

(h) *Maintenance.* All communication, fire prevention, detection and suppression systems required under this section shall be tested and maintained in an operable condition. All installed automatic sprinkler systems shall be maintained pursuant to NFPA No. 13A-1981 - Standard for the Care and Maintenance of Sprinkler Systems. A copy of the test report as specified in NFPA No. 13A-1981 shall be kept and shall be made available, upon request, to the department or its authorized deputies. The local fire department shall be notified whenever the life safety systems are shut down for repair and when placed back in service.

(i) *Floor level identification.* Each floor level or story shall be identified as to its number or name. Identification signs shall be posted in all elevator lobbies and in all required exit stairways.

History: Emerg. cr. eff. 1-1-75; cr. (1), Register, April, 1975, No. 232, eff. 5-1-75; cr. (2), Register, April, 1975, No. 232, eff. 1-1-76; (2), eff. 1-1-77; am. (2), Register, December, 1976, No. 252, eff. 1-1-77; am. (2) (d) 2. a. and cr. (2) (i), Register, December, 1977, No. 264, eff. 1-1-78; am. (1) (intro.), (a), (2) (intro.) and (2) (e) 2. a., Register, December, 1978, No. 276, eff. 1-1-79; am. (2) (h), Register, December, 1981, No. 312, eff. 1-1-82; am. (2) (h), Register, June, 1983, No. 330, eff. 7-1-83.

ILHR 52.015 Automatic fire sprinkler systems for low rise buildings. (1) FP
PURPOSE. Pursuant to s. 101.14 (4) (a), (c) and (d), Stats., created by ch. 320, Laws of 1981, this section establishes automatic fire sprinkler requirements for buildings under 60 feet in height which are used as public buildings or places of employment.

(2) **GENERAL.** The automatic fire sprinkler systems specified in this section shall conform to the definition specified in s. 145.01 (8), Stats., and shall satisfy the requirements specified in s. ILHR 51.23.

Note #1: See s. ILHR 50.03 for additional information regarding the application of these rules to new buildings, additions and changes of use.

Note #2: See s. A52.015 of Appendix A for additional information pertaining to fire hazard classifications, building usage and occupancy.

(3) **APPLICATION.** Automatic fire sprinkler systems shall be installed as follows:

(a) *Miscellaneous applications.* The following areas in all buildings, except hospitals, nursing homes, community-based residential facilities, day care centers, open parking structures and buildings used for farming purposes or primarily for the sale of farm machinery:

1. Storage and workshop areas. a. Except as provided in subpars. b. and c., storage and workshop areas exceeding 50 sq. ft. in area and located in assembly halls, theaters, offices, schools and residential occupancies;

b. Storage and workshop areas within individual living units are exempt from the provisions of subpar. a.

c. Rooms or areas used for storage of noncombustible materials, low hazard wares that do not burn rapidly or combustible materials stored in metal cabinets are exempt from the provisions of subpar. a.

Note: See A52.015 of Appendix A for additional information pertaining to low, moderate and high hazard classifications.

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2. Spray painting rooms and shops. Spray painting rooms and shops where painting, brushing, dipping or mixing using flammable materials is involved;

3. Laundry collection and trash collection rooms and chutes. Laundry collection rooms and trash collection rooms and chutes and areas used for incineration. Automatic sprinklers shall be installed within the chute at the top of the chute and on alternate floor levels;

4. Exhaust hoods in commercial kitchens. Exhaust hoods in commercial kitchens shall be protected as specified in s. ILHR 64.67 (6); and

5. Windowless floor levels. a. Except as provided in subpars. b. to e., floor levels of buildings without openings as specified in s. ILHR 52.02 (2) (a) shall be protected by an automatic fire sprinkler system.

b. Buildings or portions of buildings of totally noncombustible construction and containing noncombustible contents are exempt from the provisions of subpar. a.

c. Factory occupancies housing low hazard industrial processing are exempt from the provisions of subpar. a.

d. Within telephone central office equipment buildings, the automatic fire suppression system may be omitted in the generator and transformer rooms and the communication equipment areas provided the rooms or areas are protected with an approved automatic fire alarm system. The communication equipment areas shall be used exclusively for the equipment and shall be separated from the remainder of the building by at least one-hour fire-resistive rated walls and at least 2-hour fire-resistive rated floor/ceiling assemblies.

e. Windowless floor levels within individual living units are exempt from the provisions of subpar. a.

(b) *Factory, mercantile, class IV dry cleaning plants and moderate hazard storage and warehouse.* 1. Except as specified in subd. 2., buildings having more than 12,000 sq. ft. in area per floor or more than 24,000 sq. ft. in total area on all floors, or more than 3 stories in height and containing factory; mercantile; class IV dry cleaning plants; and storage or warehouse occupancies with moderate hazard contents, which are likely to burn with moderate rapidity, but which do not produce either poisonous gases or fumes or explosives.

Note: See s. A52.015 of Appendix A for additional information pertaining to low, moderate and high hazard classifications.

2. a. Factory occupancies housing low hazard industrial processing are exempt from the provisions of subd. 1.

Note: See s. A52.015 of Appendix A for additional information pertaining to low, moderate and high hazard classifications.

b. Buildings used for farming purposes or primarily for the sale of farm machinery.

(c) *Restaurants and recreation centers.* 1. Except as provided in subd. 2., restaurants and recreation centers, either of which exceed 12,000 square feet in area per floor.

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2. Indoor participant recreation centers, including tennis courts, skating rinks, swimming pools and equestrian clubs, are exempt from the provisions of subd. 1., provided the following conditions are satisfied.

a. Direct exits to the outside are provided for all the occupants;

b. The recreation area is conspicuously posted as to use and occupant load;

c. The building is equipped with a manual fire alarm system as specified in s. ILHR 51.24; and

d. All areas of the building other than the participant recreation areas are protected by an automatic fire suppression system.

(d) *Dance halls and night clubs.* Dance halls and night clubs either of which exceed 5,000 square feet in total area or are more than one story in height.

(e) *Exhibition buildings.* Exhibition buildings having more than 12,000 sq. ft. in area per floor.

(f) *Passenger terminals.* Passenger terminals having more than 12,000 sq. ft. in area per floor or providing enclosed loading service for 4 or more buses.

(g) *High hazard buildings.* All high hazard buildings, including class II, IIIA and IIIB dry cleaning plants, used for the storage, manufacture or processing of highly combustible, explosive, corrosive or toxic materials, which are likely to burn with extreme rapidity or which may produce poisonous fumes or explosives.

Note: See s. A52.015 of Appendix A for additional information pertaining to low, moderate and high hazard classifications.

(h) *Theatres and other places of assembly with fixed seats except places of worship.* Except for places of worship, all areas of theatres and other places of assembly with fixed seats except the auditorium, foyer, lobby and toilet rooms.

(i) *Stages.* Stages of any size and the areas within or behind the proscenium separation as follows:

1. Over the stage;

2. Under the stage gridiron with side wall sprinkler heads rated at 135° F. having heat baffle plates. The heads shall be installed around the entire perimeter of the stage, except above the proscenium opening, at points not more than 30 inches below the gridiron, nor more than 6 inches below the baffle plate;

3. Under all fly galleries;

4. Under the stage;

5. In all basements, cellars, workrooms, dressing rooms, store rooms and property rooms; and

6. In toilet, lounge and smoking rooms.

(j) *Museums, art galleries and libraries.* Museums, art galleries and libraries any of which exceed 12,000 square feet in area per floor.

(k) *Detention and correctional facilities.* 1. Except as provided in subd. 2., in all detention and correctional facilities.

2. Automatic sprinkler systems need not be provided in detention and correctional facilities with a resident load of less than 6.

(l) *Storage or repair garages.* Except as provided in subd. 3., in storage or repair garages which can accommodate more than 4 passenger motor vehicles, more than 4 motor powered boats, or more than one commercial motor vehicle under the following conditions:

1. Garages used exclusively for the storage of passenger vehicles, which will accommodate not more than 9 passengers as follows:

a. Greater than 10,000 sq. ft. in area per floor and more than one story in height;

b. More than 2 stories in height; or

c. When located in buildings where the upper stories are used for another occupancy and the garage is not separated from the other occupancy by at least 3-hour fire-resistive rated construction.

2. All other garages in which provisions are made for the care, storage, repair or painting of motor vehicles as follows:

a. Greater than 10,000 sq. ft. in area per floor;

b. Greater than 7,500 sq. ft. in area per floor and more than one story in height;

c. Greater than 5,000 sq. ft. in area per floor and more than 2 stories in height;

d. More than 3 stories in height;

e. When located in buildings where the upper stories are used for another occupancy and the garage is not separated from the other occupancy by at least 3-hour fire-resistive rated construction;

f. Where located in any floor level more than 50% below grade; or

g. Bus garages for storage of 4 or more buses.

3. Buildings used primarily for the sale of farm machinery are exempt from provisions of this section.

(4) **AREA SEPARATION WALLS.** (a) Buildings having an area exceeding the area limitations specified in sub. (3) may be constructed without complete automatic fire sprinkler systems provided the building is divided into areas less than the specified area limitations by at least 2-hour rated vertical fire separation walls.

(b) Where additions to buildings result in the area of the entire building exceeding the area limitations specified in sub. (3), the existing building and the building addition shall be protected as follows:

1. The existing building and the building addition shall be completely protected by an automatic fire sprinkler system;

2. The building addition shall be separated from the existing building by a 2-hour rated vertical fire separation wall. If the area of the building addition exceeds the area limitations specified in sub. (3), the building addition shall be completely protected by an automatic fire sprinkler system or the building addition shall be divided with 2-hour rated vertical fire separation walls as specified in par. (a); or

3. The existing building and the building addition shall be separated by 2-hour rated vertical fire separation walls as specified in par. (a).

(5) **MULTIPLE USE BUILDINGS.** Where a building contains multiple occupancies or use areas and one occupancy or use area is required by sub. (3) (b) to (1) to be protected by an automatic fire sprinkler system having more than 20 sprinkler heads, one of the following conditions shall apply:

(a) The occupancy or use area protected by the automatic fire sprinkler system shall be separated from the unprotected areas by at least 2-hour fire-resistive rated construction; or

(b) The entire building shall be protected by an automatic fire sprinkler system.

Note: See ss. ILHR 55.05 and 59.22 for occupancy separation requirements mandating fire-resistive separations of more than 2-hour rating.

(6) **SEPARATION WALLS FOR PARTIAL AUTOMATIC FIRE SPRINKLER SYSTEMS.** Where the provisions of sub. (3) (a) require the protection of an automatic fire sprinkler system, the protected area or room shall be enclosed with construction assemblies as specified in chs. ILHR 54 to 62 and as designated in Table 51.03-A for the class of construction.

Note: This rule is intended to require an effective fire barrier between those portions of the building protected by the automatic fire sprinkler system and the adjoining unprotected portions. The fire barrier is not required to be of fire-resistive construction unless required for the occupancy, use or class of construction.

History: Cr. Register, June, 1983, No. 330, eff. 7-1-83; emerg. r. and recr. (4) and r. (5), eff. 10-10-83; am. (3) (a) 1. and 5., (h), r. (3) (b) 2. b., renum. (3) (b) 2. c. to be (3) (b) 2. b., r. and recr. (3) (c), (d), (j), (4) and (5), cr. (6), Register, February, 1984, No. 338, eff. 3-1-84.

ILHR 52.02 Windows. (1) **NATURAL LIGHT.** (a) Except as provided in par. (b), every room in which one or more persons live, sleep, shall be lighted by a window or windows opening directly upon a street or alley, or upon a court on the same lot with the building.

1. The windows shall be so constructed and distributed as to afford light.

2. Every building more than 40 feet deep measuring at right angles to the windows, shall have windows on at least 2 sides of the building.

Note: For windows and other outdoor openings used for natural ventilation, see ss. ILHR 64.07, 57.13, 58.03, 58.45 and 60.13.

(b) 1. Windows shall not be required in storage rooms, factories, offices, mercantile facilities, educational facilities or areas where the nature of occupancy will not permit windows provided artificial lighting as specified in ch. Ind 19 is provided.

2. Hotel and motel rooms and similar sleeping rooms in buildings accommodating transients need not be provided with openable windows provided the rooms have clear glazed panels facing naturally lighted pool or recreation areas. The rooms shall be provided with mechanical ventilation supplying at least 5 CFM of tempered outside air per occupant.

(2) FIRE DEPARTMENT ACCESS OPENINGS. (a) Except as provided in par. (b), every story or basement either of which is not protected by an automatic fire sprinkler system shall be provided with at least 20 square feet of aggregate opening entirely above the adjoining ground level in each 50 lineal feet or fraction thereof of exterior wall in the story or basement, on at least one side of the building.

1. Openings shall have minimum dimensions of not less than 22 inches by 42 inches.

2. The openings shall be accessible to the fire department from the exterior and shall be unobstructed to allow firefighting and rescue operations from the exterior.

a. A clear space not less than 5 feet in width measured perpendicular to the building wall shall be provided outside of windows or access panels.

b. Access to a basement may be provided by a door opening directly to an outside stairway not less than 3 feet in width.

c. A skylight or hatch may serve as a basement access opening if a ladder or stairs from the floor below is provided.

d. Access openings shall be doors, windows, glazed panels or other panels readily identifiable and openable from the outside. Access panels requiring the use of a key, special tools or devices for opening will be permitted if approved by the fire department having jurisdiction.

3. Every story of a building more than 75 feet deep, measuring at right angles to the openings, shall have openings in that story on at least 2 sides of the building.

4. Openings in the basement shall be located so any location in the basement is within 75 feet of an opening.

(b) The provisions of par. (a) do not apply to the following:

1. Hospitals;

2. Nursing homes;

3. Community-based residential facilities;

4. Day care centers;

5. Buildings used for farming purposes or primarily for the sale of farm machinery; and

6. Buildings listed in s. ILHR 52.015 (3) (a) 5. b. to e.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63; r. and recr. (1) (a), Register, October, 1967, No. 142, eff. 11-1-67; am. (1) (a) Register, May, 1971, No. 185, eff. 6-1-71; r. and recr., Register, September, 1973, No. 213, eff. 10-1-73; cr. (1) (b), Register, January, 1980, No. 289, eff. 2-1-80; r. and recr. Register, June, 1983, No. 330, eff. 7-1-83; r. and recr. (2), Register, February, 1984, No. 338, eff. 3-1-84.

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ILHR 52.03 Window cleaning. (1) Where the tops of windows to be cleaned are more than 20 feet above the floor, ground, flat roof, balcony, or permanent platform, one of the following means shall be provided to protect the window cleaners.

(a) Approved attachments for window cleaner safety belts to which belts may be fastened at each end. The attachments shall be permanent devices that shall be firmly attached to the window frame, or to the building proper, and so designed that a standard safety belt may be attached thereto; or

(b) An approved portable platform that is projected through the window or supported from the ground, floor, roof or platform level, for the window cleaner to stand upon and that is designed, constructed, maintained and equipped with handrail and toeboard in compliance with the requirements of ch. Ind 1.

(c) A suspended scaffold, swinging scaffold, swinging chair scaffold, or boatswain's chair scaffold designed, constructed, equipped and maintained in compliance with the requirements of ch. Ind 35, or

(d) Other equally effective devices.

(e) Where the window consists of a fixed panel not more than 24 inches in width alongside a removable panel, the fixed panel may be cleaned by reaching through the opening of the removable panel. Where the window consists of a fixed panel between 2 removable panels, the fixed panel may be cleaned by reaching through the openings if such fixed panel is not more than 36 inches in width.

(2) For cleaning the insides of skylights (the highest parts of which are more than 20 feet above the floor, ground, balcony or permanent platform), to which access cannot be gained by any of the means described in s. Ind 1.16 (1), scaffolds as specified in ch. Ind 35 shall be provided.

(3) All equipment, including building parts and attachments, used in connection with window cleaning, shall be maintained in reasonably safe condition while in use and shall be inspected at least once each month while in use, and within 30 days before their use. It shall be the responsibility of the owner of the individual safety devices or equipment to inspect and maintain the devices or equipment belonging to the owner so that each will comply with the requirements of this section.

(4) Where the attachments specified in sub. (1) (a) are relied upon for compliance with the provisions sub. (1), the employer shall furnish or see that there is provided, an approved suitable safety belt for each employe while cleaning windows.

History: 1-2-56; am. Register, December, 1962, No. 84, eff. 1-1-63; am. (1) (a), (3) and (4), Register, December, 1981, No. 312, eff. 1-1-82.

ILHR 52.04 Requirements for barrier-free environments. (1) **SCOPE.** The requirements of this section are intended to insure that all public buildings and places of employment shall be accessible and usable by all citizens, including those with functional limitations.

Note: Owners intending to utilize federal funds for buildings may have to comply with other requirements in addition to ILHR 52.04, such as the latest revised ANSI A 117.1, Specifica-

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tion for Making Buildings and Facilities Accessible To, and Usable By, the Physically Handicapped.

(2) **DEFINITIONS.** (a) *Access or accessible.* Access or accessible means the ability of a person with a functional limitation caused by impairments of sight, hearing, incoordination, perception, semiambulatory or nonambulatory disabilities to enter and leave a public building, circulate through a public building, and use the public toilet facilities without assistance. Functional limitations may require aids such as wheelchairs, crutches, braces or canes.

(b) *Primary floor.* A primary floor is one intended for use by the employees or patrons, or both. A floor used primarily for furnace room or storage areas, or both, is not considered a primary floor.

Note: If more than one floor meets the definition of a primary floor, and access is required only to one primary floor, the owner may designate which primary floor will be provided with accessibility.