

Chapter ILHR 52

GENERAL REQUIREMENTS

Subchapter I — Fire Prevention, Detection and Suppression for High Rise Buildings	Subchapter VI — Atriums
ILHR 52.01 Fire prevention, detection and suppression for high rise buildings (p. 103)	ILHR 52.07 Atriums (p. 128)
Subchapter II — Automatic Fire Sprinkler Systems for Low Rise Buildings	Subchapter VII — Miscellaneous Provisions
ILHR 52.011 Purpose, scope and application (p. 107)	ILHR 52.19 Gas and oil lamps; gas service (p. 131)
ILHR 52.012 Individual room, limited area and partial automatic fire sprinkler systems (p. 109)	ILHR 52.20 Electrical work (p. 132)
ILHR 52.013 Specified applications by occupancy or use (p. 110)	ILHR 52.21 Location and maintenance of exits (p. 132)
Subchapter III — Windows and Fire Department Access Openings	ILHR 52.22 Repairs (p. 132)
ILHR 52.02 Windows (p. 112)	ILHR 52.23 Cleanliness (p. 132)
ILHR 52.03 Window cleaning (p. 112-1)	Subchapter VIII — Sanitary Facilities
Subchapter IV — Barrier-free Design for the Physically Disabled	ILHR 52.50 Toilet rooms (p. 132)
ILHR 52.04 Requirements for barrier-free environments (p. 113)	ILHR 52.52 Sex designation (p. 132)
ILHR 52.041 Health care facilities — new construction (p. 126)	ILHR 52.53 Location, light and ventilation (p. 133)
ILHR 52.042 Existing health care facilities (p. 127)	ILHR 52.54 Location without outside windows; when permitted (p. 133)
Subchapter V — Courts	ILHR 52.55 Artificial light (p. 133)
ILHR 52.05 Size of courts (p. 127)	ILHR 52.56 Size (p. 134)
ILHR 52.06 Ventilation of courts (p. 128)	ILHR 52.57 Floor and base (p. 134)
	ILHR 52.58 Walls and ceilings (p. 134)
	ILHR 52.59 Enclosure of fixtures (p. 134)
	ILHR 52.60 Fixtures (p. 135)
	ILHR 52.61 Protection from freezing (p. 137)
	ILHR 52.62 Disposal of sewage (p. 137)
	ILHR 52.63 Outdoor toilets (p. 137)
	ILHR 52.64 Maintenance and housekeeping (p. 137)

Note: Chapter Ind 52 was renumbered to be Chapter ILHR 52 effective 1-1-84.

Subchapter I — Fire Prevention, Detection and Suppression for High Rise Buildings

ILHR 52.01 Fire prevention, detection and suppression for high rise buildings. (1) **AUTOMATIC FIRE SPRINKLER SYSTEM.** A complete automatic sprinkler system, as specified in s. ILHR 51.23, shall be provided in every building more than 60 feet in height, the initial construction of which is commenced after July 2, 1974. The requirements of this section shall not apply to open parking structures as defined in s. ILHR 62.10 (2).

(a) *Additions to existing buildings.* Building additions more than 60 feet in height shall have an automatic sprinkler system installed. The sprinkler protection shall be provided throughout the existing building unless the addition is separated from the existing building by a fire division wall as specified in s. ILHR 51.02 (13). The requirements of this section shall not apply to open parking structures as defined in s. ILHR 62.10 (2).

(b) *Substitute suppression systems.* When approved by the department, substitute automatic suppression systems may be used in lieu of a sprin-

kler system in areas where the use of water could cause unusual damage to equipment, or where water may have a limited effect or may be hazardous to use because of the nature of processes involved.

Note: The department will accept design and installation in accordance with the latest edition of the national fire protection association standards for special extinguishing systems.

(c) *Alternate methods.* When approved by the department, alternate methods of fire prevention, detection and suppression may be provided in lieu of a complete automatic sprinkler system.

Note #1: The department will request a position statement regarding the proposed method to be submitted by the fire chief of the municipality wherein the building is located.

Note #2: The department will consider alternate methods of fire prevention, detection and suppression to include, but not limited to, fire-resistive construction, compartmentation, automatic detection systems, interior finish restriction, and partial sprinkler protection.

(2) **ADDITIONAL REQUIREMENTS FOR HIGH-RISE BUILDINGS.** The following requirements apply to all buildings more than 100 feet in height or having more than 10 stories. Open parking structures and buildings used for low hazard industrial processes, including the production and distribution of gas, steam or electric power, foundries and similar uses which require unusual heights to accommodate cranes, special machinery or equipment, are exempt from the provisions of this subsection.

(a) *Smoke control.* Natural or mechanical ventilation for the removal of products of combustion shall be provided in every story and shall consist of one or more of the following methods. Controlling devices may be automatic or manual as approved by the local fire department.

1. Panels or windows in the exterior wall which can be opened from a location other than the fire floor. Such venting facilities shall be provided at the rate of at least 20 square feet per 50 lineal feet of exterior wall in each story, and distributed around the perimeter at not more than 50-foot intervals. Such panels shall be clearly identified as required by the fire department.

2. Openable windows in habitable rooms of residential units.

3. When an automatic sprinkler system is installed in compliance with s. ILHR 51.23, the mechanical air handling equipment may be designed to assist smoke removal. Under fire conditions, the return and exhaust air shall be taken directly to the outside without recirculation to other sections of the building.

4. A mechanical ventilation system which will prevent the transfer of smoke from the fire source to other floors of the building. The design shall be substantiated by calculations or tests showing that a pressure differential of 0.10 inch of water column will be produced.

5. Any other design which will produce equivalent results.

(b) *Exit stairways.* 1. All stairways shall be pressurized. The pressure across each door shall be at least 0.15 but not more than 0.20 inch of water column with all doors closed. Pressurization shall be activated by the fire alarm system, the detection systems, and the sprinkler system. In lieu of pressurization, a smokeproof stair tower, as defined in s. ILHR 51.17, will be accepted.

Note: The department will accept alternate designs which will produce equivalent results.
Register, November, 1986, No. 371

2. All stairway doors which are to be locked from the stairway side shall have the capability of being unlocked without unlatching upon a signal from the central control station.

(c) *Elevators.* There shall be provided at least one elevator suitable for fire department access to any floor. If the building is not provided with an approved automatic sprinkler system, the elevator lobby at each level shall be separated from the remainder of the building by an effective smoke barrier.

Note: Refer to ch. Ind 4 for additional requirements.

(d) *Fire alarm and detection system.* 1. A manual fire alarm box shall be located adjacent to exit doors into stairway shafts and in every elevator lobby.

2. An approved system which will provide for automatic detection of products of combustion other than heat shall be installed in every air-handling equipment room, unless sprinklered, and in the return air portion of every air conditioning and mechanical ventilation system. Approved heat detectors may be installed in boiler rooms and furnace rooms in lieu of product of combustion detectors.

a. Detectors shall be located in the main return air and supply air ducts of each ventilation system and at each opening into a vertical return air shaft or duct.

b. The detectors shall actuate an alarm or signaling system and shut down the ventilation system except where automatic smoke control is incorporated in the system.

3. The manual alarm and automatic detection system shall conform to the Wisconsin State Electrical Code, Volume 2, ch. ILHR 16 and one of the following standards:

a. Standard for Central Station Protective Signaling Systems, NFPA No. 71;

b. Standard for Auxiliary Protective Signaling Systems, NFPA No. 72B;

c. Standard for Remote Station Protective Signaling Systems, NFPA No. 72C;

d. Standard for Proprietary Protective Signaling Systems, NFPA No. 72D.

4. Detectors shall conform to the Standard for Automatic Fire Detectors, NFPA No. 72E.

(e) *Alarm and communication systems.* The following alarm and communication systems shall be provided. The systems shall be supervised and exposed wiring shall be encased in a metal conduit.

1. Voice alarm system. The detection system, sprinkler water flow device and the fire alarm system shall actuate a prerecorded message or voice alarm capable of being operated from the central control station on a general as well as a selective basis to the area involved. The alarm shall be designed to be heard by all occupants within the building or designated portions.

2. Voice communication system. There shall be a voice communication system between the central control station and the following areas:

Note: The department will accept systems installed in accordance with the Standard for the Installation, Maintenance and Use of Local Protective Signaling Systems for Watchmen, Fire Alarm and Supervisory Service, NFPA No. 72A.

- a. Elevators, elevator lobbies, in stairways at every fifth floor, and all manual fire alarm boxes (2-way communication system);
- b. Every office area exceeding 1,000 square feet in area (one-way address system); and
- c. Each dwelling unit and hotel guest room (one-way address system).

3. Fire department communication system. A system providing 2-way communication shall be provided at all floor levels, stairways, the central control station, and other locations required by the fire department.

- a. The system shall be designed so the fire department communication system will override the other communication systems.
- b. Wiring shall be arranged so that open circuits or short circuits on individual floors will not interfere with communications on another floor.
4. Combined system. When approved by the local fire department, the fire department communication system may be combined with the voice communication system and the voice alarm system.

(f) *Central control station.* A central control station for fire department operations shall be provided in a location approved by the fire department. It shall contain the voice communication systems panel; fire detection and alarm system panels; status indicators and controls for elevators, smoke venting and air handling systems; controls for unlocking stairway doors; a public telephone; sprinkler valve and water flow detectors; and standby power controls. All fire alarm and water flow signals shall be transmitted directly to the systems indicated in s. ILHR 52.01 (2) (d) 3.

(g) *Standby power and light.* An approved permanently installed standby power generating system shall be provided. The system shall be equipped with suitable means for automatically starting the generator set upon failure of the normal electrical service and for automatic transfer and operation of the required electrical functions at full power within 60 seconds of such normal service failure. System supervision with manual start and transfer features shall be provided at the central control station.

1. An on-premise fuel supply sufficient for not less than 2 hours full demand operation of the system shall be provided.

2. The power requirement shall be determined so as to provide service to, but not limited to the following:

- a. Fire alarm system;
- b. Exit and other emergency lighting;
- c. Fire protection equipment;

Note: Standby power to service fire pumps may be omitted if approved by the local fire department.

- d. Mechanical ventilation required by this section;
- e. Fire department elevator; and
- f. Communication systems.

(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 — Standard for the Inspection, Testing and Maintenance of Sprinkler Systems. A copy of the test report as specified in NFPA No. 13A 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 or impaired and when placed back in service. The owner shall arrange for immediate and continual servicing or repair of the communication, fire prevention, detection and suppression systems until they are placed back in operation.

(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; emerg. am. (2) (h), eff. 9-6-86; am. (2) (h), Register, November, 1986, No. 371, eff. 12-1-86.

Subchapter II — Automatic Fire Sprinkler Systems for Low Rise Buildings

ILHR 52.011 Purpose, scope and application. (1) **GENERAL.** Pursuant to s. 101.14 (4) (a), (c) and (g), Stats., created by 1983 Wisconsin Act 295, this subchapter establishes automatic fire sprinkler system requirements for buildings under 60 feet in height which are used as public buildings or places of employment.

(2) **GENERAL REQUIREMENT.** Except as provided in sub. (3), automatic fire sprinkler systems shall be installed in the rooms, areas, locations, and building occupancies as specified in ss. ILHR 52.012 and 52.013.

Note: Section 4-4.4.1 of NFPA 13 states: "All concealed spaces enclosed wholly or partially by exposed combustible construction shall be protected by sprinklers." The section also listed exceptions to the rule. Buildings "completely protected" by automatic fire sprinkler systems must comply with this and related sections of NFPA 13.

(3) **ALTERNATE METHODS.** When approved by the department through the petition for variance process, alternate methods of fire protection, detection or suppression providing an equivalent degree of life safety protection may be provided.

Note: See s. ILHR 50.25 for the procedure used for submitting a petition for variance to an administrative rule.

(4) **SYSTEM DEFINITION AND STANDARD.** The automatic fire sprinkler systems specified in this subchapter shall conform to the definition specified in s. ILHR 51.01 (7a) and shall comply with the requirements speci-

Register, November, 1986, No. 371

fied in standards listed in ss. ILHR 51.27 (7) (b), (c), (cm), (d), (e), (f), (r) and (s).

Note #1: The definition of the term "automatic fire sprinkler system" in s. ILHR 51.01 (7a) is taken from s. 145.01 (2), Stats.

Note #2: See s. A52.011 of Appendix A for additional information pertaining to fire hazard classifications, building usage, and occupancy.

(5) **AREA SEPARATION WALLS.** (a) Buildings having an area exceeding the area limitations specified in s. ILHR 52.013, 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. The fire separation wall shall extend from the foundation to the underside of the roof deck.

1. Structural framing members may continue through or over the separation wall provided the framing and supporting elements are of noncombustible or one-hour fire-resistive construction.

2. All openings in the separation wall shall be protected by fire-resistive door assemblies as specified in s. ILHR 51.047.

(b) Where additions to buildings result in the area of the entire building exceeding the area limitations specified in s. ILHR 52.013, one of the following conditions shall apply:

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 s. ILHR 52.013, 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 divided by 2-hour rated vertical fire separation walls as specified in par. (a).

(6) **MULTIPLE USE BUILDINGS.** Where a building contains multiple occupancies or use areas and one occupancy or use area is required by s. ILHR 52.013 to be protected by an automatic fire sprinkler system, 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 1-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 1-hour rating.

(7) **SEPARATION OF AREAS PROTECTED BY A PARTIAL AUTOMATIC FIRE SPRINKLER SYSTEM.** Where the provisions of ss. ILHR 52.012 require the protection of an automatic fire sprinkler system, the protected area or room shall be enclosed with construction assemblies as specified in chs. Register, November, 1986, No. 371

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: Emerg. cr. eff. 9-6-86; cr. Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 52.012 Individual room, limited area and partial automatic fire sprinkler systems. The rooms or areas within buildings as specified in subs. (1) to (5) shall be protected by an automatic fire sprinkler system.

(1) **WINDOWLESS FLOOR LEVELS.** (a) Except as provided in pars. (b) and (c), automatic fire sprinkler system protection shall be provided in all basements and floor levels where openings as specified in s. ILHR 52.02 (2) (a) are not provided.

(b) Automatic fire sprinkler system protection need not be provided in the following windowless floor level applications:

1. Windowless floor levels of 2500 square feet or less in total area and equipped with an approved smoke detection system which is:

- a. Directly and permanently wired to a proper unswitched circuit; and
- b. Interconnected to the building manual fire alarm system. If the building does not have a manual fire alarm system, the smoke detection system shall be capable of sounding an audible alarm which can be heard in all occupied areas of the building.

2. Communication equipment rooms separated from the remainder of the building by at least one-hour fire resistive construction and the room is equipped with an approved automatic fire detection and alarm system;

3. Windowless floor levels in ch. ILHR 54 occupancies classified as low hazard and not exceeding 3000 square feet in area;

4. Windowless floor levels within individual living units of ch. ILHR 57 Occupancies;

5. Interior balconies and open mezzanine floors; and

6. Windowless floor levels in hospitals and nursing homes.

Note: See chs. ILHR 58 and HSS 124 and 132 for additional requirements.

(c) One-story buildings with no floor levels below the first floor need not be provided with exterior wall openings other than the required exits. Except as provided in par. (b), enclosed mezzanine floor levels shall be protected by an automatic fire sprinkler system or provided with exterior wall openings.

(2) **LAUNDRY AND TRASH COLLECTION ROOMS AND CHUTES.** Automatic fire sprinkler system protection shall be provided in all laundry and trash chutes and terminal rooms. Automatic fire sprinklers shall be installed at the top of the chute and at alternate floor levels.

(3) **STORAGE AREAS.** (a) Except as provided in par. (b), automatic fire sprinkler system protection shall be provided in storage areas exceeding 100 square feet in area and located in ch. ILHR 55, 56, and 57 occupancies. The areas of individual adjacent storage areas shall be considered

Register, November, 1986, No. 371

cumulatively unless each storage area is separated from the adjacent area by at least 30 minute fire resistive rated construction with openings protected by 20 minute rated fire doors.

(b) Automatic fire sprinkler system protection need not be provided in the following storage area applications:

1. Storage areas not exceeding 1500 square feet in area which are separated from the remainder of the building by at least one-hour fire resistive construction and the area is equipped with an approved smoke detection system, which is:

a. Directly and permanently wired to a proper unswitched circuit; and

b. Interconnected with the building manual fire alarm system. If the building does not have a manual fire alarm system, the smoke detection system shall be capable of sounding an audible alarm which can be heard in all occupied areas of the building; and

2. Storage areas located within individual living units of ch. ILHR 57 occupancies.

(4) **STAGE AREAS REQUIRING PROSCENIUM SEPARATIONS.** Automatic fire sprinkler system protection shall be provided for all stage areas requiring proscenium separations within or behind the proscenium separation as follows:

(a) Over the stage;

(b) 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;

(c) Under all fly galleries;

(d) Under the stage;

(e) In all basements, workrooms, dressing rooms, store rooms and property rooms; and

(f) In toilet, lounge and smoking rooms.

History: Emerg. cr. eff. 9-6-86; cr. Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 52.013 Specified applications by occupancy or use. Except as provided in s. ILHR 52.011 (5), a complete automatic fire sprinkler system shall be installed as specified in the following occupancies:

(1) **MERCANTILE OCCUPANCIES.** (a) Except as provided in par. (b), in mercantile occupancies where the area exceeds 15,000 sq. ft. per floor or 30,000 sq. ft. total area of all floors; or the height exceeds 3 stories;

(b) Mercantile occupancies without complete automatic fire sprinkler protection may be constructed up to the areas permitted in Table 54.01-1, but not exceeding 20,000 sq. ft. per floor provided the following conditions are satisfied:

1. The building is completely equipped with an automatic smoke detection system monitored by a fire alarm system company, proprietary or remote station service;

Register, November, 1986, No. 371

2. The distance to an exit does not exceed 100 feet; and

3. Street access for fire fighting vehicles is provided on at least 50% of the building perimeter.

(2) **EXHIBITION ROOMS.** In rooms having more than 12,000 sq. ft. of floor area which can be used for exhibition or display purposes.

(3) **LIBRARIES AND MUSEUMS.** In libraries and museums either of which exceed 15,000 sq. ft. area per floor.

(4) **RESTAURANTS, NIGHT CLUBS AND DANCE HALLS.** (a) In restaurants where the floor area exceeds 12,000 sq. ft. or where the capacity is more than 1,000 persons.

(b) 1. In buildings with rooms primarily used for dance halls or entertaining occupants who are drinking or dining and unseparated accessory uses where the total area exceeds 5,000 sq. ft. or where the capacity is more than 300 persons.

2. The area of accessory rooms such as but not limited to kitchens, storage rooms and other use areas shall be included unless the accessory rooms are separated from the remainder of the building by at least one-hour fire-resistive construction.

(5) **DETENTION AND CORRECTION FACILITIES.** In all detention and correctional facilities with a resident population of 6 or more.

(6) **STORAGE OCCUPANCIES.** (a) 1. Except as provided in par. (b), in buildings having an area exceeding 20,000 sq. ft. and used for high-piled storage of moderate hazard contents as specified in subd. 2.

2. High-piled storage shall include moderate hazard combustible materials in closely packed piles more than 15 feet in height or moderate hazard combustible materials on pallets or in rack more than 12 feet in height.

(b) 1. The automatic fire sprinkler system protection may be limited to the storage area of the building only provided the storage area is separated from the remainder of the building by at least 2-hour fire-resistive rated construction.

2. Automatic fire sprinkler system protection need not be provided in freezer warehouses.

Note: See s. ILHR 54.01 (2) (c) for additional requirements.

(c) The automatic fire sprinkler protection required by this subsection shall be in accordance with NFPA Standards No. 231 — Standard for General Storage and No. 231C — Standard for Rack Storage of Materials.

Note: See s. A52.011 for additional information on classification of hazards.

(7) **HIGH HAZARD BUILDINGS.** (a) Except as provided in par. (b), an automatic fire sprinkler system shall be installed in all high hazard occupancies exceeding 3000 sq. ft. in floor area.

Note: See s. A52.011 of Appendix A for additional information regarding classification of hazards.

(b) When approved by the department, alternate types of fire protection or suppression systems as may be appropriate for the particular hazard may be provided.

Note: The department will request a position statement regarding the proposed method to be submitted by the Fire Chief of the municipality having jurisdiction.

History: Emerg. cr. eff. 9-6-86; cr. Register, November, 1986, No. 371, eff. 12-1-86.

ILHR 52.015 Automatic fire sprinkler systems for low rise buildings. 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), (f), (4) and (5), cr. (6), Register, February, 1984, No. 338, eff. 3-1-84; emerg. r., eff. 9-6-86; r. Register, November, 1986, No. 371, eff. 12-1-86.

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.

FP 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) *Application.* Except as provided in s. ILHR 52.012 (1) (b) and (c), every basement or floor level either of which is not protected by an automatic fire sprinkler system shall be provided with at least 20 square feet of aggregate opening in each 50 lineal feet of exterior wall in the story or basement, on at least one side of the building.

Note: Openings 20 sq. ft. in area spaced 100 feet apart and no more than 50 feet from the end of a wall satisfy the intent of this subsection.

(b) *Dimensions.* Openings shall have minimum dimensions of not less than 22 inches by 42 inches. The bottom of the opening shall be not more than 48 inches above the floor.

(c) *Accessibility.* The openings shall be accessible to the fire department from the exterior and shall be unobstructed to allow fire-fighting and rescue operations.

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

Register, November, 1986, No. 371

b. A stairway or ramp to grade not less than 3 feet in width shall be provided where the bottom of the opening is more than 4 feet below grade.

2. An interior stairway may serve as basement access if the stairway leads directly to an exterior door and is separated at the first story with one-hour fire-resistive rated construction and protected openings. The stairway may not serve any floor level above the first story.

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

4. 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.

5. The fire department access shall open into the general area of the floor being served, where an aisle or passageway leading to the opening can be maintained clear of obstructions.

Note: An opening located within a tenant storage cubicle is not acceptable.

(d) *Number of openings required.* 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.

(e) *Locations.* Openings in the basement shall be located so any location in the basement is within 75 feet of an opening.

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

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.