

## Chapter SPS 362

### BUILDINGS AND STRUCTURES

SPS 362.0100	Administration.	SPS 362.1509	Rooftop photovoltaic systems.
SPS 362.0202	Definitions.	SPS 362.1603	Roof snow load.
SPS 362.0307	Pyrophoric materials.	SPS 362.1604	Alternate approvals.
SPS 362.0310	Use and occupancy classification.	SPS 362.1607	Live loads.
SPS 362.0400	Special detailed requirements based on use and occupancy.	SPS 362.1608	Snow loads.
SPS 362.0401	Chapter ATCP 93 compliance.	SPS 362.1611	Roof drains.
SPS 362.0406	Motor vehicle-related occupancies — parking garages.	SPS 362.1613	Earthquake loads.
SPS 362.0412	Aircraft-related occupancies.	SPS 362.1700	Structural tests and special inspections.
SPS 362.0415	Hazardous materials.	SPS 362.1802	Definition of neutral plane.
SPS 362.0603	Allowable materials.	SPS 362.1803	Deep foundations.
SPS 362.0702	Fire separation distance.	SPS 362.1804	Ground improvement.
SPS 362.0705	Connections between buildings.	SPS 362.1805	Basement floor base course.
SPS 362.0706	Fire wall identification.	SPS 362.1806	Presumptive load-bearing values for saturated soils.
SPS 362.0707	Fire barriers.	SPS 362.1807	Shallow post foundations.
SPS 362.0708	Shaft enclosures.	SPS 362.1808	Foundations.
SPS 362.0716	Ducts and air-transfer openings.	SPS 362.1809	Frost-protected shallow foundations.
SPS 362.0721	Calculated fire resistance.	SPS 362.1810	Deep foundations.
SPS 362.0901	Fire protection systems.	SPS 362.1913	Shotcrete clearance.
SPS 362.0902	Definitions.	SPS 362.2103	Cast stone masonry units.
SPS 362.0903	Automatic fire sprinkler systems.	SPS 362.2109	Empirical design of masonry.
SPS 362.0904	Alternative automatic fire-extinguishing systems.	SPS 362.2204	Welded Connections.
SPS 362.0907	Fire alarm and detection systems.	SPS 362.2210	Trusses spanning 60 feet or greater.
SPS 362.0909	Smoke control systems.	SPS 362.2303	Trusses spanning 60 feet or greater.
SPS 362.0910	Smoke and heat vents, and draft curtains.	SPS 362.2304	Girder ends.
SPS 362.1004	Egress for outdoor areas.	SPS 362.2409	Glass and glazing for elevators.
SPS 362.1008	Doors, gates and turnstiles.	SPS 362.2503	Gypsum board and plaster.
SPS 362.1009	Stairway width.	SPS 362.2701	Electrical code.
SPS 362.1014	Exit access.	SPS 362.2900	Additional criteria for toilets.
SPS 362.1015	Refrigerated spaces.	SPS 362.2901	Plumbing code.
SPS 362.1018	Corridor continuity.	SPS 362.2902	Plumbing fixtures.
SPS 362.1021	Exits from stories.	SPS 362.2903	Drinking facilities.
SPS 362.1022	Enclosures required.	SPS 362.3001	Elevators.
SPS 362.1101	Design.	SPS 362.3002	Elevator car to accommodate ambulance stretcher.
SPS 362.1103	Scoping requirements — limited access spaces.	SPS 362.3004	Hoistways.
SPS 362.1104	Accessible route.	SPS 362.3006	Machine rooms.
SPS 362.1107	Dwelling units and sleeping units.	SPS 362.3100	Special construction.
SPS 362.1109	Lifts.	SPS 362.3102	Blower equipment.
SPS 362.1110	Signage.	SPS 362.3103	Temporary structures.
SPS 362.1200	Carbon monoxide alarms.	SPS 362.3104	Pedestrian walkways and tunnels.
SPS 362.1204	Interior environment.	SPS 362.3109	Swimming pool enclosures.
SPS 362.1206	Court drainage.	SPS 362.3200	Encroachments into the public right-of-way.
SPS 362.1210	Toilet rooms.	SPS 362.3300	Safeguards during construction.
SPS 362.1405	Exterior walls.	SPS 362.3307	Protection of adjoining property.
SPS 362.1505	Roof covering classification.	SPS 362.3400	Existing structures.
SPS 362.1506	Roof covering materials.	SPS 362.3500	Referenced standards.
SPS 362.1507	Roof slope.	SPS 362.3600	Appendices.

**Note:** Chapter Comm 62 as it existed on June 30, 2002 was repealed and a new chapter Comm 62 was created, Register December 2001 No. 552, effective July 1, 2002. Chapter Comm 62 was renumbered chapter SPS 362 under s. 13.92 (4) (b) 1., Stats., Register December 2011 No. 672.

**SPS 362.0100 Administration.** The requirements in IBC chapter 1 are not included as part of this code.

**Note:** The sections in this chapter are generally numbered to correspond with the section numbering in the IBC, e.g., s. SPS 362.0202 corresponds to IBC section 202.

**Note:** As used throughout this code, “not included as part of this code” is intended to convey that the referenced requirements are not incorporated herein, and therefore cannot be enforced through this code. However, local ordinances may include the referenced requirements, as specified in s. SPS 361.03.

**Note:** IBC section 101.2 addresses the scope of the IBC. For the scope of the Wisconsin Commercial Building Code, see s. SPS 361.02. Three or more attached townhouses, as referenced in an exception under IBC section 101.2, are included within the scope listed in s. SPS 361.02. Detached one- and two-family dwellings, as likewise referenced in an exception under IBC section 101.2, and elsewhere in the IBC, are not included within the scope listed in s. SPS 361.02, but are regulated in Wisconsin by chs. SPS 320 to 325, in accordance with subch. II of ch. 101, Stats.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139: renum. (1) and (2) to be Comm 62.0100 and Comm 62.0115 Register June 2002 No. 558, eff. 7-1-02; CR 04-016: am. Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.0202 Definitions. (1) ADDITIONS.** This is a department definition for this chapter in addition to the definitions in IBC section 202: “High-piled combustible storage” means storage of combustible materials in closely packed piles, or on pal-

lets, in racks or on shelves, where the top of storage is greater than 12 feet in height. When required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet in height.

**(2) SUBSTITUTIONS.** Substitute the following definition for the corresponding definition in IBC section 202: “Approved” means acceptable to the department.

**(3) DELETIONS.** The following terms and corresponding definitions in IBC section 202 are not included as part of this code: approved agency, approved fabricator, base flood, base flood elevation, certificate of compliance, design flood, design flood elevation, designated seismic system, dry floodproofing, existing construction, fabricated item, inspection certificate, label, lowest floor, manufacturer’s designation, mark, special continuous inspection, special flood hazard area, special inspection, special periodic inspection, sprayed fire-resistant materials, start of construction, and structural observation.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139: renum. (1) (b) to be (2) (c) and renum. (1) (c) to (k) to be (1) (b) to (j) Register June 2002 No. 558, eff. 7-1-02; CR 04-016: am. (1) (a), renum. (1) (b) to (j) to be (1) (c) to (j) and Comm 61.04 (4), cr. (1) (b) and (3), r. and cr. (2) (b) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. (1) (intro.) and (3), renum. (1) (c), (d) and (e) to (j) to be Comm 61.04 (5), (6) and (8) to (13) and am. (5) and (8) to (11)

Register February 2008 No. 626, eff. 3-1-08; correction made in (2) (c) under s. 13.92 (4) (b) 7., Stats., Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. (1), (2) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0307 Pyrophoric materials.** This is a department informational note to be used under IBC section 307.4:

**Note:** See ch. SPS 314 for additional requirements for pyrophoric materials.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.0310 Use and occupancy classification.** This is a department informational note to be used under IBC section 310.2:

**Note:** See s. SPS 361.02 Notes for statutory definitions of adult family home and community-based residential facility. See s. SPS 361.04 for definitions of dwelling unit and multifamily dwelling.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renun. to be (2), cr. (1) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. (1), renun. (2) to be Comm 62.0310 Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.0400 Special detailed requirements based on use and occupancy.** These are department rules in addition to the requirements in IBC chapter 4:

(1) FIREWORKS, BLACK POWDER AND EXPLOSIVE MATERIALS. Fireworks, black powder and explosive materials shall be stored and isolated in accordance with ch. SPS 314.

**Note:** Pursuant to s. 167.10 (6) (d), Stats., no wholesaler, dealer or jobber may store fireworks within 50 feet of a dwelling.

(2) RECYCLING SPACE. An owner of a building shall provide a separate room or designated space within or adjacent to the building for the separation, temporary storage and collection of recyclable materials that are likely to be generated by the building occupants, under any of the following conditions:

(a) The construction of a new building.

**Note:** See Appendix B for guidelines for recommended designated areas.

**Note:** The collection and temporary storage of recyclable materials that are flammable or combustible is regulated by ch. SPS 314. Storage of liquids that are flammable or combustible is regulated by ch. ATCP 93. Owners of buildings where these materials are stored should consult those chapters for isolation, removal, and storage standards.

(3) 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.

(4) COMMUNITY-BASED RESIDENTIAL FACILITIES. A newly constructed building or portion thereof that is a community-based residential facility serving 5 to 8 unrelated adults shall comply with chs. SPS 320 to 325 instead of all other requirements of this code.

(5) NO-SMOKING SIGNS. No-smoking signs shall include the international "No Smoking" symbol consisting of a pictorial burning cigarette enclosed in a red circle with a red bar across the cigarette.

(6) LIVE LOADS POSTED. Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed 100 pounds per square foot, such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: am. (4) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. (1), r. (2) (b) and (c) Register February 2008 No. 626, eff. 3-1-08; correction in (2) made under s. 13.92 (4) (b) 1., Stats., Register February 2008 No. 626; CR 09-104: cr. (5) Register December 2010 No. 660, eff. 1-1-11; CR 10-103: renun. (6) from Comm 62.1603 (5) and am. Register August 2011 No. 668, eff. 9-1-11; correction in (1), (4) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.0401 Chapter ATCP 93 compliance.** This is a department informational note to be used under IBC section 401.1:

**Note:** See ch. ATCP 93 for additional requirements relating to motor fuel dispensing facilities and repair garages and to the storage, handling, processing and transporting of flammable, combustible and hazardous liquids.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; correction in (title) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.0406 Motor vehicle-related occupancies — parking garages.** Substitute the following wording for the requirements and exception in IBC section 406.2.8: Heating equipment shall be installed in accordance with the *International Mechanical Code*.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: r. and recr. Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. (2), renun. (1) to be Comm 62.0406 Register February 2008 No. 626, eff. 3-1-08; correction in (title) made under s. 13.92 (4) (b) 2., Stats., Register August 2011 No. 668.

**SPS 362.0412 Aircraft-related occupancies.** Substitute the following wording for exception 1 in IBC section 412.2.4: Heating equipment that is suspended at least 10 feet above the upper surface of wings or engine enclosures of the highest aircraft which may be housed in the hangar; or at least 8 feet above the floor in shops, offices and other sections of the hangar communicating with storage or service areas.

**History:** CR 04-016: cr. Register December 2004 No. 588, eff. 1-1-05.

**SPS 362.0415 Hazardous materials.** (1) Substitute the following wording for the corresponding definition in IBC section 415.2: Immediately dangerous to life and health (IDLH). The concentration of air-borne contaminants which poses a threat of death, immediate or delayed permanent adverse health effects, or effects which could prevent escape from such an environment. This contaminant concentration level is established by the National Institute of Occupational Safety and Health based on both toxicity and flammability. It generally is expressed in parts per million by volume, or milligrams per cubic meter.

(2) This is a department rule in addition to the requirements in IBC section 415: A magazine for detonators in quantities of 100 or less shall have sides, bottoms and doors constructed of not less than number 12-gauge metal and lined with a nonsparking material. Hinges and hasps shall be attached so they cannot be removed from the outside. One steel padlock, which need not be protected by a steel hood, having at least 5 tumblers and a case-hardened shackle of at least 3/8 inch diameter shall be provided for locking purposes.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renun. to (1), cr. (2) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. and recr. (2) Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.0603 Allowable materials.** Substitute the following wording for application 18 in IBC section 603.1: Sprayed fire-resistant materials and intumescent and mastic fire-resistant coating, determined on the basis of fire-resistance tests in accordance with Section 703.2.

**History:** CR 04-016: cr. Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. (1), renun. (2) to be Comm 62.0603 and am. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.0702 Fire separation distance.** Substitute the following definition for the corresponding definition listed in IBC section 702: "Fire separation distance" means the distance measured at right angles from the face of the building wall to one of the following:

(1) The closest interior lot line.

(2) To a permanent no-build easement line.

(3) To the centerline of a street, an alley or a public way.

(4) To an imaginary line between two buildings on the same property.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0705 Connections between buildings.** This is a department exception to the requirements in IBC section

705.1: This section does not apply to connections between buildings, that are in compliance with IBC section 3104.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 10-103: renum. from Comm 62.0704 and am. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0706 Fire wall identification.** These are department rules in addition to the requirements in IBC section 706:

(1) **PURPOSE.** Pursuant to s. 101.135, Stats., the purpose of this section is to establish uniform standards for the identification of fire walls on the exterior of buildings.

(2) **MUNICIPAL ORDINANCE.** A city, village or town may by ordinance require owners to identify the location of a fire wall at the exterior wall of a building with a sign.

(3) **SIGN REQUIREMENTS.** (a) *General.* The sign shall consist of 3 circles arranged vertically on the exterior wall, marking the location of the fire wall and centered on the fire wall. The circles shall either be affixed directly to the surface of the building or may be placed on a background material that is affixed to the building.

(b) *Size of circle.* Each circle shall be the same size. The diameter of the circle shall be at least 1 1/2 inches, but no greater than 2 inches.

(c) *Spacing.* The circles shall be spaced an equal distance apart. The distance measured from the top of the uppermost circle to the bottom of the lowermost circle shall be no more than 12 inches.

(d) *Color.* The color of the circle shall be red, amber (orange-yellow) or white (clear) and shall be reflective. The color of the circle shall contrast with the color of the background.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 10-103: renum. from Comm 62.0705 and am. (intro.) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0707 Fire barriers.** Substitute the following wording for IBC section 707.5: Fire barriers shall extend from the top of the foundation; or horizontal assembly constructed in accordance with IBC section 712; or floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above, or to the underside of the horizontal assembly constructed in accordance with IBC section 712 and shall be securely attached thereto. Such fire barriers shall be continuous through concealed spaces, such as the space above a suspended ceiling.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0708 Shaft enclosures.** Substitute the following wording for the 7.2 exception in IBC section 708.2: Is not part of a required exit enclosure.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0716 Ducts and air-transfer openings.**

(1) **PENETRATIONS OF SHAFT ENCLOSURES.** This is a department exception to the requirements in IBC section 716.5.3: Smoke dampers are not required in ducts that are used in the exhaust portion of laboratory ventilating systems which are designed and installed in accordance with NFPA 45.

(2) **SMOKE DAMPERS IN HEALTH CARE FACILITIES.** This is a department exception to the requirements in IBC section 716.5.5: Smoke dampers are not required in Group I-2 duct penetrations of smoke barriers in fully ducted HVAC systems.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.0721 Calculated fire resistance.** (1) **NON-SYMMETRICAL ASSEMBLIES.** Substitute the following wording for the exception in each of IBC sections 721.2.1.4.3, 721.3.2.3 and 721.4.1.4: Exception: For an exterior wall with a fire separation distance greater than 10 feet, the fire shall be assumed to occur on the interior side only.

(2) **EXTERIOR WALLS.** Substitute the following wording for IBC Section 721.6.2.3: For an exterior wall with a fire separation distance greater than 10 feet, the wall is assigned a rating dependant on the interior membrane and the framing as described in IBC Tables 721.6.2(1) and 721.6.2(2). The membrane on the outside of the nonfire-exposed side of exterior walls with a fire separation distance greater than 10 feet may consist of sheathing, sheathing paper and siding as described in IBC Table 721.6.2(3).

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0901 Fire protection systems.** (1) **MODIFICATIONS.** Substitute the following informational note for the requirements in IBC section 901.3:

**Note:** Chapter SPS 314 has requirements relating to shutting down or impairing fire sprinkler systems. Chapter SPS 361 has requirements relating to availability of sprinkler documents and to submittal and approval of plans prior to altering, modifying, or removing sprinkler systems.

(2) **FIRE HOSE THREADS.** These are department informational notes to be used under IBC section 901.4:

**Note:** Section 213.15, Stats., regulates fire hose threads and fittings and reads as follows: "All fire hose fittings, apparatus fittings, 1.5 and 2.5 inches in diameter purchased or procured by a fire department or fire company shall be of the national standard hose thread as adopted by the national fire protection association. No fire department shall utilize hose and equipment not in conformance with the requirement that all threads shall be national standard hose thread as adopted by the national fire protection association. Any person offering for sale nonstandard hose couplings, fittings or apparatus fittings may be fined not less than \$100 nor more than \$500."

**Note:** NFPA 1963 contains the specifications for national standard hose thread.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02.

**SPS 362.0902 Definitions.** Substitute the following definitions and informational note for the corresponding definitions listed in IBC section 902.1:

(1) "Automatic sprinkler system" or "Automatic fire sprinkler system" has the meaning given in s. 145.01 (2), Stats.

**Note:** Section 145.01 (2), Stats., reads as follows: "'Automatic fire sprinkler system,' for fire protection purposes, means an integrated system of underground and overhead piping designed in accordance with fire protection engineering standards. The system includes a suitable water supply, such as a gravity tank, fire pump, reservoir or pressure tank or connection beginning at the supply side of an approved gate valve located at or near the property line where the pipe or piping system provides water used exclusively for fire protection and related appurtenances and to standpipes connected to automatic sprinkler systems. The portion of the sprinkler system above ground is a network of specially sized or hydraulically designed piping installed in a building, structure or area, generally overhead, and to which sprinklers are connected in a systematic pattern. The system includes a controlling valve and a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area."

(2) "Fire area" means the aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or fire-resistance-rated horizontal assemblies of a building.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 10-103: am. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0903 Automatic fire sprinkler systems.** (1) **GROUP A-1.** Substitute the following wording for condition

3 in IBC section 903.2.1.1: None of the stories in which the fire area is located include a level of exit discharge.

(2) GROUP A-2. Substitute the following wording for condition 3 in IBC section 903.2.1.2: None of the stories in which the fire area is located include a level of exit discharge.

(3) GROUP A-3. Substitute the following wording for condition 3 in IBC section 903.2.1.3: None of the stories in which the fire area is located include a level of exit discharge.

(4) GROUPE. Substitute the following wording for the requirements in IBC section 903.2.3:

(a) Except as provided in par. (b), an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 20,000 square feet in area.

2. Throughout every story of educational buildings that is located below a story which includes the lowest level of exit discharge.

(b) An automatic sprinkler system is not required in any fire area, or in any story that is located below a story which includes the lowest level of exit discharge, where every classroom throughout the building has at least one exterior exit door at ground level.

(5) GROUP R. Substitute the following wording for the requirements in IBC section 903.2.8:

(a) Except as provided in pars. (b) to (d), an automatic sprinkler system installed in accordance with IBC section 903.3 shall be provided throughout all buildings with a Group R fire area.

(b) An automatic sprinkler system installed in a multifamily dwelling may conform with sub. (10) provided the multifamily dwelling complies with all of the following:

1. The multifamily dwelling does not contain more than 4 dwelling units.

2. The multifamily dwelling is not more than 2 stories above grade plane in height.

3. The multifamily dwelling is not served by either a community water system or a municipal water system as defined under s. NR 811.02.

**Note:** Under s. NR 811.02 "community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Any water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units or 10 or more condominium units shall be considered a community water system unless information is provided by the owners indicating that 25 year-round residents will not be served."

**Note:** Under s. NR 811.02 "municipal water system means a community water system owned by a city, village, county, town, town sanitary district, utility district, public inland lake and rehabilitation district, municipal water district or a federal, state, county or municipal owned institution for congregate care or correction, or a privately owned water utility serving the foregoing."

(c) An automatic sprinkler system installed in a townhouse may conform with sub. (10) provided the townhouse complies with all of the following:

1. The townhouse does not exceed more than 3 stories above grade plane in height.

2. Each dwelling unit within the townhouse is separated from other dwelling units by at least one hour fire-resistive-rated separation walls constructed in accordance with the requirements of IBC section 706 and do not contain any openings or have any plumbing equipment or mechanical equipment within. The separation wall does not have to comply with the structural stability requirements of IBC section 706.2 and the horizontal continuity requirements of IBC section 706.5.

(d) An automatic sprinkler system installed in a building with a Group R-3 fire area may conform with sub. (10) provided the Group R-3 use complies with all of the following:

1. The Group R-3 use is limited to a single-room bunkhouse type sleeping unit.

2. The fire area does not exceed 1,500 square feet.

3. The fire area is not more than one story above grade plane in height.

4. The fire area has an occupant load of 10 or less.

5. The Group R-3 use is not served by either a community water system or a municipal water system as defined under s. NR 811.02.

**Note:** Under s. NR 811.02, "community water system" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Any water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units or 10 or more condominium units shall be considered a community water system unless information is provided by the owners indicating that 25 year-round residents will not be served."

**Note:** Under s. NR 811.02, "municipal water system" means a community water system owned by a city, village, county, town, town sanitary district, utility district, public inland lake and rehabilitation district, municipal water district or a federal, state, county or municipal owned institution for congregate care or correction, or a privately owned water utility serving the foregoing."

(6) STUDENT HOUSING. These are department rules in addition to the requirements in IBC section 903.2.8:

(a) *Definition.* In this paragraph, "private student residential building" has the meaning as given under s. 101.14 (4) (b) 1m., Stats.

**Note:** Section 101.14 (4) (b) 1m., Stats., reads: "In this paragraph, "private student residential building" means a privately owned and operated residential building that has a capacity of at least 100 occupants, that is occupied by persons at least 80 percent of whom are enrolled in an institution of higher education, and that has attributes usually associated with a student residence hall or dormitory such as a food service plan or occupancy by a resident advisor."

(b) *Existing housing.* 1. An automatic fire sprinkler system shall be provided by January 1, 2014 throughout every residence hall and dormitory greater than 60 feet in height, the initial construction of which was begun before January 7, 2006, that is owned or operated by an institution of higher education, other than a residence hall or dormitory owned or operated by the board of regents of the University of Wisconsin System.

2. An automatic fire sprinkler system shall be provided by January 1, 2014 throughout every private student residential building greater than 60 feet in height, the initial construction of which was begun before January 7, 2006.

3. An automatic fire sprinkler system shall be provided by January 1, 2014 throughout every student residential facility operated by a fraternity, sorority or other organization authorized or sponsored by an institution of higher education, the initial construction of which was begun before January 7, 2006.

(c) *New housing.* 1. An automatic fire sprinkler system shall be provided throughout every residence hall and dormitory, the initial construction which is begun on or after April 26, 2000, that is owned or operated by the board of regents of the University of Wisconsin System.

2. An automatic fire sprinkler system shall be provided throughout every residence hall and dormitory, the initial construction which is begun on or after January 7, 2006, that is owned or operated by an institution of higher education, other than a residence hall or dormitory owned or operated by the board of regents of the University of Wisconsin System.

3. An automatic fire sprinkler system shall be provided throughout every student residential facility, operated by a fraternity, sorority or an organization authorized or sponsored by an institution of higher education, the initial construction of which is begun on or after January 7, 2006.

4. An automatic fire sprinkler system shall be provided throughout every private student residential building, the initial construction of which is begun on or after January 7, 2006.

(7) BUILDINGS OVER 60 FEET IN HEIGHT. This is a department rule in addition to the requirements in IBC section 903.2.11.3:

(a) Except as provided in par. (b), pursuant to s. 101.14 (4) (b) 1r., Stats., automatic fire sprinkler systems shall be installed throughout buildings and structures that are more than 60 feet in height.

(b) An automatic fire sprinkler system is not required to be provided in any of the following buildings or structures or portions of buildings or structures that are more than 60 feet in height:

1. Airport control towers.

2. Open parking structures complying with IBC section 406.3.

3. Telecommunications equipment spaces used exclusively for telecommunications equipment, associated electrical power distribution equipment and standby engines, provided that those spaces or areas are equipped throughout with an automatic fire detection system in accordance with IBC section 907.2 and are separated from the remainder of the building with fire barriers consisting of 1-hour fire-resistance-rated walls and 2-hour fire-resistance-rated floor/ceiling assemblies.

4. Special industrial occupancies complying with the criteria outlined in IBC section 503.1.1.

5. Occupancies of Group F-2 when omission of the automatic fire sprinkler system is approved in accordance with s. SPS 361.22.

**(8) EXEMPT LOCATIONS.** Substitute the following wording for exempt location 2 in IBC section 903.3.1.1.1: Any room or space where sprinklers are considered undesirable because of the nature of the contents, where approved by the department.

**(9) BALCONIES.** Substitute the following wording for the requirements in IBC section 903.3.1.2.1: Sprinkler protection complying with NFPA 13 shall be provided for exterior balconies, decks and ground-floor patios of dwelling units where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch to 6 inches below the structural members, and a maximum distance of 14 inches below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

**(10) NFPA 13D SPRINKLER SYSTEMS.** (a) Substitute the following wording for the requirements in IBC section 903.3.1.3: Where allowed, automatic sprinkler systems in townhouses and multi-family dwellings shall be installed throughout in accordance with NFPA 13D, except as provided in par. (b).

(b) 1. The requirements in NFPA 13D section 6.3 (4) are not included as part of this code.

2. Fire department connections are prohibited in multi-purpose piping systems.

**Note:** Multi-purpose piping systems must conform with the applicable provisions of the Plumbing Code, chs. SPS 381 to 387.

**(11) TESTING AND MAINTENANCE.** Substitute the following informational note for the requirements in IBC section 903.5:

**Note:** See ch. SPS 314 for requirements for inspection, testing, and maintenance of fire sprinkler systems.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. (2) to (5) to be (6), (7), (11) and (12), cr. (2) to (5), (8) to (10) and (13) Register December 2004 No. 588, eff. 1-1-05; CR 04-043: cr. (1m) Register December 2004 No. 588, eff. 1-1-05; emerg. renum. (6) to be (6) (a) and am. (6) (a) (intro.), cr. (6) (intro.) and (b), eff. 3-4-06; CR 06-040: renum. (6) to be (6) (a) and am. (6) (a) (intro.), cr. (6) (intro.) and (b), r. (7) Register September 2006 No. 609, eff. 10-1-06; CR 06-120: r. (1m) and (12), r. and recr. (5) and (6), cr. (6m), (11), (13) and (14), am. (8) to (10), renum. (11) and (13) to be (12) and (15) Register February 2008 No. 626, eff. 3-1-08; corrections in (6) (a) and (d) and (11) (a) made under s. 13.92 (4) (b) 7., Stats., Register February 2008 No. 626; CR 10-103: r. (1), (6) (b), Table 62.0903, (6m) (b) 1. and 2., (8) to (10) and (14) (b), r. and recr. (5) (c), cr. (5) (d), (10) (b), renum. (2) to (5) to be (1) to (4), (6) (intro.), (a), (c) and (d) to be (5) (intro.), (a), (b) and (c), (6m) (intro.) (a), (b) 3. to 5. and (c) to be (6) (intro.) (a), (b) 1. to 3. and (c), (11) to (13) to be (7) to (9), (14) to be (10), (15) to be (11) and am. (4) (intro.), (5) (intro.), (b) (intro.), (c) 3. (intro.) and 3. b., (6) (intro.), (7) (intro.), (b) 4. and (9), Register August 2011 No. 668, eff. 9-1-11, r. and recr. (5) (c) Register August 2011 No. 668, eff. 7-1-14; correction in (7) (b) 5. made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.0904 Alternative automatic fire-extinguishing systems.** (1) Substitute the following wording and informational note for the requirements in IBC section 904.1: Automatic fire-extinguishing systems, other than automatic sprinkler systems, shall be designed and installed in accordance with the provisions of IBC section 904 and the applicable referenced standards.

**Note:** See ch. SPS 314 for requirements for inspection, testing, and maintenance of alternate automatic fire-extinguishing systems.

(2) These are department rules in addition to the requirements in IBC section 904:

(a) *Water mist fire protection systems.* Where a water mist fire protection system is installed, it shall comply with NFPA 750.

(b) *Manual-wet sprinkler systems.* 1. Where allowed. A manual-wet sprinkler system may not be installed in a building unless all of the following conditions are met:

a. There is no municipal water system available to serve the property.

b. There is no provision under this code that requires the building or a portion of the building to have an automatic fire sprinkler system.

c. The municipality where the building is to be located has an adopted ordinance that requires the installation of manual-wet sprinkler systems and requires these systems to meet the provisions of this subsection.

2. General requirements. a. A building protected with a manual-wet sprinkler system shall be considered unsprinklered under all other code provisions.

b. Each manual-wet sprinkler system shall be provided with a fire department connection. The fire department connection shall be installed in an accessible location acceptable to the fire chief.

c. All above ground piping of the manual-wet sprinkler system shall be labeled as a "manual-wet sprinkler system." Labels shall be placed at the fire department connection; at all valves and hose outlets; and on the piping at intervals of not more than 25 feet and at each side where the piping passes through a wall, floor or roof.

d. The manual-wet sprinkler system design and installation shall comply with the automatic fire sprinkler system requirements of NFPA 13 or NFPA 13R, as applicable, except that the system comprised of the pilot line, fire department connection and fire department apparatus is considered as the approved water supply for the system.

e. A manual-wet sprinkler system shall be supplied with water through the fire department connection using fire department apparatus.

f. The plumbing well, water service and pressure tank shall be of a size and capacity to supply the hydraulically most remote sprinkler with the required waterflow and pressure for a minimum of 10 minutes.

g. A pilot line shall be connected from the manual-wet sprinkler system to the plumbing water supply system at the well pressure tank. The pilot line shall be of a size that is adequate to supply the hydraulically most remote sprinkler in the system.

h. The connection of a manual-wet sprinkler system to a plumbing water supply system shall be protected against backflow conditions in accordance with ch. SPS 382.

i. The actuation of any sprinkler in the system shall operate the waterflow indicating device, which shall initiate a fire alarm within the building.

j. Upon actuation of the building fire alarm, a fire alarm signal shall be sent automatically to the fire department providing fire protection to the building.

3. Installer qualifications. The installation or alteration of a manual-wet sprinkler system shall be performed by a licensed individual as specified for the installation of an automatic fire sprinkler system under subch. V of ch. SPS 305.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139: am. (2) (b) 8. Register June 2002 No. 558, eff. 7-1-02; CR 04-016: renum. (intro.), (1) and (2) to be (2) (intro.), (a) and (b), and r. and recr. (2) (b) 2. c., cr. (1) Register December 2004 No. 588, eff. 1-1-05; correction in (2) (b) 2. h., 3. made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

### SPS 362.0907 Fire alarm and detection systems.

**(1) GENERAL.** Substitute the following wording and informational note for the requirements in IBC section 907.1: IBC section 907 covers the application and installation of fire alarm systems and their components.

**Note:** See ch. SPS 314 for requirements for performance and maintenance of fire alarm systems and their components.

**(2) SMOKE ALARMS.** These are department informational notes to be used under IBC section 907.2.11:

**Note:** Section 101.145 (2) and (3) (a), Stats., addresses installation of smoke detectors and reads as follows: Section 101.145 (2) “A smoke detector required under this section shall be approved by underwriters laboratory.”

(3) (a) “The owner of a residential building shall install any smoke detector required under this section according to the directions and specifications of the manufacturer of the smoke detector.”

**Note:** Section 101.145 (4), Stats., addresses retroactivity requirements for buildings constructed prior to the effective date of this section. This statute section applies beyond the application of this code, as established in s. SPS 361.03 (2), and states “The owner of a residential building the initial construction of which is commenced before, on or after May 23, 1978, shall install and maintain a functional smoke detector in the basement and at the head of any stairway on each floor level of the building and shall install a functional smoke detector either in each sleeping room of each unit or elsewhere in the unit within 6 feet of each sleeping area and not in a kitchen.”

**Note:** Under section 101.145 (1) (b), Stats., “sleeping area” means the area of the [dwelling] unit in which the bedrooms or sleeping rooms are located. Bedrooms or sleeping rooms separated by another use area such as a kitchen or living room are separate sleeping areas but bedrooms or sleeping rooms separated by a bathroom are not separate sleeping areas.

**(3) PROTECTIVE COVERS.** Substitute the following wording for the requirements in IBC section 907.4.2.5: The building official is authorized to require the installation of listed manual fire alarm box protective covers to prevent malicious false alarms or provide the manual fire alarm box with protection from physical damage. The protective cover shall be transparent or red in color with a transparent face to permit visibility of the manual fire alarm box. Each cover shall include proper operating instructions. Protective covers shall not project more than that permitted by IBC section 1003.3.3.

**(4) EMPLOYEE WORK AREAS.** Substitute the following wording for the requirements in IBC section 907.5.2.3.2: Where employee work areas have audible alarm coverage, the alarm system shall be designed so that visible notification appliances can be integrated into the system.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. (1) to (3) to be (2) to (4), cr. (1) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: renum. (3) and (4) to be (5) and (6), cr. (3), (4) and (7) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. (2) to (4), renum. (5) to (7) to be (2) to (4) and am. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0909 Smoke control systems. (1) INSPECTION AND TEST REQUIREMENTS.** Substitute the following wording for the requirements in IBC section 909.3: In addition to the ordinary inspection and test requirements that buildings, structures and parts thereof are required to undergo, smoke control systems subject to the provisions of IBC section 909 shall undergo inspections and tests sufficient to verify the proper commissioning of the smoke control design in its final installed condition. The design submission accompanying the construction documents shall clearly detail procedures and methods to be used and the items subject to such inspections and tests. Such commissioning shall be in accordance with generally accepted engineering practice and, where possible, based on published standards for the particular testing involved.

**(2) INSPECTIONS FOR SMOKE CONTROL.** Substitute the following wording for the requirements in IBC section 909.18.8: Smoke control systems shall be tested by a qualified agency.

**(3) SCOPE OF TESTING.** Substitute the following wording for the requirements in IBC section 909.18.8.1: Inspections shall be conducted in accordance with the following:

(a) During erection of ductwork and prior to concealment for the purposes of leakage testing and recording of device location.

(b) Prior to occupancy and after sufficient completion for the purposes of pressure-difference testing, flow measurements, and detection and control verification.

**(4) QUALIFICATIONS.** Substitute the following wording for the requirements in IBC section 909.18.8.2: Inspection agencies for smoke control shall have expertise in fire protection engineering, mechanical engineering and certification as air balancers.

**(5) REPORTS.** Substitute the following wording for the requirements in IBC section 909.18.8.3: A complete report of testing shall be prepared. The report shall include identification of all devices by manufacturer, nameplate data, design values, measured values and identification tag or mark. The report shall be reviewed by the responsible registered design professional and, when satisfied that the design intent has been achieved, the responsible registered design professional shall seal, sign and date the report.

**(6) REPORT FILING.** Substitute the following wording for the requirements in IBC section 909.18.8.3.1: A copy of the final report shall be maintained and made available to the building official upon request.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02, CR 06-120: renum. (5) and (6) to be (6) and (7), cr. (5) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. (7) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.0910 Smoke and heat vents, and draft curtains. (1) EXCEPTION.** Substitute the following wording for exception 1. in IBC section 910.1: Buildings protected by an approved automatic sprinkler system.

**(2) GROUPS F-1 AND S-1.** Substitute the following wording for the requirements, but not the exception, in IBC section 910.2.1: Buildings and portions thereof used as Group F-1 or S-1 occupancies having more than 50,000 square feet in area that is undivided by full-height walls having smoke resisting characteristics which are similar to those under IBC section 910.3.5.1.

**History:** CR 04-016: cr. Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. (title), (1) and (2), r. (3) to (6) Register February 2008 No. 626, eff. 3-1-08; correction made in (2) under s. 13.92 (4) (b) 7., Stats., Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1004 Egress for outdoor areas.** Substitute the following wording for the requirements, but not the exceptions, in IBC section 1004.8: Yards, patios, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be based on the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant load of the building plus the outdoor areas.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1008 Doors, gates and turnstiles. (1) CLEAR DOOR OPENINGS FOR NONACCESSIBLE STALLS.** This is a department exception to the requirements in IBC section 1008.1.1: The clear door opening for a nonaccessible toilet stall, shower stall, or other similar compartment, may be less than 32-inches wide.

**(2) DOOR ARRANGEMENT.** This is a department exception to the requirements in IBC section 1008.1.8: Where maneuvering space is provided between the doors in accordance with IBC section 1101.2 such that use by an individual in a wheelchair will not block the operation of the doors.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: am. (2) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1009 Stairway width.** This is a department rule in addition to the requirements in IBC section 1009.1: Where installing an inclined platform lift or stairway chairlift, the clear-passage width shall be provided with the lift in the unfolded, usable position.

**History:** CR 14-020: cr. Register August 2014 No. 704, eff. 9-1-14.

**SPS 362.1014 Exit access.** This is a department exception to the requirements in IBC section 1014.3: The length of a common path of egress travel requirements shall not be limited within townhouse dwelling units provided the townhouse complies with all of the following:

(1) The townhouse does not exceed more than 3 stories above grade plane in height.

(2) Each dwelling unit within the townhouse is separated from other dwelling units by at least 2-hour fire-resistive-rated separation walls constructed in accordance with the requirements of IBC section 705 and do not contain any openings and plumbing equipment or mechanical equipment. The separation wall does not have to comply with the structural stability requirements of IBC section 705.2 and the horizontal continuity requirements of IBC section 705.5.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; correction made to (2) under s. 13.92 (4) (b) 7. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1015 Refrigerated spaces.** Substitute the following wording for the exception in IBC section 1015.5: Where using refrigerants in quantities limited to the amounts based on the volume set forth in ch. SPS 345.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.1018 Corridor continuity.** This is a department exception to the requirements in IBC section 1018.6: Other spaces or rooms constructed as required for corridors, and that are adjacent to a fire-resistance-rated corridor, shall not be construed as intervening rooms; and may be open to the corridor when all of the following are satisfied:

(1) The spaces are not occupied for hazardous uses.

(2) The spaces are not occupied for the incidental uses listed in IBC Table 508.2.

(3) The spaces are arranged so as to not obstruct access to the required exits.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: renum. from Comm 62.1017 and am. (intro.) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1021 Exits from stories.** (1) Substitute the following wording for the requirements in IBC section 1021.1: All rooms and spaces within each story shall be provided with and have access to the minimum number of approved independent exits required by Table 1021.1 based on the occupant load of the story. For the purposes of this chapter, occupied roof shall be provided with exits as required for stories. The required number of exits from any story, basement or individual space shall be maintained until arrival at grade or the public way.

(2) This is a department exception to the requirements in IBC section 1021.1: Buildings of Group I-3 occupancy that are used as guard towers, provided the towers are no higher than 2 stories above grade, accommodate no more than 10 occupants, and have a travel distance of no more than 75 feet.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; correction made to (2) (a), (b) and (c) under s. 13.92 (4) (b) 7., Stats., Register February 2008 No. 626, eff. 3-1-08; CR 10-103: renum. from Comm 62.1019 and am. (title), (1), cr. (2) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1022 Enclosures required.** Substitute the following wording for exceptions 6. and 7. in IBC section 1022.1:

(1) Stairways as required by IBC sections 410.5.3 and 1015.6.1 are not required to be enclosed.

(2) Stairways from balconies, galleries or press boxes as provided for in IBC section 1028.5.1 are not required to be enclosed.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1101 Design.** These are department rules in addition to the requirements in IBC section 1101.2 and ICC/ANSI A117.1 sections 1003 and 1004:

(1) TYPE A AND TYPE B UNITS. (a) *Circuit breakers.* Circuit breakers, when provided for use by tenants in occupancies with dwelling and sleeping units, shall comply with ICC/ANSI A117.1 section 309.2 and 309.3.

(b) *Doors and doorways.* A renter of a dwelling unit may request the landlord to install lever door handles on any doors inside the dwelling unit or install single-lever controls on any plumbing fixtures used by the renter. These controls shall be provided and installed by the landlord at no additional cost to the renter.

**Note:** These requirements are based language from s. 101.132 (2) (a) 4., Stats.

(2) R-2 OCCUPANCY TOILET AND BATHING ROOMS. (a) When toilet and bathing rooms are provided in dwelling units and sleeping units within an R-2 occupancy the rooms shall conform to ICC/ANSI A117.1 section 1004.11.3.2 and with the requirements specified under pars. (b) and (c).

(b) The minimum clear floor space provided at bathtubs and transfer showers shall be designed to facilitate a person using a wheelchair to reach and operate the bathtub or transfer shower controls without entering the bathtub or transfer shower.

(c) The controls for a roll-in, 60-inch transfer shower may be located on the back wall of the shower.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: am. (2) (a), cr. (2) (c) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1103 Scoping requirements — limited access spaces.** Substitute the following wording for the requirements in IBC section 1103.2.8:

(1) Storage spaces that do not include permanent workstations, are infrequently accessed by employees, and are not open to the general public are not required to be accessible.

(2) Nonoccupiable spaces accessed only by ladders, catwalks, crawl spaces, freight elevators, very narrow passageways, or tunnels are not required to be accessible.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08, CR 10-103: r. (1), renum. (2) to be Comm 62.1103, Register August 2011 No. 668, eff. 9-1-11; correction under s. 13.92 (4) (b) 1. and 2., Stats., Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1104 Accessible route.** (1) GOVERNMENT-OWNED OR -OPERATED FACILITIES. This is a department limitation to the exception in IBC section 1104.4, Exception 1.: Government-owned or -operated facilities that are outside the scope of sub. (2) and IBC section 1104.3.2.

(2) TWO STORY BUILDINGS OR FACILITIES. Substitute the following wording for exception 4. under IBC section 1104.4: Where a two story building or facility, including a government-owned or -operated building or facility, has one story with an occupant load of five or fewer persons that does not contain public use space, that story shall not be required to be connected to the story above or below.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1107 Dwelling units and sleeping units.** (1) GROUP I. (a) *Group I-1.* Substitute the following wording for the requirements, but not the exception, in IBC section 1107.5.1.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(b) *Group I-2 nursing homes.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.5.2.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every

dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(c) *Group I-2 hospitals.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.5.3.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(2) **GROUP R.** (a) *Group R-1.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.1.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(b) *Group R-2.* 1. 'Apartment houses, monasteries and convents.' Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.2.1.2: Where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

2. 'Boarding houses, dormitories, fraternity houses and sorority houses.' Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.2.2.2: Where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(c) *Group R-3.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.3: In Group R-3 occupancies where there are three or more dwelling units or sleeping units intended to be occupied as a residence in a single structure, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(d) *Group R-4.* Substitute the following wording for the requirement, but not the exception, in IBC section 1107.6.4.2: In structures with three or more dwelling units or sleeping units intended to be occupied as a residence, every dwelling unit and sleeping unit intended to be occupied as a residence shall be a Type B unit.

(3) **SITE IMPRACTICALITY.** (a) *Petition for variance.* This is a department rule in addition to the requirements in IBC section 1107.7.4: In accordance with s. 101.132 (2) (b) 4. and (c) 2., Stats., the owner may use the petition for variance procedure specified in s. SPS 361.22 to request a reduction in the number of Type A or Type B dwelling units due to site impracticality.

**Note:** The Department may grant a variance in accordance with ch. SPS 303 which requires the submittal of a petition for variance form (SBD-9890) and a fee, and that an equivalency is established in the petition for variance that meets the intent of the rule being petitioned. Chapter SPS 303 also requires the Department to process regular petitions within 30 business days and priority petitions within 10 business days. The SBD-9890 form is available at the Department's Web site at [www.dps.wi.gov](http://www.dps.wi.gov) through links to Division of Industry Services forms.

(b) *Condition.* Substitute the following wording for condition 1 under IBC section 1107.7.4: Not less than 50% of the units required by IBC section 1107.7.1 on the site are Type A or Type B units.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: cr. (2) (c), am. (title), (1) (a) to (c), (2) (a), (3) (a), (3) (b) (title), renum. (2) (c) to be (2) (d) Register August 2011 No. 668, eff. 9-1-11; correction in (3) (a) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.1109 Lifts.** (1) Substitute the following wording for the requirements in ICC/ANSI A117.1 section 410.2.1 as referenced in IBC section 1102.1 and as applied to lifts by IBC section 1109.7:

(a) Doors and gates shall be low energy power operated doors or gates complying with ICC/ANSI A117.1 section 404.3, except as provided in par. (b). Doors shall remain open for 20 seconds minimum. On lifts with one door or with doors on opposite ends, the end door clear opening width shall be 32 inches minimum. On lifts with one door on a narrow end and one door on a long side,

the end door clear opening width shall be 36 inches minimum. Side door clear opening width shall be 42 inches minimum. Where a door is provided on a long side and on a narrow end of a lift, the side door shall be located with either the strike side or the hinge side in the corner furthest from the door on the narrow end.

(b) 1. A door or gate providing access to a narrow end of a platform that serves only one landing shall be permitted to be of the manual opening, self-closing type, where clearance at the door or gate complies with ICC/ANSI A117.1 sections 404.2.3.1, 404.2.3.4, and 404.2.5, and the floor surface is not steeper than 1:48.

2. Lifts serving 2 landings maximum and having doors or gates on adjacent sides shall be permitted to have self-closing manual doors or gates provided that the side door or gate is located with the strike side furthest from the end door; the clearance at the door or gate complies with ICC/ANSI A117.1 sections 404.2.3.1, 404.2.3.4, and 404.2.5; and the floor surface is not steeper than 1:48.

(2) Substitute the following wording for the requirements in ICC/ANSI A117.1 section 410.5 as referenced in IBC section 1102.1 and as applied to lifts by IBC section 1109.7: Platform lifts with doors on adjacent sides shall provide a clear floor width of 42 inches minimum and clear floor depth of 60 inches minimum.

(3) These are department rules in addition to the requirements in ICC/ANSI A117.1 section 410 as referenced in IBC section 1102.1 and as applied to lifts by IBC section 1109.7:

(a) Controls at platform-lift landings shall comply with the requirements in ICC/ANSI A117.1 sections 407.2.1 and 407.2.1.1 to 407.2.1.4.

(b) Floor designations shall comply with the requirements in ICC/ANSI A117.1 section 407.2.3.1.

(c) Controls on the platform shall comply with the requirements in ICC/ANSI A117.1 sections 407.4.6.2 and 407.4.7.1.1 to 407.4.7.1.3.

**History:** CR 14-020: cr. Register August 2014 No. 704, eff. 9-1-14.

**SPS 362.1110 Signage.** (1) **SIGNS.** (a) *General.* Substitute the following wording for the requirements for location 1 in IBC section 1110.1: Except as specified par. (b), accessible parking spaces required in IBC section 1106 for the general public shall be identified with a sign complying with the accessible parking sign requirements specified in s. Trans 200.07.

(b) *Exceptions.* 1. 'Small parking facilities.' Accessible parking spaces required by IBC section 1106.1 are not required to be signed when the total number of parking spaces provided is four or less.

2. 'Employee and resident parking.' Accessible parking facilities identified for use only by employees of any building or facility or by tenants in Group R-2 occupancies may be identified with signs other than the s. Trans 200.07 signs.

(2) **DIRECTIONAL SIGNAGE.** (a) Substitute the following wording for the introductory paragraph of IBC section 1110.2: Signage indicating directional information or information about functional spaces or signage indicating special accessibility provisions shall comply with ICC A117.1 and be provided at the following locations:

(b) This is a department informational note to be used under IBC section 1110.3.

**Note:** Refer to s. SPS 362.0400 (5) for requirements for no-smoking signs.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: am. (1) (title), (2) (title), (a) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1200 Carbon monoxide alarms.** These are department rules in addition to the requirements in IBC chapter 12:

(1) **DEFINITIONS.** In this section:

(a) "Dwelling unit" has the meaning as given in s. 101.61 (1), Stats.



**Note:** Section 101.61 (1), Stats., reads: "Dwelling unit" means a structure or that part of a structure which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

(b) "Fuel-burning appliance" means a device that is installed in a building and burns fossil-fuel or carbon based fuel where carbon monoxide is a combustion by-product, including stoves, ovens, grills, clothes dryers, furnaces, boilers, water heaters, heaters, fireplaces and stoves.

(c) "Residential building" has the meaning as given in s. 101.149 (1) (b), Stats.

**Note:** Section 101.149 (1) (b), Stats., reads: "Residential building" means a tourist rooming house, a bed and breakfast establishment, or any public building that is used for sleeping or lodging purposes. "Residential building" does not include a hospital or nursing home.

(d) "Sealed combustion appliance" means a listed appliance that acquires all air for combustion through a dedicated sealed passage from the outside to a sealed combustion chamber and all combustion products are vented to the outside through a separate dedicated sealed vent.

(e) "Sleeping area" has the meaning as given in s. 101.145 (1) (b), Stats.

**Note:** Section 101.145 (1) (b), Stats., reads: "Sleeping area" means the area of the unit in which the bedrooms or sleeping rooms are located. Bedrooms or sleeping rooms separated by another use area such as a kitchen or living room are separate sleeping areas but bedrooms or sleeping rooms separated by a bathroom are not separate sleeping areas.

**(2) INSTALLATION.** (a) 1. Listed and labeled carbon monoxide alarms or detectors shall be installed at locations specified in s. 101.149 (2), Stats., and maintained in accordance with s. 101.149 (3), Stats., in buildings, including buildings existing on October 1, 2008, which are residential buildings or include residential buildings, and contain fuel-burning appliances, except as provided in subd. 5.

**Note:** Section 101.149 (2) and (3), Stats., reads:

**(2) INSTALLATION REQUIREMENTS.** (a) Except as provided in par. (b), the owner of a residential building shall install a carbon monoxide detector in all of the following places not later than the date specified under par. (c):

1. In the basement of the building if the basement has a fuel-burning appliance.
2. Within 15 feet of each sleeping area of a unit that has a fuel-burning appliance.
3. Within 15 feet of each sleeping area of a unit that is immediately adjacent to a unit that has a fuel-burning appliance.
4. In each room that has a fuel-burning appliance and that is not used as a sleeping area. A carbon monoxide detector shall be installed under this subdivision not more than 75 feet from the fuel-burning appliance.
5. In each hallway leading from a unit that has a fuel-burning appliance, in a location that is within 75 feet from the unit, except that, if there is no electrical outlet within this distance, the owner shall place the carbon monoxide detector at the closest available electrical outlet in the hallway.

(b) If a unit is not part of a multiunit building, the owner of the residential building need not install more than one carbon monoxide detector in the unit.

(c) 1. Except as provided under subd. 2., the owner of a residential building shall comply with the requirements of this subsection before the building is occupied.

2. The owner of a residential building shall comply with the requirements of this subsection not later than April 1, 2010, if construction of the building was initiated before October 1, 2008, or if the department approved the plans for the construction of the building under s. 101.12, Stats., before October 1, 2008.

(d) Any carbon monoxide detector that bears an Underwriters Laboratories, Inc., listing mark or similar mark from an independent product safety certification organization satisfies the requirements of this subsection.

(e) The owner shall install every carbon monoxide detector required by this subsection according to the directions and specifications of the manufacturer of the carbon monoxide detector.

**(3) MAINTENANCE REQUIREMENTS.** (a) The owner of a residential building shall reasonably maintain every carbon monoxide detector in the residential building in the manner specified in the instructions for the carbon monoxide detector.

(b) An occupant of a unit in a residential building may give the owner of the residential building written notice that a carbon monoxide detector in the residential building is not functional or has been removed by a person other than the occupant. The owner of the residential building shall repair or replace the nonfunctional or missing carbon monoxide detector within 5 days after receipt of the notice.

(c) The owner of a residential building is not liable for damages resulting from any of the following:

1. A false alarm from a carbon monoxide detector if the carbon monoxide detector was reasonably maintained by the owner of the residential building.
2. The failure of a carbon monoxide detector to operate properly if that failure was the result of tampering with, or removal or destruction of, the carbon monoxide detector by a person other than the owner or the result of a faulty alarm that was reasonably maintained by the owner as required under par. (a).

2. The installation of carbon monoxide alarms or detectors in accordance with s. 101.149 (2) and (3), Stats., shall be throughout

the entire building where a portion of the building includes a residential building.

3. The installation of carbon monoxide alarms or detectors in adjacent units required under s. 101.149 (2) (a) 3., Stats., shall apply to those units located on the same floor level.

4. The 75-foot installation limit specified under s. 101.149 (2) (a) 5., Stats., shall be measured from the door of the unit along the hallway leading from the unit.

5. The installation of carbon monoxide alarms or detectors is not required in buildings if construction of the building was initiated before October 1, 2008, or if the department approved the plans for the construction of the building under s. SPS 361.30, provided the building does not have an attached enclosed garage and either of the following circumstances applies:

a. All of the fuel-burning appliances in the building are of a sealed-combustion type that are covered by the manufacturers' warranties against defects.

b. All of the fuel-burning appliances in the building are of sealed-combustion type that are inspected in accordance with sub. (3) or rules promulgated by the department of health services under s. 254.74 (1) (am), Stats.

6. a. For the purposes of s. 101.149 (2) (a) 4., Stats., "room" means an enclosed area affording space for any other human activity besides just servicing mechanical equipment, including fuel-burning appliances.

b. For the purposes of s. 101.149 (2) (a) 4., Stats., where a fuel-burning appliance is located within a closet or other enclosure affording space only for the appliance and any other mechanical equipment, a carbon monoxide alarm or detector shall be installed either within or outside of the enclosure. Installation may be within the enclosure only if specifically permitted by the manufacturer of the alarm or detector. Installation outside of the enclosure shall be within 75 feet of the appliance in a space adjacent to the enclosure and on the same floor as the appliance.

(b) 1. Carbon monoxide alarms shall conform to UL 2034.

2. Carbon monoxide alarms shall be listed and labeled identifying conformance to UL 2034.

3. Carbon monoxide detectors and sensors as part of a gas detection or emergency signaling system shall conform to UL 2075.

(c) Carbon monoxide alarms to be installed in a building shall be wired to the building's electrical service and include battery secondary power supplies, if either of the following conditions applies:

1. Plans for the construction of the building were submitted for review under s. SPS 361.30 on or after October 1, 2008.

2. Construction of the building was initiated on or after October 1, 2008, if plans were not required to be submitted and approved under s. SPS 361.30.

(d) Carbon monoxide alarms to be installed within a dwelling unit shall be interconnected so that activation of one alarm will cause activation of all alarms within the dwelling unit, if either of the following conditions applies:

1. Plans for the construction of the building were submitted for review under s. SPS 361.30 on or after October 1, 2008.

2. Construction of the building was initiated on or after October 1, 2008, if plans were not required to be submitted and approved under s. SPS 361.30.

**(3) INSPECTION OF SEALED COMBUSTION APPLIANCES.** (a) The owner of a building or their agent shall arrange the inspection of sealed combustion appliances and the vents and chimneys serving the appliances under sub. (2) (a) 5. b.

(b) Pursuant to sub. (2) (a) 5. b., the inspection of the sealed combustion appliances, vents and chimneys shall be for the purpose of determining carbon monoxide emission levels.

(c) Pursuant to sub. (2) (a) 5. b., the inspection of the sealed combustion appliances, vents and chimneys shall be performed at least once a year.

(d) For the propose of sub. (2) (a) 5. b., the inspection of the sealed combustion appliances, vents and chimneys shall be performed by an individual who holds a certification issued under s. SPS 305.71 as an HVAC qualifier.

(e) If upon inspection, the carbon monoxide emissions from a fuel burning appliance, vent or chimney are not within manufacturer's specifications, the appliance may not be operated until repaired or carbon monoxide alarms or detectors are installed in accordance with s. 101.149 (2) and (3), Stats.

(4) ORDERS. Pursuant to s. 101.149 (6) (b), Stats., the department may issue orders for a violation of the provisions of this section.

(5) PENALTIES. Violation of the provisions of this section shall be subject to the penalties provided under s. 101.149 (8), Stats.

**Note:** Section 101.149 (8), Stats., reads:

(8) PENALTIES. (a) If the department of safety and professional services or the department of health services determines after an inspection of a building under this section or s. 254.74 (1g) that the owner of the building has violated sub. (2) or (3), the respective department shall issue an order requiring the person to correct the violation within 5 days or within such shorter period as the respective department determines is necessary to protect public health and safety. If the person does not correct the violation within the time required, he or she shall forfeit \$50 for each day of violation occurring after the date on which the respective department finds that the violation was not corrected.

(b) If a person is charged with more than one violation of sub. (2) or (3) arising out of an inspection of a building owned by that person, those violations shall be counted as a single violation for the purpose of determining the amount of a forfeiture under par. (a).

(c) Whoever violates sub. (4) is subject to the following penalties:

1. For a first offense, the person may be fined not more than \$10,000 or imprisoned for not more than 9 months, or both.

2. For a 2nd or subsequent offense, the person is guilty of a Class I felony.

**History:** EmR0826; emerg. cr. eff. 10-1-08; CR 08-085: cr. Register May 2009 No. 641, eff. 6-1-09; corrections in (3) (a) to (d) and (4) made under s. 13.92 (4) (b) 2. and 7., Stats., Register May 2009 No. 641; CR 09-104: cr. (2) (a) 6. Register December 2010 No. 660, eff. 1-1-11; CR 10-103: am. (2) (a) 1., (3) (d) Register August 2011 No. 668, eff. 9-1-11; correction in (2) (a) 5., (c) 1., 2., (d) 1., 2., (3) (d) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.1204 Interior environment.** Substitute the following wording for the requirements and exception in IBC section 1204.1: Interior spaces intended for human occupancy shall conform to the IMC.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: renum. Comm 62.1203 to be Comm 62.1204 and am. Register February 2008 No. 626, eff. 3-1-2008.

**SPS 362.1206 Court drainage.** Substitute the following wording and informational note for the requirements in IBC section 1206.3.3: The bottom of every court shall be properly graded and drained.

**Note:** See ch. SPS 382 for requirements for storm water piping.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: renum. Comm 62.1205 to be Comm 62.1206 and am. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1210 Toilet rooms.** These are department rules in addition to the requirements in IBC section 1210.5:

(1) PRIVACY AND ACCESS. Every toilet room shall be enclosed and separated from other areas of the building in a manner that will ensure privacy of the users of the toilet rooms. Restriction of access to toilet rooms, such as by use of key locks or other similar devices, is prohibited, except as provided in sub. (2).

(2) EXCEPTIONS. (a) Toilet rooms for a service or filling station that are accessed from the exterior may be key locked.

(b) A self-service filling station that has a key- or card-operated fuel dispensing device which can be used while the station is unattended by an employee is not required to have toilet rooms available during the unattended periods.

(c) Single-occupant toilet rooms may have privacy locks.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: renum. Comm 62.1209 to be Comm 62.1210 and am. (intro.) Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1405 Exterior walls.** (1) This is a department exception in addition to the exceptions in IBC section 1405.3: Where other approved means to avoid condensation in unventi-

lated framed wall, floor, roof and ceiling cavities and box sills are provided.

(2) This is a department rule in addition to the requirements in IBC section 1405.14.1: Polystyrene sheathing may be utilized as the required backing material for vinyl siding provided all of the following characteristics and conditions are met:

(a) The sheathing is extruded, rigid and cellular.

(b) The sheathing is type IV, as specified in ASTM C578.

(c) The sheathing has a thickness of at least one inch.

(d) The sheathing is installed with an on-center stud spacing of 16 inches or less.

(e) The mean roof height of the building is 40 feet or less.

(f) The building wall has a wind exposure category of B or C, as established in IBC section 1609.4; and the building is not sited on the upper half of an isolated hill or escarpment meeting conditions 1, 2, and 3 in IBC section 1609.1.1.1.

**History:** CR 04-016: cr. Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. (2) (c) 3. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1505 Roof covering classification.** The requirements in Footnote a in IBC Table 1505.1 are not included as part of this code.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. to be (1), cr. (2) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. and recr. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.1506 Roof covering materials.** Substitute the following wording for the requirements in IBC section 1506.3: Roof covering materials shall conform to the applicable standards listed in IBC chapter 15.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02.

**SPS 362.1507 Roof slope.** (1) This is a department exception to the requirements in IBC section 1507.12.1: Thermoset single-ply membrane roofs may have a design slope of less than 2 percent, if permitted by the manufacturer's literature or listing criteria.

(2) This is a department exception to the requirements in IBC section 1507.13.1: Thermoplastic single-ply membrane roofs may have a design slope of less than 2 percent, if permitted by the manufacturer's literature or listing criteria.

(3) This is a department exception to the requirements in IBC section 1507.14.1: Sprayed polyurethane foam roofs may have a design slope of less than 2 percent, if permitted by the manufacturer's literature or listing criteria.

(4) This is a department exception to the requirements in IBC section 1507.15.1: Liquid-applied roofs may have a design slope of less than 2 percent, if permitted by the manufacturer's literature or listing criteria.

**History:** CR 04-016: cr. Register December 2004 No. 588, eff. 1-1-05.

**SPS 362.1509 Rooftop photovoltaic systems.** This is a department informational note to be used under IBC section 1509:

**Note:** See ch. SPS 314 for requirements relating to firefighter access pathways on roofs with rooftop photovoltaic systems.

**History:** CR 13-105: cr. Register August 2014 No. 704, eff. 9-1-14.

**SPS 362.1603 Roof snow load.** Substitute the following wording for the requirements in IBC section 1603.1.3: The ground snow load,  $P_g$ , shall be indicated. In areas where the ground snow load,  $P_g$ , exceeds 10 pounds per square foot, the following additional information shall also be provided, regardless of whether snow loads govern the design of the roof:

(1) Flat-roof snow load,  $P_f$

(2) Snow exposure factor,  $C_e$ .

(3) Snow load importance factor,  $I$ .

(4) Thermal factor,  $C_t$ .

(5) Any sloped-roof snow load,  $P_s$ .

**(6) Any unbalanced, drift or sliding snow loads.**

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. (1) and (2) to be (3) and (4), cr. (1) and (2) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: renum. (1) to (4) to be (2) and (4) to (6), cr. (1) and (3) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. (title), (1), (3), (4), (6), renum. (2) to be Comm 62.1603, (5) to be Comm 62.0400 (6) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1604 Alternate approvals.** Substitute the following wording for the requirements in IBC section 1604.7: Materials and methods of construction that are not capable of being designed by approved engineering analysis or that do not

comply with the applicable material design standards listed in IBC chapter 35 shall be submitted for approval in accordance with subch. V of ch. SPS 361.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. to be (1), cr. (2) Register December 2004 No. 588, eff. 1-1-05; CR 10-103: r. (title), (1), renum. (2) to be Comm 62.1604 Register August 2011 No. 668, eff. 9-1-11; correction made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.1607 Live loads. (1) RESIDENTIAL FLOOR LOADS.** Substitute the following wording and live loads for the requirements in line 27 and footnote j of IBC Table 1607.1:

**Table 1607.1**  
**Minimum Uniformly Distributed Live Loads**  
**and Minimum Concentrated Live Loads<sup>g</sup>**  
(Partial Table)

Occupancy or Use	Uniform (psf)	Concentrated (lbs.)
27. Residential		
Uninhabitable attics without storage <sup>i</sup>	5	
Uninhabitable attics with storage <sup>i, j, k</sup>	20	
Habitable attics	40	—
Hotels and Group R-2		
Private rooms and corridors serving them	40	
Public rooms and corridors serving them	100	

j. For attics with storage and constructed with trusses, this live load need only be applied to those portions of the bottom chord where there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high by 2 feet wide or greater, located within the plane of the truss. The rectangle shall fit between the top of the bottom chord and the bottom of any other truss member, provided that each of the following criteria is met:

- i. The attic area is accessible by a pull-down stairway or framed opening in accordance with IBC section 1209.2, and
- ii. The truss shall have a bottom chord pitch less than 2:12.
- iii. Bottom chords of trusses shall be designed for the greater of actual imposed dead load or 10 psf, uniformly distributed over the entire span.

**(2) TRUCK AND BUS GARAGES.** Substitute the following wording for the requirements in IBC section 1607.6: Minimum live loads for garages having trucks or buses shall be as specified in IBC Table 1607.6, but shall not be less than 50 pounds per square foot, unless other loads are specifically justified and approved by the department. Actual loads shall be used where they are greater than the loads specified in the table.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. to (3), cr. (1), (2), (4) and (5) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. and recr. (1) and Table 1607.1, r. (4) and (5) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: am. (1), Table 1607.1, r. (2), renum. (3) to be (2) and am. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1608 Snow loads. (1) UNBALANCED SNOW LOADS.** This is a department alternative to the requirements in IBC section 1608.1: Unbalanced snow loads on a hip or gable roof may be calculated in accordance with the following equation:

$$S = S_s(I_s)(C_bC_wC_sC_a)$$

Where:

S = Alternate unbalanced roof snow load

S<sub>s</sub> = Ground snow load from IBC Figure 1608.2

I<sub>s</sub> = Importance factor from IBC section 1608.1 [ASCE 7, Table 7-4]

C<sub>b</sub> = Basic roof snow load factor of 0.8

C<sub>w</sub> = Wind exposure factor of 1.0

C<sub>s</sub> = Slope factor; see Tables 362.1608-1 and 362.1608-2

C<sub>a</sub> = Accumulation factor; see Table 362.1608-3

**Table 362.1608-1**  
**Non-Slippy Roof<sup>a</sup>**

Roof Slope, α	Factor, C <sub>s</sub>
α ≤ 30°	1.0
30° < α ≤ 70°	(70° - α) / 40°
70° < α	0

<sup>a</sup> Such as with shingles.

**Table 362.1608-2**  
**Unobstructed Slippy Roof<sup>a</sup>**

Roof Slope, α	Factor, C <sub>s</sub>
α ≤ 15°	1.0
15° < α ≤ 60°	(60° - α) / 45°
60° < α	0

<sup>a</sup> Where snow and ice can slide completely off, such as with steel.

**Table 362.1608-3**  
**Accumulation Factor**

Roof Slope, α	Factor, C <sub>a</sub>
α ≤ 15°	N/A. Analysis for balanced loading only.
15° < α ≤ 20°	0.25 + α / 20°
20° < α ≤ 90°	1.25

**(2) EXISTING ROOFS.** These are department rules in addition to the requirements in IBC section 1608.1:

(a) *Buildings on the same property.* 1. Where an existing roof, regardless of the date of its construction, is horizontally within 15 feet of a proposed, taller structure on the same property, IBC section 1608.1 or an alternate recognized engineering method shall be applied to the existing roof, to address any drifting or sliding of snow onto the existing roof, as caused by the taller structure.

2. Where an analysis under subd. 1. shows that an existing roof or corresponding supporting elements will not be adequate to support the additional snow load caused by the taller structure, the existing roof or supporting elements shall be strengthened to support those loads, in accordance with this code.

(b) *Buildings on adjoining properties.* Where an existing roof, regardless of the date of its construction, is horizontally within 15 feet of a proposed, taller structure on an adjoining property, the owner of the proposed structure shall notify the adjoining owner of the potential for increased structural loads on the existing roof, due to sliding or drifting of snow, as caused by the taller structure.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: cr. (3) and (4) Register December 2004 No. 588, eff. 1-1-05; CR 06-120:

r. (1) and (2), renum. (3) and (4) to be (1) and (2) and am. (1) (intro.), (2) (intro.) and (a) 1. Register February 2008 No. 626, eff. 3-1-08; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.1611 Roof drains.** This is a department informational note to be used under IBC section 1611.1:

**Note:** See ch. SPS 382 for requirements to not connect a secondary roof-drain system to a primary roof-drain system, and to discharge a secondary roof-drain system to the ground surface.

**History:** CR 04-016: cr. Register December 2004 No. 588, eff. 1-1-05.

**SPS 362.1613 Earthquake loads.** This is a department informational note to be used under IBC section 1613.5:

**Note:** An interactive Website maintained by the U. S. Geological Service, at <http://earthquake.usgs.gov/research/hazmaps/design/>, can be used in lieu of IBC Figures 1613.5 (1) and (2) to determine the spectral response acceleration values for an inputted zip-code area.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. (1), (2), renum. (3) to be Comm 62.1613 Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1700 Structural tests and special inspections.** The requirements in IBC chapter 17, except for the requirements in IBC sections 1711 to 1716, are not included as part of this code.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: am. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: am. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1802 Definition of neutral plane.** This is a department definition in addition to the definitions in IBC section 1802.1: NEUTRAL PLANE. A deep foundation's neutral plane is the level at which drag load, accumulated from the top down, added to the long-term static service load, equals the upward acting shaft resistance accumulated from the bottom up, added to the deep foundation's toe resistance.

**History:** CR 10-103: renum. from Comm 16.1808 (1) and am. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1803 Deep foundations.** Item 5 in IBC section 1803.5.5 is not included as part of this code.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1804 Ground improvement.** These are department rules in addition to the requirements in IBC section 1804:

(1) DESIGN OF GROUND IMPROVEMENT. Ground improvement for support of foundations or floor slabs shall be designed by an architect or engineer who is registered by the department.

(2) ALLOWABLE FOUNDATION PRESSURE OF IMPROVED GROUND. The allowable foundation pressure for improved ground shall incorporate a minimum safety factor of 3 with respect to a bearing capacity failure within the composite improved ground.

(3) SETTLEMENT OF STRUCTURES SUPPORTED ON IMPROVED GROUND. The improved ground shall be designed and constructed for a maximum anticipated total settlement of one inch and a maximum anticipated differential settlement of three fourths of an inch, unless it can be shown that the predicted total and differential settlement will not cause any of the following:

- (a) Harmful distortion of the structure.
- (b) Instability in the structure.
- (c) Any element to be loaded beyond its capacity.

(4) DESIGN CONFIRMATION TESTING. The registered design professional responsible for the design of the ground improvement shall determine the scope of field testing required to confirm the design, shall supervise the testing, and shall write a report indicating whether the test results confirm the design. At the discretion of that design professional, testing may be limited to a modulus load test to measure deformation behavior of a single ground improvement element. The design of the ground improve-

ment shall be modified as appropriate based on the results of the confirmatory testing.

(5) QUALITY CONTROL OBSERVATIONS AND TESTING. The registered design professional responsible for the design of the ground improvement, or a technician working under supervision of that professional, shall observe construction of the ground improvement, perform quality control testing, and upon completion of work, prepare a report stating whether the ground improvement meets the intent of the approved construction documents. A copy of the report shall be provided to the registered design professional in responsible charge of the project, and to the building official if requested.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11; correction in (1) made under s. 13.92 (4) (b) 6., Stats., Register December 2011 No. 672.

**SPS 362.1805 Basement floor base course.** This is a department rule in addition to the requirements in IBC section 1805.4.1: A required base course shall be placed on a geotextile fabric that is designed to limit migration of silt and fine sand into the base course.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. to (1), cr. (2) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. and recr. (2) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1806 Presumptive load-bearing values for saturated soils.** This is an additional department footnote for IBC Table 1806.2: Footnote c. Values to be multiplied by 0.5 for saturated soils.

**History:** CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1807 Shallow post foundations.** This is a department alternative to the requirements in IBC section 1807.3.2: The design criteria in ANSI/ASAE EP 486.1 may be used in lieu of the design criteria in IBC section 1807.3.2.

**History:** CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1808 Foundations.** Substitute the following wording for the requirements in IBC section 1808.7.5: Alternate setbacks and clearances are permitted, subject to the approval of the department.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1809 Frost-protected shallow foundations.** This is a department rule in addition to the requirements in IBC section 1809.5: Where a frost-protected shallow foundation is relied upon for a heated or semi-heated structure, permanent, legible notices shall be posted near the thermostats of all building heating appliances that indicates all of the following:

(1) That the structure is designed using a frost-protected-shallow foundation.

(2) The minimum monthly average temperature that the structure must be maintained at to avoid frost damage to the foundation.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1810 Deep foundations. (1) DOWNDRAG.** This is a department rule in addition to the requirements in IBC section 1803.5.5: Investigations and reports for deep foundations shall include analysis of whether downdrag is anticipated. Where downdrag is anticipated, the report shall include a determination of the position of the deep foundation's neutral plane, an estimate of the soil settlement at the neutral plane, and a determination of the maximum load at the neutral plane.

(2) DETERMINATION OF ALLOWABLE LOADS. Substitute the following wording for the requirements in IBC section 1810.3.3:

(a) The allowable axial and lateral loads on deep foundations shall be determined by an approved formula, load tests or static analysis.

(b) The factor of safety to be used for deep foundation design shall depend on the extent of field testing performed to verify capacity.

(c) If the ultimate capacity is assessed solely by static analysis, a minimum factor of safety of 3.0 shall be applied to the ultimate capacity to determine allowable load capacity.

(d) If only static analysis and dynamic field testing are performed, a minimum factor of safety of 2.5 shall be applied to the ultimate capacity to determine allowable load capacity.

(e) 1. If one or more static load tests are performed, in addition to a static analysis, a minimum factor of safety of 2.0 shall be applied to the ultimate capacity to determine allowable load capacity, except as provided in subd. 2.

2. A minimum factor of safety of 1.5 may be used for structures in occupancy category I, provided all of the following conditions are met:

a. The deep foundations are required only to control settlement.

b. The deep foundations are not required to prevent a bearing capacity failure.

c. A static load test, a static analysis and dynamic field testing have been performed.

**(3) DRIVING CRITERIA.** This is a department rule in addition to the requirements in IBC section 1810.3.3.1.1: Driving criteria for deep foundations shall be submitted prior to installing the foundations, if requested by the building official.

**(4) APPROVED FORMULAS.** This is a department informational note to be used under IBC section 1810.3.3.1.1:

**Note:** The Department has approved the following two dynamic driving formulas, when used within the parameters prescribed below.

1. Washington State Department of Transportation formula:  
 $R_n = 6.6F_{eff}WH \ln(10N)$

Where:

$R_n$  is the ultimate axial compression capacity in kips.

$F_{eff}$  is an efficiency factor based on hammer and pile type.

$W$  is the hammer weight in kips.

$H$  is the drop height of the hammer in feet.

$N$  is the average penetration resistance at the end of driving, in blows per inch.

Acceptable  $F_{eff}$  values are:

0.55 for all pile types driven with an air or steam hammer.

0.37 for open-ended diesel hammers for concrete and timber piles.

0.47 for open-ended diesel hammers for steel piles.

0.35 for closed-ended diesel hammers for all pile types.

2. Corrected FHWA-Modified Gates Equation:

$$R_u = [(1.75)(eE_r)^{0.5}] (\log(10N_b) - 100) (F_o) (F_s) (F_p) (F_h)$$

Where:

$R_u$  is the ultimate axial compression capacity in kips.

$e$  is the hammer efficiency.

$E_r$  is the hammer energy in foot-pounds.

$N_b$  is the final penetration resistance in blows per inch.

$F_o$  is an overall correction factor.

$F_s$  is a correction factor for soil type.

$F_p$  is a correction factor for pile type.

$F_h$  is a correction factor for hammer type.

Acceptable hammer-efficiency values are:

0.75 for drop hammers.

0.85 for other hammers, or an efficiency recommended by the hammer manufacturer.

Acceptable correction factors are:

Overall  $F_o$ : 0.94.

Soil  $F_s$ : 1.00 for mixed soil profile.

0.87 for sandy soil profile.

1.20 for clayey soil profile.

Pile  $F_p$ : 1.00 for closed-ended pipe.

1.02 for open-ended pipe.

0.80 for H-Section piles.

Hammer  $F_h$ : 1.00 for open-ended diesel.

0.84 for closed-ended diesel.

1.16 for air or steam single-acting.

1.01 for air or steam double-acting.

1.00 for hydraulic.

If at least 1 static load test is performed to field-check the penetration resistance criteria calculated by the above dynamic formulas, a minimum safety factor of 2.5 must be applied to the ultimate axial compression capacity calculated by the dynamic formula to determine the allowable pile load. If only dynamic testing (including signal matching) is performed to field-check the penetration resistance criteria determined by the dynamic formula, a minimum safety factor of 2.75 must be applied to the ultimate axial compression capacity calculated by the dynamic formula to determine the allowable pile load. If no field testing is performed to check the penetration resistance criteria calculated by the dynamic formula, a minimum safety factor of 3.0 must be applied to the ultimate axial compression capacity calculated by the dynamic formula to determine the allowable pile load.

The above formulas are predicated on the following three conditions: (1) static load testing and/or dynamic testing being performed on pile(s) driven in uniform site soil conditions, (2) test pile(s) being driven with the same hammer and cushion used for installation of production piles, and (3) test pile(s) being of the same type and section used for production piles. If any of the three conditions is not met, additional field testing is required. With static load testing and/or dynamic testing, penetration resistance criteria calculated by the dynamic formula must be modified as appropriate based on the results of the field testing. A site must be defined as a project site, or a portion of it, where subsurface conditions can be characterized as geologically similar in terms of subsurface stratigraphy, including the sequence, thickness, geologic history, engineering properties and groundwater aspects.

**(5) FACTOR OF SAFETY FOR UPLIFT.** The exception in IBC section 1810.3.3.1.5 is not included as part of this code.

**(6) HELICAL PILES.** This is a department informational note to be used under IBC section 1810.3.3.1.9:

**Note:** See sub. (2) for factors of safety that supersede the criteria in this section. For example, under sub. (2) (c), (d) and (e), this factor may be 3, 2.5 or 1.5, respectively.

**(7) DEEP FOUNDATIONS IN SUBSIDING AREAS.** Substitute the following wording for the requirements in IBC section 1810.3.4:

(a) Where deep foundations are installed through subsiding fills or other subsiding strata and derive support from underlying firmer materials, consideration shall be given to the downward drag load that may be imposed on the deep foundations by the subsiding upper strata.

(b) Where the influence of subsiding fills is considered as imposing loads on the deep foundation, the allowable stresses specified in this chapter are permitted to be increased where satisfactory substantiating data are submitted.

(c) The position of the deep foundation's neutral plane shall be determined, and the settlement of the soil at the level of the neutral plane shall be estimated. The maximum load in the deep foundation, which occurs at the neutral plane, shall be determined.

**(8) DESIGN CRACKING MOMENT.** Substitute the following equation for IBC equation 18-11:  $\phi M_n = 3(f'_c)^{0.5}(S_m)$ .

**(9) DRIVEN TIMBER PILES.** Substitute the following wording for the requirements in IBC section 1810.4.1.5: Any sudden decrease in driving resistance of an end-supported timber pile shall be investigated with regard to the possibility of damage. If the sudden decrease in driving resistance cannot be correlated to load-bearing data, the pile shall be removed for inspection or rejected, or shall be assigned a reduced capacity commensurate with the loss of end-bearing in lieu of removing or rejecting the pile.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: am. (3) (e), cr. (6) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: renum. Comm 62.1807 to be Comm 62.1808 and am. (1), (2), (3) (intro.), (4) (intro.), (5) (intro.) and (a) and (6) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: (title), (1), (2), (7) renum. from Comm 62.1808, (title), (2), (3), (5) and

am., (9) renum. from Comm 62.1809 and am.; cr. (3) to (6), (8) Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.1913 Shotcrete clearance.** Substitute the following wording for the exception under IBC section 1913.4.2: Subject to the approval of the department, required clearances may be reduced where it is demonstrated by preconstruction tests that adequate encasement of the bars used in the design will be achieved.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: renum. Comm 62.1914 to be Comm 62.1913 and am. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.2103 Cast stone masonry units.** These are department rules in addition to the requirements in IBC section 2103.4:

(1) Cast stone masonry units covered under this category are homogeneous or faced, dry cast concrete products other than conventional concrete masonry units (brick or block), but of similar size.

(2) Cast stone masonry units shall be made with portland cement, water and suitable mineral aggregates, with or without admixtures, and reinforced if required.

(3) Cast stone masonry units shall have a minimum compressive strength of 6500 psi and a maximum water absorption of 6% when tested as 2- x 2-inch cylinders or cubes.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: am. (intro.) Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.2109 Empirical design of masonry.**

(1) **BEARING ON MASONRY.** This is a department rule in addition to the requirements in IBC section 2109.1: Lintels shall be considered structural members and shall be designed in accordance with the applicable provisions of IBC chapter 16.

(2) **JOINTING.** These are department rules in addition to the requirements in IBC section 2109:

(a) *Expansion and shrinkage.* Joints commensurate with lateral stability requirements shall be installed in all exterior masonry to allow for expected growth of clay products and shrinkage of concrete products.

(b) *Vertical jointing.* Vertical movement joints shall be provided at a spacing in compliance with Table 362.2109.

**Note:** To accomplish the intended purpose, joints should be located at critical locations, such as changes in building heights, changes in framing systems, columns built into exterior walls, major wall openings, and changes in materials.

(c) *Horizontal jointing.* Where supports such as shelf angles or plates are required to carry the weight of masonry above the foundation level, a pressure-relieving joint shall be provided between the structural support and any masonry that occurs below this level. The joint width shall be such as to prevent any load being transmitted from the support to any element directly below. All mortar and rigid materials shall be kept out of this joint. This type of joint shall be provided at all such supports in a concrete frame structure where clay masonry is exposed to the weather.

**Table 362.2109  
Maximum Spacing of Exterior Masonry Movement Joints  
Between Unrestrained Ends† (Feet)**

Loading Conditions	Type of Material	Openings (Percent of Total Wall Area)			
		0 to 20		More than 20	
		Joint to Joint	Joint to Corner	Joint to Joint	Joint to Corner
Load-bearing	Clay units	140	70	100	50
	Concrete units	60	30	40	20
Nonload-bearing walls	Clay units	100	50	60	40
	Concrete units	50	25	30	20

†Jointing required is a minimum and is not intended to prevent minor cracking. The distances given for maximum spacing of joints are for a single wall plane. For composite walls, the maximum spacing of joints shall be governed by the masonry material type used in the exterior wythe.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 10-103: r. (2), Table 62.2109-1, renum. (3) to be (2), Table 62.2109-2 to be Table 62.2109 and am. (2) (b) Register August 2011 No. 668, eff. 9-1-11; correction in (2) (b) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.2204 Welded Connections.** This is a department informational note to be used under IBC section 2204.1:

**Note:** The rules pertaining to registration of structural welders are specified in ch. SPS 305.

**History:** CR 06-120: cr. Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.2210 Trusses spanning 60 feet or greater.**

The requirements in IBC section 2210.3.4 are not included as part of this code.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.2303 Trusses spanning 60 feet or greater.**

The requirements in IBC section 2303.4.1.3 are not included as part of this code.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016: renum. to be (2), cr. (1) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. and recr. (1), am. (2), cr. (3) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.2304 Girder ends.** This is a department rule in addition to the requirements in IBC section 2304.11.2.5: A mois-

ture barrier shall be provided between an untreated or nondurable wood girder and an exterior masonry or concrete bearing surface.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: am. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.2409 Glass and glazing for elevators.** This is a department informational note to be used under IBC section 2409:

**Note:** See ch. SPS 318 [ASME A17.1] for additional glass and glazing requirements relating to elevators. Those requirements include a prohibition against elevator hoistway windows that give a false appearance of a floor level.

**History:** CR 06-120: cr. Register February 2008, No. 626, eff. 3-1-08.

**SPS 362.2503 Gypsum board and plaster.** The requirements in IBC section 2503.1 are not included as part of this code.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02.

**SPS 362.2701 Electrical code.** This is a department informational note to be used under IBC section 2701.1:

**Note:** As defined in s. SPS 361.04 (6), “ICC Electrical Code” means ch. SPS 316.

**History:** CR 01-139; cr. Register June 2002 No. 558, eff. 7-1-02.

**SPS 362.2900 Additional criteria for toilets.** These are department rules in addition to the requirements in IBC chapter 29:

(1) **PLUMBING FIXTURE ALTERNATIVES.** (a) *Water closets.* 1. Systems or devices recognized under ss. SPS 391.10 and 391.11 may be substituted for water closets required under IBC chapter 29.

2. Privies recognized under ch. SPS 391 may be substituted for water closets required under IBC chapter 29 in any of the following situations:

a. A building accommodating a seasonal occupancy when occupancy of the building does not extend for more than 3 of the 4 seasons.

b. A building accommodating a school or a assembly that is operated by and for members of a bona fide religious denomination in accordance with the teachings and beliefs of the denomination.

c. As approved by the department.

3. Portable restrooms recognized under ch. SPS 391 may be substituted for water closets required under IBC chapter 29 for buildings accommodating events or temporary occupancies not exceeding 12 consecutive days or as approved by the department.

(b) *Lavatories.* Waterless antiseptic cleansing provisions may be substituted for lavatories required under IBC chapter 29 where systems or devices under par. (a) 2. are substituted for water closets. Where water-based water closets or urinals are used, water-based lavatories shall be provided in numbers to accommodate the number of people served by the water closets and urinals.

(2) **PERMANENT OUTDOOR TOILETS.** (a) A permanent outdoor toilet room shall be provided with a suitable approach such as a concrete, gravel or cinder walk.

(b) All windows, ventilators, and other openings for a permanent outdoor toilet room shall be screened to limit the entrance of flies, and all doors shall be self closing.

(3) **ENCLOSURE OF FIXTURES.** (a) Water closets and urinals within a toilet room shall be arranged to ensure privacy. Except as provided in par. (b), each water closet shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy. Urinals shall be placed against walls at least 6 feet 8 inches high and arranged individually with or without partitions.

(b) 1. Water closet compartments may be omitted in a single-occupant toilet room having a door with a privacy lock.

2. Toilet rooms located in day-care and child-care facilities and containing 2 or more water closets may have one water closet without an enclosing compartment.

3. Compartments are not required for water closets in prison or jail cells.

**History:** CR 00-179; cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139; am. (2) Register June 2002 No. 558, eff. 7-1-02; CR 04-016; am. (2), cr. (4) (b) 3. Register December 2004 No. 588, eff. 1-1-05; CR 06-120; r. and recr. Register February 2008 No. 626, eff. 3-1-08; CR 08-055; am. (1) Register February 2009 No. 638, eff. 3-1-09; correction in (1) (a) 1., 2., 3. made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.2901 Plumbing code.** This is a department informational note to be used under IBC section 2901.1:

**Note:** As defined in s. SPS 361.04 (12) and (13), “IPC and International Plumbing Code” and “IPSC and International Private Sewage Code” mean chs. SPS 381 to 387.

**History:** CR 01-139; cr. Register June 2002 No. 558, eff. 7-1-02.

**SPS 362.2902 Plumbing fixtures.** (1) **MINIMUM NUMBER OF FIXTURES.** (a) *Exceptions.* These are department exceptions to the requirements in IBC section 2902.1:

1. Where more than one water closet is required for males, urinals may be substituted for up to 50 percent of the required number of water closets.

2. Where water is served in restaurants or where other acceptable arrangements are made to provide drinking water, drinking fountains are not required.

3. For child day care facilities, bathtubs or showers are not required where other personal hygiene washing arrangements are provided that satisfy the licensing requirements of the Wisconsin department of health services.

4. For day nurseries and child day care facilities, children under the age of 30 months need not be considered as a part of the occupant load used to determine the minimum number of water closets.

5. Service sinks may be omitted for any occupancy where privies have been substituted for water closets under s. SPS 362.2900 (1) (a) 2.

(b) *Additional fixtures.* These are department informational notes to be used under IBC sections 2902.1 and 2902.2:

**Note:** Additional plumbing fixtures may be required for employees by the U.S. department of labor, occupational safety and health act (OSHA) regulations.

**Note:** Additional plumbing fixtures may be required by the department of health services for restaurants, mobile home parks, camping grounds, camping resorts, recreational camps and educational camps.

**Note:** Chapter SPS 390 also has requirements for minimum numbers of sanitary fixtures for a public swimming pool, as based on the pool area. For some buildings, the minimum number of sanitary fixtures determined in that manner may be larger than the minimum number determined in accordance with this section. Compliance with this section does not relieve an owner from complying with ch. SPS 390.

**Note:** Chapter SPS 391 has requirements for equal speed of access to toilets for each gender, at facilities where the public congregates that do not fall under the scope of this chapter.

(c) *Substitutions in IBC Table 2902.1.* 1. Substitute the following wording for the water closets heading in IBC Table 2902.1: Water closets<sup>e</sup> (see s. SPS 362.2902 (1) (a) 1. for urinals).

2. Substitute the following wording for the drinking fountains heading in IBC Table 2902.1: Drinking fountains (see s. SPS 362.2902 (1) (a) 2.).

3. In IBC Table 2902.1, substitute the following wording for the required minimum number of water closets for females in type A-4 and A-5 occupancies: 1 per 37 for the first 1,500 and 1 per 60 for the remainder exceeding 1,500.

4. Substitute the following wording for the required number of bathtubs or showers in storage occupancies in IBC Table 2902.1: See the *International Plumbing Code*.

5. Substitute the following wording for the required number of bathtubs or showers in factory and industrial occupancies in IBC Table 2902.1: See the *International Plumbing Code*.

(d) *Addition to IBC Table 2902.1.* This is an additional department footnote for IBC Table 2902.1: Footnote e. Wherever more than 500 people congregate and more than the required minimum number of water closets or urinals are provided for males, twice as many of those additional toilet facilities shall be provided for females.

(2) **LAVATORIES FOR TOILET ROOMS.** This is a department rule in addition to the requirements in IBC section 2902.1: At least one lavatory shall be provided in each toilet room or in a gender-designated lounge adjacent to the toilet room. If a multiple-use lavatory is provided, 24 lineal inches of wash sink, or 20 inches measured along the edge of a circular basin will be considered equivalent to one lavatory.

(3) **DISTRIBUTION OF PLUMBING FACILITIES AND NUMBER OF OCCUPANTS OF EACH SEX.** Substitute the following wording for the

requirements in IBC section 2902.3: Except as otherwise specified in IBC Table 2902.1, the required water closets, lavatories, and showers or bathtubs shall be distributed equally between the sexes based on the percentage of each sex anticipated in the occupant load. The occupant load shall be composed of 50% of each sex, unless statistical data approved by the code official indicate a different distribution of the sexes.

**Note:** The substitution in this subsection is no longer valid because the IBC section 2902.3 that is referred to was repealed during promulgation of the 2009 edition of the IBC.

**(4) PUBLIC FACILITIES.** This is a department exception to the requirements in IBC section 2902.3: Toilet rooms may be omitted in a small retail or mercantile building where all of the following requirements are met:

- (a) No more than 25 occupants are accommodated.
- (b) Other restrooms are conveniently located and available to the patrons and employees during all hours of operation.
- (c) The omission is approved in writing by the local unit of government.
- (d) A copy of the written approval from the local unit of government is provided to the department or its authorized representative upon request.

**(5) LOCATION OF RESTAURANT TOILET ROOMS.** This is a department informational note to be used under IBC section 2902.3:

**Note:** Additional requirements for restaurant toilet rooms may be applied by the Department of Health Services.

**(6) PAY FACILITIES.** Substitute the following wording for the requirements in IBC section 2902.3.4 All toilet facilities shall be free of charge.

**Note:** Section 146.085, Stats., prohibits charging a fee for the use of toilet facilities and imposes a fine of \$10 to \$50 for violations.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139: am. (2) Register June 2002 No. 558, eff. 7-1-02; CR 02-002: cr. (1) (c) Register April 2003 No. 568, eff. 5-1-03; CR 04-016: r. and recr. (1) (a), am. (1) (c) 1. and 2., renum. (1) (c) 3., 4., and (4) to (7) to be (1) (c) 4., 5., and (6) to (9), cr. (1) (c) 3., (d), (4) and (5) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. (1) (c) 1. and (d), r. and recr. (1) (c) 3., r. (3), (4) and (8), renum. (5) to (7) and (9) to be (3) to (5) and (6) and am. (4) (intro.), (5) and (6) Register February 2008 No. 626, eff. 3-1-08; CR 08-055: cr. (1) (a) 5. Register February 2009 No. 638, eff. 3-1-09; correction in (1) (a) 3. made under s. 13.92 (4) (b) 6., Stats., Register February 2009 No. 638; correction in (1) (a) 5., (c) 1., 2. made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672; **corrections in (4) (intro.), (5), (6) made under s. 13.92 (4) (b) 7., Stats., Register September 2014 No. 705.**

**SPS 362.2903 Drinking facilities.** This is a department rule in addition to the requirements in IBC section 2903: Drinking fountains, water coolers and bottled water dispensers may not be located or installed in public restrooms.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11.

**SPS 362.3001 Elevators. (1) REFERENCED STANDARDS.** Substitute the following wording for the requirements in IBC section 3001.2: Except as otherwise provided for in this code, the design, construction, installation, alteration, repair and maintenance of conveyances and their components shall comply with ch. SPS 318.

**(2) CHANGE IN USE.** Substitute the following wording for the requirements in IBC section 3001.4: A change in use of an elevator from freight to passenger, passenger to freight, or from one freight class to another freight class shall comply with ch. SPS 318.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-043: cr. (4) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: r. (4) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. (1), renum. (2), (3) to be (1), (2) and am. Register August 2011 No. 668, eff. 9-1-11; correction in (1), (2) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.3002 Elevator car to accommodate ambulance stretcher.** Substitute the following wording for IBC section 3002.4:

**(1)** Where passenger elevators are provided, at least one elevator shall be provided for fire department emergency access to

all floors served by passenger elevators in all of the following situations:

(a) A building four or more stories above or four or more stories below grade plane.

(b) Any floor above or below the level affording fire department vehicle access, if the floor accommodates any one of the following occupancies:

1. Group I.
2. R-2.
3. Outpatient clinic and ambulatory health care facility.

**(2)** The elevator car provided for fire department emergency access shall be of such a size and configuration to accommodate an ambulance stretcher 24 inches by 84 inches with not less than 5-inch radius corners, in the horizontal, open position.

**(3)** Except in hospitals and except where all of a building's elevators are large enough for fire department emergency access, all elevator cars that are provided for fire department emergency access shall be identified by the international symbol for emergency medical services, star of life. The symbol may not be less than 3 inches high and shall be placed on both sides of the elevator hoistway door frame on all floor levels, approximately 60 inches above the floor.

**History:** CR 10-103: cr. Register August 2011 No. 668, eff. 9-1-11; CR 14-020: r. and recr. (3) Register August 2014 No. 704, eff. 9-1-14.

**SPS 362.3004 Hoistways. (1) VENTING.** This is a department rule in addition to the requirements in IBC section 3004.3: A ventilation opening in a hoistway wall, where provided, shall have guards securely anchored to the supporting structure inside the hoistway. The guards shall consist of a wire-mesh screen of at least 0.0915-inch diameter steel wire with openings that will reject a ball one-inch in diameter, or expanded metal screen of equivalent strength and open area.

**(2) AREA OF VENTS.** This is a department rule in addition to the requirements in the exception under IBC 3004.3: The manual override control shall comply with all of the following:

(a) Be a keyed switch of the open-auto-close type with the three positions labeled, that is operated with an FEO-K1 key or other approved key.

(b) Be located adjacent to the elevator hoistway door frame at the level of fire department vehicle access, approximately 48 inches above the floor, or other approved location. This location may be behind a locked panel.

(c) Be labeled "hoistway vent control."

**(3) PLUMBING AND MECHANICAL SYSTEMS.** Substitute the following wording for the requirements and the exception in IBC section 3004.4:

(a) *General.* Except as specified in par. (b), plumbing and mechanical systems shall not be located in an elevator shaft.

(b) 1. Except as provided in subd. 2., A drain or sump complying with ss. SPS 382.33 and 382.36 shall be provided in an elevator pit. Connection of the drain or sump to a sanitary system is prohibited.

2. An elevator pit is exempt from the sump or drain requirement under subd. 1. for any of the following situations:

a. The floor of an elevator walk-in pit is level with the adjacent floor.

b. The elevator does not extend to the building's lowest floor level and the pit floor is not in contact with the earth.

c. The pit floor is above adjacent grade where the elevator hoistway shaft has one or more exterior walls.

d. The pit will not allow the entrance of ground water and will not be greater than 16 inches in depth.

3. The aggregate capacity for drainage from the pit shall be at least one of the following:

- a. 30 gpm in a hoistway with one elevator.
- b. 50 gpm in a hoistway with two or three elevators.



c. 80 gpm in a hoistway with four elevators.

**Note:** See s. SPS 382.36 for the width or diameter and depth of a sump pump located in an elevator pit.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-111: r. and recr. (2) Register June 2002 No. 558, eff. 7-1-02; CR 04-016: am. (2) (intro.) Register December 2004 No. 588, eff. 1-1-05; CR 06-120: am. (2) (intro.) Register February 2008 No. 626, eff. 3-1-08; CR 10-103: r. and recr. (2) (b) Register August 2011 No. 668, eff. 9-1-11; correction in (2) (b) 1. made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672; CR 14-020: renum. (2) to (3), cr. (2), (3) (b) 2. d. Register August 2014 NO. 704, eff. 9-1-14.

**SPS 362.3006 Machine rooms. (1) SCOPE.** This is a department rule in addition to the requirements in IBC section 3006: This section applies to elevator machine rooms, machinery spaces, control rooms and control spaces not within the hoistway.

**(2) ACCESS.** This is a department informational note to be used under IBC section 3006.1:

**Note:** See ch. SPS 318 for additional requirements, including a prohibition against accessing elevator machine rooms, machinery spaces, control rooms, or control spaces through a toilet room, sleeping room or other private space; and a prohibition against accessing spaces, machinery or equipment not related to a conveyance through machine rooms, machinery spaces, control rooms, control spaces, or hoistways.

**(3) TEMPERATURE AND HUMIDITY.** Substitute the following wording for the requirements in IBC section 3006.2: Elevator machine rooms that contain solid-state equipment for elevator operation shall be provided with an independent means to control the temperature and humidity in the machine room.

**Note:** See IBC section 3003.1.4 and ASME A17.1 section 2.7.9.2 for additional requirements that may apply.

**(4) PRESSURIZATION.** This is a department exception to the requirements in IBC section 3006.3: An elevator machine room which serves a pressurized elevator hoistway and which is not directly connected to the pressurized elevator shaft is not required to be pressurized.

**(5) PLUMBING SYSTEMS.** Substitute the following wording for the requirements in IBC section 3006.6: Plumbing systems not used in connection with the operation of the elevator may not be located in elevator equipment rooms.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-111: renum. (1) and (2) to be (2) and (3) and cr. (1) Register June 2002 No. 558, eff. 7-1-02; CR 04-016: renum. (3) to be (4), cr. (3) Register December 2004 No. 588, eff. 1-1-05; CR 14-020: renum. (1), (2), (4) to (2), (4), (5), cr. (1), (r) (3), cr. (3) Register August 2014 No. 704, eff. 9-1-14; (1) (title), (3) (title) added under s. 13.92 (4) (b) 2., Stats., Register August 2014 No. 704.

**SPS 362.3100 Special construction.** These are department rules in addition to the requirements in IBC chapter 31: Public mausoleum structures shall be designed, constructed and maintained in accordance with this code. Mausoleums shall be classified as a Group S-1 storage occupancy and shall be constructed of reinforced concrete or other materials of similar durability.

**Note:** Section 157.12 (2) (d), Stats., reads as follows: "A mausoleum shall be constructed to last as long as possible, taking into consideration the technology and economics applicable to mausoleum construction at the time of construction."

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139: am., cr. (2) Register June 2002 No. 558, eff. 7-1-02; CR 06-120: r. (1), renum. (2) to be Comm 62.3100 Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.3102 Blower equipment.** Substitute the following wording for requirement 2 in IBC section 3102.8.1.2: Blowers shall be provided with inlet screens, belt guards and other protective devices as required to provide protection from injury.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: am. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.3103 Temporary structures.** This is a department rule in addition to the requirements in IBC section 3103: Under IBC sections 3103.1.1 and 3103.2, the requirements for

permits and construction documents for temporary structures are at the option of the local code official.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02.

#### **SPS 362.3104 Pedestrian walkways and tunnels.**

Substitute the following wording for the requirements and exception in IBC section 3104.2: Buildings that are connected in accordance with IBC section 3104 shall be considered to be separate structures.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120: r. (1) (title) and (2), renum. (1) to be Comm 62.3104 Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.3109 Swimming pool enclosures.** Substitute the following informational note for the requirements in IBC section 3109.

**Note:** See ch. SPS 390 for requirements for swimming pool enclosures.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02.

**SPS 362.3200 Encroachments into the public right-of-way.** The requirements in IBC chapter 32 are not included as part of this code.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02.

#### **SPS 362.3300 Safeguards during construction.**

Except for the requirements in IBC sections 3302.1 and 3303.5, the requirements in IBC chapter 33 are not included as part of this code.

**History:** CR 00-179: cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139: renum. (1) to be Comm 62.3300 and renum. (2) to be Comm 62.3307 Register June 2002 No. 558, eff. 7-1-02.

**SPS 362.3307 Protection of adjoining property.** This is a department informational note to be used under IBC chapter 33:

**Note:** Sections 101.111 (1) to (6), Stats., read as follows:

“(1) **DEFINITION.** In this section ‘excavator’ means any owner of an interest in land making or causing to be made an excavation.

(2) **CAVE-IN-PREVENTION.** Any excavator shall protect the excavation site in such a manner so as to prevent the soil of adjoining property from caving in or settling.

(3) **LIABILITY FOR UNDERPINNING AND FOUNDATION EXTENSIONS.** (a) If the excavation is made to a depth of 12 feet or less below grade, the excavator may not be held liable for the expense of any necessary underpinning or extension of the foundations of buildings on adjoining properties.

(b) If the excavation is made to a depth in excess of 12 feet below grade, the excavator shall be liable for the expense of any necessary underpinning or extension of the foundations of any adjoining buildings below the depth of 12 feet below grade. The owners of adjoining buildings shall be liable for the expense of any necessary underpinning or extension of the foundations of their buildings to the depth of 12 feet below grade.

(4) **NOTICE.** Unless waived by adjoining owners, at least 30 days prior to commencing the excavation the excavator shall notify, in writing, all owners of adjoining buildings of his or her intention to excavate. The notice shall state that adjoining buildings may require permanent protection. The owners of adjoining property shall have access to the excavation site for the purpose of protecting their buildings.

(5) **EMPLOYEES NOT LIABLE.** No worker who is an employee of an excavator may be held liable for his or her employer’s failure to comply with this section.

(6) **FAILURE TO COMPLY; INJUNCTION.** If any excavator fails to comply with this section, any aggrieved person may commence an action to obtain an order under ch. 813 directing such excavator to comply with this section and restraining the excavator from further violation thereof. If the aggrieved person prevails in the action, he or she shall be reimbursed for all his or her costs

and disbursements together with such actual attorney fees as may be approved by the court.”

**History:** CR 01-139; renun. from Comm 62.3300 (2) Register June 2002 No. 558, eff. 7-1-02.

**SPS 362.3400 Existing structures.** The requirements in IBC chapter 34 are not included as part of this code.

**History:** CR 00-179; cr. Register December 2001 No. 552, eff. 7-1-02; CR 06-120; r. and recr. Register February 2008 No. 626, eff. 3-1-08.

**SPS 362.3500 Referenced standards. (1) INTRODUCTION.** Substitute the following wording for the introductory paragraph in IBC chapter 35: This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in s. SPS 361.03 (1) (b) and (3) (a).

**(3) ADDITIONS.** This is a department rule in addition to the requirements in IBC chapter 35: The following standards are hereby incorporated by reference into this code:

(b) NFPA 30A-2008, Code for Motor Fuel Dispensing Facilities and Repair Garages.

(c) NFPA 45-2004, Standard on Fire Protection for Laboratories Using Chemicals.

(d) NFPA 750-2010, Standard on Water Mist Fire Protection Systems.

(e) UL 2034-2005, Single and Multiple State Carbon Monoxide Alarms.

(f) UL 2075-2007, Gas and Vapor Detectors and Sensors.

**Note:** ANSI/ASAE standards may be purchased from the American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659.

NFPA standards may be purchased from the National Fire Protection Association, One Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.

UL standards may be purchased for Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

Copies of the standards adopted under this section are on file in the offices of the department and the legislative reference bureau.

**History:** CR 00-179; cr. Register December 2001 No. 552, eff. 7-1-02; CR 01-139; am. Register June 2002 No. 558, eff. 7-1-02; CR 04-016; r. and recr. Register December 2004 No. 588, eff. 1-1-05; CR 06-120; am. (1), r. (2) and (3) (a), renun. (3) (b) to (e) to be (3) (a) to (d) and am. (3) (c) Register February 2008 No. 626, eff. 3-1-08; EmR0826; emerg. cr. (3) (e), eff. 10-1-08; CR 08-085; cr. (3) (e) and (f) Register May 2009 No. 641, eff. 6-1-09; CR 10-103; r. (3) (a), am. (3) (b), (d) Register August 2011 No. 668, eff. 9-1-11; correction in (1) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.

**SPS 362.3600 Appendices. (1) EXCLUSIONS.** The provisions in IBC Appendices A, B, D, and F to K are not included as part of this code.

**(2) APPENDIX C.** The provisions in IBC Appendix C apply to Group U agricultural buildings, as described in IBC section C 101.1, that are not exempt from this code as outlined in ss. SPS 361.01 and 361.02 (2) and (3).

**History:** CR 00-179; cr. Register December 2001 No. 552, eff. 7-1-02; CR 04-016; am. (1) Register December 2004 No. 588, eff. 1-1-05; CR 06-120; am. (1) Register February 2008 No. 626, eff. 3-1-08; correction in (2) made under s. 13.92 (4) (b) 7., Stats., Register December 2011 No. 672.