will impede fire-fighting efforts.

Note: See s. ILHR 51.01 (124) for definition of street.

(b) 1. Except as provided in subd. 2., buildings with no area limitations shall have a continuous all-weather, hard-surfaced area 30 feet or more in width for a distance of not less than 50% of the perimeter of the building. These buildings shall have at least one wall facing a street for its entire length. At least 2 of the remaining building walls shall face streets for at least 50% of their respective lengths.

2. Unlimited area buildings of fire-resistive type 1 construction and one-story unlimited area buildings of fire-resistive type 2 construction shall be provided with street access as defined in s. ILHR 51.01 (124) to at least one side of the building.

(6) **HEIGHT EXCEPTIONS.** Rack storage facilities of noncombustible construction protected with automatic fire sprinkler systems installed in accordance with NFPA No. 231C — Standard for Rack Storage of Materials, may be of unlimited height.

(7) **PUBLIC MAUSOLEUM CONSTRUCTION.** Public mausoleum structures shall be constructed in accordance with s. ILHR 51.03 and mausoleum spaces shall be constructed of reinforced concrete.

History: 1-2-56; am. (2) and (3), Register, September, 1959, No. 45, eff. 10-1-59; am. (3), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (3), eff. 8-1-71 and exp. 1-1-72; cr. (3) eff. 1-1-72, Register, July, 1971, No. 187; r. and recr. (1) and (2), Register, June, 1972, No. 198, eff. 1-1-73; r. and recr. (2) and (3), Register, September, 1973, No. 213, eff. 10-1-73; cr. (2) (a) 2 a., Register, December, 1977, No. 264, eff. 1-1-78; am. (2) (b) 2. a. and (2) (c), cr. (4), Register, November, 1978, No. 276, eff. 1-1-79; am. (3), Register, January, 1980, No. 289, eff. 2-1-80; r. and recr. table, am. (2) (b) 2. and (3), Register, December, 1981, No. 312, eff. 1-1-82; reprinted to correct errors in Table 54.01 and (2) (b) 2., Register, February, 1982, No. 314; am. (3), Register, December, 1983, No. 336, eff. 1-1-84; renumb. (2) (a) and (c) to be (2) (a) 1. and (d), (2) (a) 2. renumb. and am. from ILHR 54.23, am. (2) (b) 1. and 2., r. and recr. (2) (b) 3., cr. (2) (c), Register, August, 1985, No. 356, eff. 1-1-86; emerg. r. and recr. (1) to (4), cr. (5) and (6) and tables 54.01-1 and 54.01-2, r. table 54.01, eff. 9-6-86; r. and recr. (1) to (4), cr. (5), (6) and tables 54.01-1 and 54.01-2, r. table 54.01, Register, November, 1986, No. 371, eff. 12-1-86; am. (4) (a) 1. d., Register, March, 1991, No. 423, eff. 4-1-91; cr. (7), Register, March, 1992, No. 435, eff. 4-1-92.

ILHR 54.02 Number and location of exits. (1) **NUMBER OF EXITS.** Every building and every floor level thereof shall have at least 2 exits.

(2) **EXCEPTIONS.** One exit will be permitted in the following conditions:

(a) Floor levels used entirely for storage in buildings 2 stories or less in height and not over 3,000 square feet gross area per floor.

(b) Interior balconies or mezzanine floors not over 3,000 square feet gross area used entirely for storage.

(c) Open interior balconies or open mezzanine floors not over 750 square feet gross area used for purposes other than nonoccupied storage.

(d) One-story office buildings, without a basement or mezzanine, having a gross floor area, per floor, of not more than 1,800 square feet. Only one office operation per floor level shall be permitted. The single exit from the first floor or ground floor(s) shall be an outside exit serving only that floor level.

(e) Retail establishments not over 750 square feet net area, provided there are 2 directions for exiting from the entrance door of the store.

(3) **OFFICE SUITE EXITING.** One exit will be permitted from office suites having a floor area of not more than 1,800 square feet net area, provided there are 2 directions for exiting from the entrance door of the suite.

(4) * **EXIT DISTANCE.** (a) Exits shall be distributed or located so that no part of any building within the scope of this chapter will be more than 150 feet distant from an exit.

(b) Where an approved automatic fire sprinkler system is provided throughout the building, an increase in exit distance to 200 feet will be permitted for mercantile buildings and an increase in exit distance to 300 feet will be permitted in all other buildings within the scope of this chapter, except high hazard buildings.

(c) Buildings having contents which are liable to burn with extreme rapidity or from which poisonous fumes may be liberated or explosions occur in case of fire, shall have exits provided so that the maximum distance to exit is limited to 75 feet.

Note: See s. A52.015 of Appendix A for further information relating to "high hazard" occupancies.

(d) All of the above distances shall be measured along public passageways and aisles.

Note: Also see s. ILHR 51.08 (1) for alternate exit distance provisions.

(5) **EXIT DISTRIBUTION.** Exits in all buildings of this classification shall be so located and distributed so as to afford the best possible egress.

History: 1-2-56; cr. (1) (c), Register, September, 1959, No. 45, eff. 10-1-59; am. (1) (b), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (1) (b), eff. 8-1-71 and exp. 1-1-72, and cr. (1) (b), eff. 1-1-72, Register, July, 1971, No. 187; am. (1), Register, September, 1973, No. 213, eff. 10-1-73; r. and recr. Register, December, 1978, No. 276, eff. 1-1-79; am. (4), Register, January, 1980, No. 289, eff. 2-1-80; am. (4), Register, December, 1981, No. 312, eff. 1-1-82; emerg. am. (1) (b), eff. 9-6-86; am. (4) (b), Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 51.03 Type of exits. (1) At least one-half of the exits required in accordance with s. ILHR 54.02 shall be stairways or standard exits to grade as specified in ss. ILHR 51.15-51.18. The other exits shall be either stairways, standard exits, or horizontal exits as specified in s. ILHR 51.19, or fire escapes as specified in s. ILHR 51.20. A fire escape will not be accepted as a required exit for any building level more than 5 stories or 55 feet above grade. An outside wooden stairway may be used as an exit for a 2-story building.

(a) *Exception.* The width of required exit stairways serving unoccupied areas (i.e., storage areas, equipment mezzanines and similar areas) not exceeding 750 square feet may be reduced to 3 feet 0 inches.

(b) *Exception.* Less than 3 risers may be used to elevated work stations (such as pharmacy floors, computer floors and similar areas) or to altars, podiums and similar areas, not in a required exit passageway.

(c) *Exception.* A spiral stairway may be used as a nonrequired convenience stairway in addition to all other required exit stairways in places of employment.

* See Appendix A for further explanatory material.

(a) *Factories, office and mercantile buildings.* All factories, office and mercantile buildings shall be provided with separate toilet rooms for each sex, except as follows:

1. Where not more than 10 employes and 25 patrons are accommodated, one toilet room, shared in common, may be provided if the door of the toilet room is equipped with a lock to ensure privacy.

2. Separate toilet rooms for the employes and the general public need not be provided if the toilet rooms are accessible to both employes and the general public.

3. Toilet facilities need not be provided in buildings and structures which provide service to people in automobiles, such as drive-in bank teller booths, photography and film service booths, or parking lot attendant booths, but not including drive-in restaurants, provided that a written statement is submitted to the department showing proof that convenient toilet facilities are available during all periods of operation. The requirement for toilet facilities is also waived for mobile crews and for unattended buildings, provided the employes have access to available toilet facilities.

(b) *Shopping centers.* In shopping centers, separate toilet rooms for each sex shall be provided for use by the general public. The toilet rooms may be located in the public mall or in the individual stores. Separate toilet rooms for each sex shall be provided for the employes in each store. In stores which accommodate not more than 10 employes and 25 patrons, one toilet room to accommodate both sexes will be acceptable. A store which has a net area of 750 square feet or less is not required to be provided with toilet rooms for the employes if the employes have access to the public toilet rooms located in the mall.

Note 1: The department recommends that public toilet rooms in the mall be conveniently located for patron use and that the travel distance between sets of public toilet rooms be less than 400 feet.

Note 2: See ss. ILHR 54.12 (1) (d) and 55.32 for requirements for toilet rooms for other use groups which may also be included in shopping centers.

(c) *Places of worship.* 1. Places of worship. Except as provided in subd. 2., places of worship which are included under this chapter shall be provided with separate toilet rooms for each sex.

2. Mausoleums. Sanitary facilities are not required for unheated worship areas of mausoleums without fixed seating or for mausoleums within cemeteries where public sanitary facilities for each sex are provided within the cemetery.

(d) *Places for entertainment, recreation and seated dining.* Restaurants, taverns, and places for entertainment and recreation which are included under the scope of this chapter shall be provided with separate toilet rooms for each sex. Separate toilet rooms for employes and the general public are not required.

Note: See ch. HSS 196, Wis. Adm. Code, rules of the department of health and social services, for supplementary requirements for toilet room facilities in restaurants.

(e) *Garages, service stations and filling stations.* Toilet rooms shall be provided in accordance with the requirements of this subsection.

1. *Garages.* Separate toilet rooms for each sex shall be provided in all service and repair garages, body shops, automobile tire and battery shops, and buildings of similar use, except that a single toilet room, shared in common, may be provided in buildings which accommodate not more than 10 employes and 25 patrons. Separate toilet rooms for employes and patrons need not be provided if toilet rooms are accessible to both employes and patrons.

2. *Service stations and filling stations.* Separate toilet rooms for each sex shall be provided in service stations and filling stations, including self-service stations. Separate toilet rooms for employes and patrons need not be provided if toilet rooms are accessible to both employes and patrons.

(2) **SANITARY FIXTURES.** In public buildings and places of employment, except taverns, restaurants, filling stations and service stations, the total number of sanitary fixtures required in the building shall be based upon the total number of occupants of the building and shall be determined from the ratios established in Table 54.12-A, but in no case shall the ratio of the number of fixtures to the number of employes be less than those specified in Table 54.12-B. The total number of occupants will be considered equally divided between men and women unless a different ratio is approved by the department. The requirements of this section do not apply to the buildings exempt from toilet rooms under s. ILHR 54.12 (1).

(a) *Exceptions:* 1. a. Except as provided in subpar. b, taverns and restaurants shall provide at least one toilet room for each sex.

b. One toilet room having at least one water closet (WC) and one lavatory (L) may be shared in common by both sexes in restaurants providing seating for 15 or less patrons provided the door of the toilet room is equipped with a lock to ensure privacy. Separate toilet rooms for the employes and the general public need not be provided if the toilet rooms are accessible to both employes and the general public.

c. Taverns and restaurants accommodating 16 to 50 total occupants shall provide at least one water closet (WC) and one lavatory (L) for each sex.

d. Taverns and restaurants accommodating 51 to 100 occupants in total shall provide at least 2 water closets (WC) and one lavatory (L) for the females and at least one water closet (WC), one urinal (U) and one lavatory (L) for the males.

e. Taverns and restaurants accommodating more than 100 occupants in total shall be provided with sanitary fixtures as specified in Table 55.32.

History: 1-2-56; am. (3) (a) and (b), and (6), Register, September, 1959, No. 45, eff. 10-1-59; r. and recr. Register, December, 1976, No. 252, eff. 1-1-77; am. (1) (a) 1, (1) (b) and (c) 1, r. (1) (e) 3, r. and recr. (2), Register, December, 1977, No. 264, eff. 1-1-78; am. (2) (intro.) and (2) (a) 2., Register, December, 1978, No. 276, eff. 1-1-79; r. and recr. table and (2) (a) 1., Register, December, 1981, No. 312, eff. 1-1-82; r. and recr. (2) (a) 1., Register, October, 1982, No. 322, eff. 11-1-82; am. (1) (a) 1. and (e) 1., Register, December, 1983, No. 336, eff. 1-1-84; am. table 54.12 A and B, r. (2) (a) 1. a., renum. (2) (a) 1. intro., b. and c. to be a. d. and e. and am. a., cr (2) (a) 1. b. and c., Register, August, 1985, No. 356, eff. 1-1-86; am. (2) (a) 1. c. and d., r. (2) (a) 2., Register, March, 1991, No. 423, eff. 4-1-91; r. and recr. (1) (c), Register, March, 1992, No. 435, eff. 4-1-92.

ILHR 54.13 Change rooms and lunchrooms. (1) **CHANGE ROOMS.** Change rooms equipped with storage facilities for street clothes shall be provided where employees are required to wear protective clothing due to the nature of the employment and where employees are exposed to toxic materials and industrial poisons. Separate storage facilities for street clothes and work clothes shall be provided for employees who work with industrial poisons.

Note: See also ch. HSS 196, Wis. Adm. Code, rules of the department of health and social services, for requirements for dressing rooms and lockers in restaurants.

(2) **LUNCHROOMS.** A space for eating lunches shall be provided in all places of employment where there is exposure to injurious dusts, toxic material and industrial poisons. Such space shall be physically separate from any location where there is exposure to toxic materials. Toilet rooms shall not be permitted to serve as lunchrooms.

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

ILHR 54.14 Isolation of hazards. (1) **GENERAL.** (a) Except as provided in par. (b), all fuel-fired heating boilers and furnaces, power boilers, fuel rooms and breeching, storage vaults for paints, oils, and similar combustibles and other similar hazards in a building shall be isolated from the rest of the building by at least a 2-hour fire-resistive enclosure as specified in ss. ILHR 51.04 to 51.049; except that in buildings not more than 2 stories in height and having a floor area of not more than 3,000 square feet per floor, a 1-hour fire-resistive enclosure as specified in ss. ILHR 51.04 to 51.049, or better, shall be provided.

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Note: See ch. ILHR 10, for isolation of flammable and combustible liquids.

(b) Direct vent sealed combustion chamber appliances need not be enclosed with fire-resistive rated construction as specified in par. (a).

(2) **PROTECTION OF OPENINGS.** All openings shall be protected with self-closing fire-resistive doors as specified in s. ILHR 51.047.

(3) **SUSPENDING EQUIPMENT.** (a) Except as provided in par. (b), boilers up to 200,000 Btu input, water heaters up to 200,000 Btu input, gas and liquid fuel-fired space heaters, suspended furnaces, vented and unvented unit heaters may be used without an enclosure where approved by the department. Where suspended furnaces, vented and unvented unit heaters, boilers and water heaters are used without an enclosure, all such units shall be located at least 7 feet above the floor. The blow-off pipe for suspended boilers and water heaters shall be extended down to within 6 inches of the floor.

(b) The rated enclosure for heating equipment in factories may be omitted if the burner of the equipment is located at least 7 feet off the floor and the equipment is protected from physical damage.

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Note: See s. ILHR 61.21 for additional requirements.

History: 1-2-56; am. (1) and (2), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (1) and (2), eff. 8-1-71 and exp. 1-1-72; cr. (1) and (2), eff. 1-1-72, Register, July, 1971, No. 187; renum. from 54.13, Register, December, 1976, No. 252, eff. 1-1-77; am. (3), Register, December, 1978, No. 276, eff. 1-1-79; am. Register, December, 1981, No. 312, eff. 1-1-82; am. (3), Register, October, 1982, No. 322, eff. 11-1-82; r. and recr. (3), Register, December, 1983, No. 336, eff. 1-1-84; am. (1), Register, August, 1985, No. 356, eff. 1-1-86.

ILHR 51.145 Occupancy separations. (1) Occupancies within the scope of this chapter shall be separated from other occupancies or uses in accordance with s. ILHR 51.08.

History: Cr. Register, December, 1981, No. 312, eff. 1-1-82; r. and recr. Register, March, 1991, No. 423, eff. 4-1-91.

ILHR 51.15 Fire protection systems. (1) **SPRINKLER SYSTEMS.** Automatic fire sprinkler systems shall be provided as outlined in ss. ILHR 52.01, 52.011, 52.012 and 52.013.

(2) **STANDPIPE SYSTEMS.** (a) *Fire department standpipes.* Fire department standpipes shall be provided in all buildings exceeding 60 feet in height.

(b) *Dry standpipes.* Dry 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 an approved automatic sprinkler system is installed. First-aid standpipes may be provided in lieu of dry standpipes in factory occupancies.

(3) **FIRE EXTINGUISHERS.** Portable fire extinguishers shall be provided and maintained as specified in s. ILHR 51.22.

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; emerg. r. and recr. (2), eff. 9-6-86; r. and recr. (2), Register, November, 1986, No. 371, eff. 12-1-86; r. and recr. Register, March, 1991, No. 423, eff. 4-1-91.

ILHR 51.17 Fire alarms. (1) **FACTORY AND WORKSHOP.** Except as provided in sub. (3), a manual fire alarm complying with the requirements of s. ILHR 51.24 shall be provided in every factory or workshop where more than 10 persons are employed above the second story.

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(2) **OFFICE BUILDINGS.** Except as provided in sub. (3), a manual fire alarm complying with the requirements of s. ILHR 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.

(3) **EXCEPTION.** The installation of a manual fire alarm system may be omitted in buildings where complete automatic fire sprinkler system protection is provided.

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; emerg. r. and recr., eff. 9-6-86; r. and recr. Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 51.18 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

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