

(d) The locking device for a security gate which requires the use of a key or a combination to open it shall be accessible from the exterior of the building.

(e) The building owner shall send to the local fire department and building inspection department a letter indicating that a security gate is to be installed and maintained in accordance with this section.

(f) The department or its authorized deputies shall have the authority to revoke the use of any security gate for any exterior exit door upon the violation of any one provision specified in pars. (a) to (e).

History: 1-2-56; am. (1), Register, December, 1978, No. 276, eff. 1-1-79; am. Register, January, 1980, No. 289, eff. 2-1-80; am. Register, December, 1983, No. 336, eff. 1-1-84; r. and recr. Register, March, 1991, No. 423, eff. 4-1-91.

**ILHR 54.07 Exit access.** (1) Where there is not direct access to an exit or exits from an area within a building, exit access corridors, passageways, or aisles shall be provided to lead to the exit or exits.

(2) (a) The width of a corridor, passageway or aisle which provides access to an exit shall be at least:

1. Three feet, if the corridor, passageway or aisle serves a space with an occupant load not greater than 25 persons; and

2. Three feet 8 inches, if the corridor, passageway or aisle serves a space with an occupant load greater than 25 persons.

(b) The width of a corridor, passageway or aisle which provides egress from an exit shall be at least as wide as the required width for the exit served, as determined under ss. ILHR 51.15 (6) and 51.16 (3).

(3) (a) The width of a corridor, passageway, or aisle which provides access to or egress from an exit shall be determined at the narrowest point produced by any projection or other similar object or obstruction.

(b) The required width of a corridor, passageway, or aisle which provides access to or egress from an exit as determined under this section shall be maintained clear and unobstructed at all times.

Note: See s. ILHR 52.04 (9) for corridor widths to accommodate the physically disabled.

History: 1-2-56; am. Register, December, 1981, No. 312, eff. 1-1-82; r. and recr. Register, March, 1991, No. 423, eff. 4-1-91.

**ILHR 54.08 Enclosure of stairways and shafts.** (1) (a) Except as provided in par. (b), all stairways including landings, ramps and shafts, shall be enclosed as specified in s. ILHR 51.02 (11). FP

(b) 1. The stairways or shafts connecting one floor level with another floor level immediately adjacent to it may be left unenclosed where the distance to an exit from the area served by the open stairway including the horizontal travel distance on the exit access stair, does not exceed 100 feet in buildings not completely protected by an approved automatic sprinkler system or 150 feet in buildings completely protected by an approved automatic sprinkler system; or

2. Any stairway or shaft connecting the second floor, first floor and basement or ground floor shall be separated at the first floor level or first adjacent basement or ground floor level with fire resistive construction as specified in Table 51.03-A or better in buildings 2 stories or less in height,

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and where the distance to an exit from the area served by the open stairway including the horizontal travel distance on the exit access stair, does not exceed 100 feet in buildings not completely protected by an approved automatic sprinkler system or 150 feet in buildings completely protected by an approved automatic sprinkler system.

(2) All doors opening into such enclosures shall be as specified in s. ILHR 51.047, and all windows shall be of wired glass and metal frames and sash.

Note: See ch. ILHR 18 for requirements governing the installation and operation of elevators.

History: 1-2-56; am. (1) (a), (b), (c), (d) and (2), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (1) (a), (b), (c), (d) and (2) eff. 8-1-71 and exp. 1-1-72; cr. (1) (a), (b), (c), (d) and (2) eff. 1-1-72, Register, July, 1971, No. 187; r. and recr. (1), Register, June, 1972, No. 198, eff. 1-1-73; am. (3), Register, December, 1977, No. 264, eff. 1-1-78; r. (3), Register, December, 1978, No. 276, eff. 1-1-79; am. (1), Register, January, 1980, No. 289, eff. 2-1-80; am. (1), Register, October, 1982, No. 322, eff. 11-1-82; am. (1) (b), Register, December, 1983, No. 336, eff. 1-1-84; r. and recr. (1) (b) 1., Register, March, 1991, No. 423, eff. 4-1-91.

**ILHR 54.10 Trap doors and floor openings.** Every opening through any floor or through any roof used by the public or by employees shall be guarded by a substantial enclosure or rail not less than 3 feet 6 inches high. Floor openings in buildings of more than 2 stories, unless enclosed with fire-resistive enclosures as specified in s. ILHR 54.08 shall be protected by fire-resistive doors as specified in s. ILHR 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.

**ILHR 54.105 Toeboards.** A toeboard shall be provided at the exposed edges of all elevated platforms, walks, balconies, mezzanines, ramps and floor openings to prevent the fall of materials where the elevation difference is greater than 5 feet. The toeboard shall extend 4 inches above the finished floor. Where material is stockpiled to a height where the toeboard does not provide adequate protection, additional measures shall be taken to prevent the fall of materials.

(1) **EXCEPTION.** Toeboards are not required on stairways or ramps and their landings or platforms.

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

**ILHR 54.11 Lighting.** (1) (a) Except as provided in par. (b), all stairways, fire escapes and exits and the passageways leading thereto when used at night shall be properly illuminated to facilitate egress. The intensity of illumination shall be as specified in ch. Ind 19.

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(b) The level of intensity of illumination for fire escapes may be reduced to 2.5 foot candles.

(2) All gas jets or gas lights in factories or workshops where combustible material is used, shall be properly enclosed by globes or wire cages, or otherwise properly guarded.

History: 1-2-56; am. (1), Register, August, 1985, No. 356, eff. 1-1-86.

**ILHR 54.12 Sanitary facilities.** (1) **GENERAL.** The occupancies included under the scope of this chapter shall be provided with toilet rooms as outlined in this section.

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(a) The toilet rooms shall be available for all occupants and employes during all hours of operation and located as specified in sub. (2) (b) 2.

(b) Toilet rooms for employes shall be accessible and convenient during all hours of operation.

(c) Sanitary fixtures for the public shall be provided using Table 54.12-A. Sanitary fixtures for employes shall be provided using Table 54.12-B.

TABLE 54.12-A  
 NUMBER OF SANITARY FIXTURES REQUIRED FOR  
 PATRONS/OCCUPANTS FOR PUBLIC BUILDINGS

Number of Patrons/ Occupants of Each Sex <sup>2</sup>	Type of Fixture <sup>1</sup>				
	Water Closets (WC)		Urinals (U)	Drinking Facilities (DF)	Lavatories <sup>3</sup> (L)
Males (M)	Females (F)				
1- 100	1	1	0		
101- 200	1	2	1		
201- 250	1	3	2		
251- 300	1	4	2	One (DF) for each 150 occupants or fraction up to 600	One (L) for each 2 fixtures (WC) or (U) required or fraction
301- 350	2	5	2		
351- 400	2	6	2		
401- 450	2	7	3		
451- 500	2	8	3		
501- 600	2	9	4		
Over 600	One (WC) for each additional 600 (M) or 275 (F) or fraction		One (U) for each additional 500 (M) or fraction	One additional (DF) for each additional 3000 occupants or fraction	

<sup>1</sup> Showers shall be required only in public pool facilities and for occupants exposed to occupational hazards such as poisonous, infectious or irritating materials.

<sup>2</sup> The determination of the number of each sex shall be based on equal number of each sex unless other information is made available to the department and accepted. Where a single toilet room designated as UNISEX is provided, it shall be considered as accommodating no more than 10 employes and 25 occupants.

<sup>3</sup> A minimum of one lavatory shall be provided in each toilet room.

Note: For structures with additions or alterations, the required number of sanitary fixtures shall be the sum of the fixtures required for the existing portion at the time it was constructed plus the fixtures required by this table for the new addition or altered area. At such time as the summation of the addition and alteration area is equal to or greater than 51% of the building area calculated as specified in s. ILHR 50.03 (4) (d), fixtures shall be provided in conformance to this table utilizing the capacity of the entire building.

TABLE 54.12-B  
NUMBER OF SANITARY FIXTURES REQUIRED FOR  
EMPLOYEES FOR PUBLIC BUILDINGS

Number of Employees of Each Sex <sup>2</sup>	Type of Fixture <sup>1</sup>					
	Water Closets (WC)		Urinals (U)	Drinking Facilities (DF)	Lavatories <sup>3</sup> (L)	Showers (S)
Males (M)	Females (F)					
0- 15	1	1	0			
16- 35	1	2	1			
36- 55	2	3	1			
56- 80	2	4	2			
81-110	3	5	2	One (DF) for each 100 em- ployees, or frac- tion	One (L) for each 2 fixtures (WC) or (U), or fraction	One (S) for each 10 em- ployees of each sex, or frac- tion
111- 150	4	6	2			
151- 200	5	8	3			
201- 250	6	9	3			
Over 250	One (WC) for each addi- tional 55 (M) or fraction; one (WC) for each additional 15 (F) or fraction		One (U) for each additional 75 (M) or fraction			

<sup>1</sup> Showers shall be provided in public pool facilities and for employees exposed to occupational hazards such as poisonous, infectious or irritating materials.

<sup>2</sup> The determination of the number of each sex shall be based on equal number of each sex unless other information is made available to the department and accepted. Where a single toilet room designated as UNISEX is provided, it shall be considered as accommodating no more than 10 employees and 25 occupants.

<sup>3</sup> A minimum of one lavatory shall be provided in each toilet room.

Note 1: For structures with additions or alterations, the required number of sanitary fixtures shall be the sum of the fixtures required for the existing portion at the time it was constructed plus the fixtures required by this table for the new addition or altered area. At such time as the summation of the addition and alteration area is equal to or greater than 51% of the building area calculated as specified in s. ILHR 50.03 (4) (d), fixtures shall be provided in conformance to this table utilizing the capacity of the entire building.

Note 2: *Examples:* Example #1: Mercantile building with 300 patrons and 50 employees = 350 total occupants; equally divided between sexes = 175 males, 175 females. From Table 54.12-A, 101-200 occupants of each sex: males require one water closet, one urinal, one lavatory; females require 2 water closets, one lavatory. Check for compliance with Table 54.12-B for employees: 50 employees, equally divided between sexes = 25 males, 25 females; 16-35 employees of each sex, males require one water closet, one urinal, one lavatory; females require 2 water closets, one lavatory. Therefore, the number of fixtures required by Table 54.12-A also satisfies the requirements of Table 54.12-B for employees and patrons.

Example #2: Office building with 300 employees and 50 patrons = 350 total occupants; equally divided between sexes = 175 males, 175 females. From Table 54.12-A, 101-200 occupants of each sex: males require one water closet, one urinal, one lavatory; females require 2 water closets, one lavatory. Check for compliance with Table 54.12-B for employees: 300 employees, equally divided between sexes = 150 males, 150 females; 111-150 employees of each sex, males require 4 water closets, 2 urinals, 3 lavatories; females require 6 water closets, 3 lavatories. Therefore, the number of fixtures required by Table 54.12-B for employees is more restrictive and governs.

Note 3: See also rules of the department of health and social services for sanitary fixtures for public swimming places, mobile home parks, camping grounds, camping resorts, recreational camps and educational camps.

(2) TOILET ROOMS. (a) *Factories, office and mercantile buildings.* All factories, office and mercantile buildings shall be provided with separate toilet rooms for each sex.

(b) *Exceptions.* 1. Where not more than 10 employees and 25 patrons are accommodated, one toilet room to accommodate both sexes shall be provided. Register, August, 1993, No. 452

vided. The door of the toilet room shall be equipped with an operating lock to ensure privacy.

2. Separate toilet rooms for employes and the general public need not be provided if the toilet rooms are accessible to both employes and the general public during all hours of operation. If the toilet rooms are accessible only through the employe work area, separate toilet rooms shall be provided for the general public.

3. 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, shall not be required to provide toilet rooms, provided that a written statement is submitted to the department verifying that convenient toilet facilities are available during all shifts and periods of operation. Toilet rooms are not required for mobile crews or in unattended buildings, provided the employes have access to convenient toilet facilities during all hours of operation.

(c) *Shopping centers and shopping malls.* 1. General public. Separate toilet rooms for each sex shall be provided for use by the general public in all shopping centers and shopping malls. The toilet rooms may be located in the public mall or in individual tenant spaces provided the toilet rooms are available during all hours of operation and located as specified in par. (b) 2. A minimum of one set of toilet rooms shall be provided for the general public.

2. Tenant spaces and employes. a. Separate toilet rooms for each sex shall be provided for the employes in each individual tenant space. In tenant spaces which accommodate not more than 10 employes, one toilet room to accommodate both sexes may be provided. For an individual tenant space or an individual booth within the public mall with a net area of 750 square feet or less, toilet rooms for the employes need not be provided if the employes have access to convenient public toilet rooms located in the public mall during all hours of operation.

b. Toilet rooms for other use groups which may also be included in shopping centers or shopping malls shall be provided as specified in sub. (2) (e) and s. ILHR 55.32.

Note: The department recommends that public toilet rooms in shopping centers and shopping malls be conveniently located for patron use and that the travel distance between sets of public toilet rooms be less than 400 feet. A set of public toilet rooms means one toilet room for each sex.

(d) *Places of worship and mausoleums.* 1. Places of worship. 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.

(e) *Places for entertainment, recreation and dining.* 1. 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 need not be provided if the toilet rooms are accessible to both employes and the general public during all hours of operation.

2. For mixed-use facilities, such as a dinner theater, the number required for the restaurants apply.

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

(f) *Garages, service stations and filling stations.* Toilet rooms shall be provided as outlined in this paragraph.

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 to accommodate both sexes may be provided in buildings which accommodate not more than 10 employes and 25 patrons. If toilet rooms are accessible to both employes and patrons during all hours of operation, separate toilet rooms for employes and patrons need not be provided.

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. If toilet rooms are accessible to both employes and patrons, separate toilet rooms for employes and patrons need not be provided.

(g) *Airports, bus terminals, train stations and other transportation centers.* All airports, bus terminals, train stations and other transportation centers shall be provided with separate toilet rooms for each sex as required in Table 54.12-A.

(3) **SANITARY FIXTURES.** (a) *General.* In public buildings and places of employment, except as provided in par. (b), 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 by using the higher number calculated from Tables 54.12-A and 54.12-B. The total number of occupants will be considered equally divided between males and females unless a different ratio is established by the department.

(b) *Exceptions.* 1. Except as provided in subd. 2., taverns and restaurants shall provide at least one separate toilet room for each sex.

2. Restaurants providing seating for 15 or less occupants, one toilet room having at least one water closet (WC) and one lavatory (L) may be provided to accommodate both sexes. The door of the toilet room shall be equipped with a lock to ensure privacy. If the toilet rooms are accessible to both employes and the general public, separate toilet rooms for employes and the general public need not be provided.

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

4. Taverns and restaurants accommodating 51 to 100 occupants, at least 2 water closets (WC) and one lavatory (L) for female patrons and at least one water closet (WC), one urinal (U) and one lavatory (L) for male patrons shall be provided.

5. Taverns and restaurants accommodating more than 100 occupants, the number of sanitary fixtures provided shall be as determined by using Table 55.32.

(c) *OSHA regulations.* The ratios for water closets established in Table 54.12-B for employes are taken directly from the U.S. department of labor, occupational safety and health act (OSHA) regulations. Therefore, s. ILHR 50.25, petitions for variance, is not applicable to the requirements of Table 54.12-B.

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 (e) 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; r. and recr. Register, August, 1993, No. 452, eff. 3-1-94.

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

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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.

Note: See s. ILHR 64.21 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 54.145 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 54.15 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 54.17 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.

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(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 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