SPS 362.0100 Administration. The requirements in IBC chapter 1 are not included as part of chs. SPS 361 to 366.

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 chs. SPS 361 to 366, “not included as part of chs. SPS 361 to 366” is intended to convey that the referenced requirements are not incorporated, and therefore cannot be enforced through chs. SPS 361 to 366. 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 town- houses, 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 like- wise 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.
SPS 362.0202 Definitions.

(1) ADDITIONS. These are department definitions for this chapter in addition to the definitions in IBC section 202:

(a) “High-piled combustible storage” means storage of combustible materials in closely packed piles or on pallets, racks, or 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.

(b) “Neutral plane for a deep foundation” means 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.

(c) “Self-service storage facility” has the meaning given in S. 704.90 (1) (g), Stats.

(2) SUBSTITUTIONS. Substitute the following definitions for the corresponding definition in IBC section 202:

(a) “Approved” means acceptable to the department.

(b) “Automatic sprinkler system” or “automated 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.”

(c) “Commercial motor vehicle” means a motor vehicle used to transport passengers or property if the motor vehicle meets either of the following:

1. The vehicle has a gross vehicle weight rating of 26,000 pounds or more.
2. The vehicle is designed to transport 16 or more passengers including the driver.

(d) “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.

(e) “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. A permanent no−build easement line.
3. The centerline of a street, an alley, or a public way.
4. An imaginary line between two buildings on the same property.

(f) “Fuel−burning appliance” means a device that is installed in a building and burns fossil−fuel or carbon−based fuel when carbon dioxide is a combustion by−product, including ranges, ovens, grills, clothes dryers, furnaces, boilers, water heaters, heaters, fireplaces, and stoves.

(g) “Immediately dangerous to life and health (IDLH)” means a concentration of airborne contaminants that poses a threat of death, immediate or delayed permanent adverse health effects, or effects that 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.

(h) “Live/work unit” means a dwelling unit that includes a “home−based business” as defined in s. SPS 361.04 (3m).

Note: SPS 361.04 (3m) reads as follows: “Home−based business” means any business, profession, trade, or employment conducted in a person’s dwelling unit, that may involve the person’s immediate family or household and a maximum of one other unrelated person, but does not involve any of the following:
(a) Explosives, fireworks, or repair of motor vehicles.

(b) More than 25% of the habitable floor area of the dwelling unit.

(i) “Sealed combustion appliance” means a listed appliance that acquires all air for combustion though 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.

(3) DELETIONS. The following terms and corresponding definitions in IBC section 202 are not included as part of chs. SPS 361 to 366: approved agency, approved fabricator, base flood, base flood elevation, certificate of compliance, design flood, design flood elevation, designated seismic system, dry floodproofing, fabricated item, label, lowest floor, manufacturer’s designation, mark, special flood hazard area, special inspection, sprayed fire-resistant materials, start of construction, and structural observation.
SPS 362.0306 **Cheese factories classified as F–2 occupancy.** This is a department rule in addition to the examples in IBC section 306.3: Cheese factory.

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.

SPS 362.0308 **Classification of institutions with 5 or fewer persons receiving medical care.** Substitute the following wording for IBC section 308.4.2: Five or fewer persons receiving medical care. A facility with 5 or fewer persons receiving medical care shall be classified as Group R–3.

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.
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 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 chs. SPS 361 to 366.

(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.
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.
SPS 362.0412 Aircraft storage.

(1) Substitute the following wording for exception 1 in IBC section 412.4.4: 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.

(2) Substitute the following wording for the requirements, but not the exception, in IBC section 412.4.3: Floor surface. Floors shall be graded and drained to meet the requirements of ch. SPS 382.
SPS 362.0415 Hazardous materials.

(1) Substitute the definition in s. SPS 362.0202 (2) (g) for the corresponding definition in IBC section 415.2: “Immediately dangerous to life and health (IDLH).”

(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 non-sparking 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.
SPS 362.0423 Storm shelters. The requirements in IBC sections 423.3 and 423.4 are not included as part of chs. SPS 361 to 366.
SPS 362.0504 Building height and number of stories. The following is a department exception to the requirements in IBC section 504: The requirements in IBC section 504 do not apply to buildings and structures listed under SPS 362.0903 (18) (b) 2.
SPS 362.0506 Allowable building area. Substitute the following for the requirements in IBC Table 506.2 for I–3 occupancies of Type IIA construction: The allowable area for a single story sprinkled building shall be 60,000 square feet. The allowable area for a multistory sprinkled building shall be 45,000 square feet.
SPS 362.0509 Incinerator rooms. In IBC section 509, Table 509, “incinerator rooms” does not include a crematory as defined in SPS 361.04 (1r).
**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.
SPS 362.0702 Definitions. Substitute the definition in s. SPS 362.0202 (2) (e) for the corresponding definition listed in IBC section 202: “Fire separation distance.”
SPS 362.0705 Exterior Walls.

(1) 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.

(2) PROJECTIONS. Substitute Table 362.0705–2 for IBC Table 705.2.

Table 362.0705–2

<table>
<thead>
<tr>
<th>Fire Separation Distance (FSD)</th>
<th>Minimum Distance From Line Used to Determine FSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 feet to 2 feet</td>
<td>Projections not permitted</td>
</tr>
<tr>
<td>Greater than 2 feet to 3 feet</td>
<td>24 inches</td>
</tr>
<tr>
<td>Greater than 3 feet to less than 30 feet</td>
<td>24 inches plus 8 inches for every foot of FSD beyond 3 feet or fraction thereof</td>
</tr>
<tr>
<td>30 feet or greater</td>
<td>40 inches</td>
</tr>
</tbody>
</table>
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.

(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.
SPS 362.0713 Chute discharge room. This is a department rule in addition to the requirements in IBC section 713: The requirements of IBC 713.13.4 shall apply to recycling chutes in addition to waste and linen chutes.
SPS 362.0717 Ducts and air-transfer openings.

(1) SMOKE DAMPER ACTUATION. This is an additional method in addition to the methods listed in IBC section 717.3.3.2: Method 6: Where a single listed duct smoke detector is installed inside the duct or outside the duct with sampling tubes protruding into the duct in the supply air ductwork downstream of the air handling equipment, including air filters, and ahead of any branch ductwork and return air duct smoke detectors are installed inside the duct or outside the duct with sampling tubes protruding into the duct within 5 feet (1524 mm) of each return air smoke damper, all supply and return air smoke dampers shall be closed when any of the duct smoke detectors in the supply or return air ducts are in alarm. Other than in mechanical smoke control systems, dampers shall be closed upon fan shutdown when local smoke detectors require a minimum velocity to operate.

(2) DUCT SMOKE DAMPERS. This is a department exception to the requirements in IBC section 717.5.3: Smoke dampers are not required in ducts that are used in the exhaust portion of laboratory ventilating systems that are designed and installed in accordance with NFPA 45.
SPS 362.0722 Calculated fire resistance.

(1) NON- SYMMETRICAL ASSEMBLIES. Substitute the following wording for the exception in each of IBC sections 722.2.1.4.3, 722.3.2.3 and 722.4.1.4: 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 722.6.2.3: For an exterior wall with a fire separation distance greater than 10 feet, the wall is assigned a rating dependent on the interior membrane and the framing as described in IBC Tables 722.6.2 (1) and 722.6.2 (2). The membrane on the outside of the non-fire-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 722.6.2 (3).
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.”

SPS 362.0902 Definitions. Substitute the following definitions and informational note in s. SPS 362.0202 (2) (b) and (d) for the corresponding definitions listed in IBC section 902.1:

(1) “Automatic sprinkler system” or “automatic fire sprinkler system.”

(2) “Fire area.”
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) GROUP E. 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 Eoccupancies 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 (cm), 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 20 dwelling units.

Note: See s. 101.971 (2), Stats., for the definition of “multifamily dwelling”.

Note: See s. 101.14 (4m), Stats., for requirements relating to automatic fire sprinkler systems for a multifamily dwelling.

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.”

(cm) 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 6.3.2 are not included as part of chs. SPS 361 to 366.
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

(12) UPHOLSTERED FURNITURE. The requirement in IBC section 903.2.9 condition 5 is not included as part of chs. SPS 361 to 366.

(13) RECYCLING CHUTES. The requirements of IBC section 903.2.11.2 shall apply to recycling chutes in addition to rubbish and linen chutes.

(14) ALTERNATE AUTOMATIC FIRE SPRINKLER SYSTEM DESIGN STANDARD. This is a department rule in addition to the requirements of IBC section 903.3.1.1: When the provisions of chs. SPS 361 to 366 require that a building or portion thereof be equipped with an automatic sprinkler system in accordance with this section, sprinklers may be installed throughout in accordance with the alternate design standard of the FM Global Loss Prevention Data Sheets 2–0 Installation Guidelines for Automatic Sprinklers and 8–9 Storage of Class 1, 2, 3, 4 and Plastic Commodities.

(15) FAIRGROUND BUILDINGS. Pursuant to s. 101.14 (4), Stats., no city, village, or town may enact or enforce an ordinance that requires a county or organized agricultural society, association, or board to install or maintain an automatic fire suppression system in a building on a fairgrounds if all of the following apply:

(a) The building is open to the public only for seasonal or temporary event use for 180 cumulative days or fewer per year.
(b) Public access to the building is provided by garage style doors that remain open when the building is open to the public.

(16) ASSEMBLY OCCUPANCIES ON ROOFS. The requirements in IBC section 903.2.1.6 are not included as part of chs. SPS 361 to 366.

(17) LIMITED AREA SPRINKLER SYSTEMS. Substitute the following wording for IBC Section 903.3.8.1: Limited area sprinklers may not exceed 20 sprinklers in any single fire area.

(18) BUILDINGS WITHOUT ACCESS TO MUNICIPAL WATER. (a) Exemptions. These are department exceptions to the automatic fire sprinkler system requirements in IBC section 903: An automatic fire sprinkler system is not required for a building that meets all of the requirements of this section.
(b) Building types and occupancies. These are department rules in addition to requirements in IBC section 903.2: An automatic fire sprinkler system is not required under this section in a building that does not have access to a municipal water supply.

1. A Group A–2 occupancy banquet hall, restaurant, tavern, or bar that is not already exempt under IBC section 903.2.1.2 when all of the following apply:
a. The fire area does not exceed 12,000 square feet.
b. The occupant load of the fire area does not exceed 300.
c. The fire area is located on a floor with exit discharge at grade.

2. Buildings and structures that are on a farm premises used for farming purposes and temporarily or permanently repurposed as a Group A−2 occupancy that is not already exempt under IBC section 903.2.1.2 when all of the following apply:
   a. The building is used for assembly purposes no more than 180 cumulative days per calendar year.
   b. The fire area does not exceed 12,000 square feet.
   c. The occupant load of the fire area does not exceed 300.
   d. The fire area is located on a floor with exit discharge at grade.

3. A Group A−3 occupancy place of religious worship, or an accessory to a place of worship as specified in IBC section 303.1.4, that is not already exempt under IBC section 903.2.1.3 when all of the following apply:
   a. The building is used for a place of worship no more than 180 cumulative days per calendar year.
   b. The fire area does not exceed 12,000 square feet.
   c. The occupant load of the fire area does not exceed 300.
   d. The fire area is located on a floor with exit discharge at grade.

4. A single-story Group R occupancy cabin or camp lodge building, or a building or space that is used for assembly purposes at a camp when all of the following apply:
   a. The building or space is used no more than 180 cumulative days per calendar year.
   b. The fire area does not exceed 12,000 square feet.
   c. The occupant load of the fire area does not exceed 300.
   d. The fire area is located on a floor with exit discharge at grade.
   e. All sleeping rooms have a direct exit to the exterior.

(c) Additional requirements. These are department rules in addition to the requirements in IBC section 903.2 for the buildings in par. (b): A building that meets the requirements of par. (b) shall also comply with all of the following:
   1. The occupant load shall be displayed in accordance with IBC section 1004.3.
   2. All open flames, including smoking, shall be prohibited in the building and within 50 feet or less from the building, except for flame equipment used to reheat or maintain food temperatures.
   3. A smoke detection and fire alarm system shall be installed in accordance with IBC section 907.
   4. Portable fire extinguishers shall be installed in accordance with IBC section 906.
   5. A municipal fire and building inspection position statement shall be submitted to the department on an approved form indicating the municipality’s review and approval of the proposed building design. The position statement shall be completed by the fire code official if there is no commercial building inspector for the jurisdiction.

Note: Position statement forms are available from the department’s website at dsps.wi.gov.
SPS 362.0904 Alternative automatic fire-extinguishing systems. (1) GENERAL. 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.

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

(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 chs. SPS 361 to 366 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 back-flow 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.

k. 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.

l. System interconnection. Substitute the following wording for IBC 904.12.2: The actuation of the fire suppression system shall automatically shut down all sources of fuel and power to all equipment located beneath the exhaust hood and protected by the suppression system. The fuel and power reset shall be manual.

(3) DOMESTIC COOKING SYSTEMS IN GROUP I–2 CONDITION 1. The requirements in IBC sections 904.13, 904.13.1, and 904.13.2 are not included as part of chs. SPS 361 to 366.

Note: The requirements in IBC sections 904.13, 904.13.1, and 904.13.2 are similar to those contained in the 2012 edition of the Life Safety Code. Section DHS 132.82(1) and the Medicare conditions of participation for long–term care facilities under 42 CFR 483 require all nursing homes to meet the 2012 edition of the Life Safety Code.
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) SMOKES ALARMS. These are department informational notes to be used under IBC section 907.2.11:

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 chs. SPS 361 to 366, 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.”

(2m) ELEVATOR EMERGENCY OPERATION. Substitute the following wording for the requirements in IBC section 907.3.3: Except as provided in s. SPS 362.0907 (5) (a) and (b), fire alarm initiating devices installed for elevator emergency operation shall be installed in accordance with ch. SPS 318 and NFPA 72.

(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 exception in IBC section 907.5.2.3.1: 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.
(5) INSTALLATION AND MONITORING. The following are department exceptions to the requirements in IBC section 907.6:

(a) The requirements in NFPA 72 section 21.3.3 do not apply to elevator pits.

(b) The requirements in NFPA 72 section 21.3.7 (2) are not included as part of chs. SPS 361 to 366.
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.
SPS 362.0915 Carbon monoxide detection. Substitute the following wording for the requirements in IBC section 915:

(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” has the meaning given in s. SPS 362.0202 (2) (f).

(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” has the meaning given in s. SPS 362.0202 (2) (i).

(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.
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 agriculture, trade and consumer protection under s. 97.625 (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 agriculture, trade and consumer protection determines after an inspection of a building under this section or s. 97.625 (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.
SPS 362.1004 Egress for outdoor areas. Substitute the following wording for the requirements, but not the exceptions, in IBC section 1004.5: 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.
SPS 362.1006 Exits. (1) EXIT ACCESS. This is a department exception to the requirements in IBC section 1006.3: The length of a common path of egress travel requirements may not be more than 200 feet within townhouse dwelling units provided the townhouse complies with all of the following:

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

(b) Each dwelling unit within the townhouse is separated from other dwelling units by at least 2-hour fire-resistant-rated separation walls constructed in accordance with the requirements of IBC section 706 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 706.2 and the horizontal continuity requirements of IBC section 706.5.

(2) REFRIGERATED SPACES. Substitute the following wording for the exception in IBC section 1006.2.2.3: When using refrigerants in quantities limited to the amounts based on the volume set forth in ch. SPS 345.

(3) EXITS FROM STORIES. This is a department exception to the requirements in IBC section 1006.3: 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.

(4) SALT AND SAND STORAGE. This is a department exception to the requirements in IBC table 1006.2.1: A single exit is allowed, and the common path of travel shall be a maximum of 250 feet in buildings or portions of buildings used exclusively for non-combustible bulk material storage of salt and sand storage when the building walls contain the materials stored.

(5) SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY. Substitute the following wording for Table 1006.2.1 footnote a.: Buildings equipped throughout with an automatic sprinkler system in accordance with IBC section 903.3.1.1, 903.3.1.2, or 903.3.1.3. See IBC section 903 for occupancies where automatic sprinkler systems are permitted in accordance with IBC section 903.3.1.1, 903.3.1.2, or 903.3.1.3.
SPS 362.1009 Accessible means of egress. This is a department exception in addition to IBC section 1009.3: Areas of refuge are not required at floors that are not required to be accessible.
SPS362.1010 Doors, gates, and turnstiles.

(1) CLEAR DOOR OPENINGS FOR NONACCESSIBLE STALLS. This is a department exception to the requirements in IBC section 1010.1.1: The clear door opening for a non-accessible 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 1010.1.8: 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.

(3) PANIC AND FIRE EXIT HARDWARE. Substitute the following wording for the requirements relating to electrical rooms in IBC section 1010.1.10:

(a) An electrical room that contains equipment rated 800 amperes or more, and contains overcurrent devices, switching devices, or control devices, and contains a personnel door intended for entrance to and egress from the working space less than 25 feet from the nearest edge of the working space, the door shall be equipped with panic hardware or fire exit hardware and open in the direction of egress.

(b) An electrical room that is over 6 feet wide and contains equipment rated 1,200 amperes or more, and contains overcurrent devices, switching devices or control devices, and contains an exit or exit access door, the door shall be equipped with panic hard-ware or fire exit hardware and open in the direction of egress.
SPS 362.1011 Stairway width. (1) GENERAL. This is a department rule in addition to the requirements in IBC section 1011.1: Where installing an inclined platform lift or stairway chairlift, the clear-passage width shall be provided with the lift in the unfolded, usable position. (2) WIDTH AND CAPACITY. This is a department rule in addition to the requirements in IBC section 1011.7: For platform buildings designed in accordance with IBC section 510.2 in which a stair shaft serves 2 or more classes of construction and one of those classes of construction allows combustible materials, the entire stair construction within the enclosure may be of combustible materials.
**SPS 362.1013 Floor–level exit signs.** The requirements in IBC section 1013.2 are not included as part of chs. SPS
SPS 362.1015 Guards. Substitute the following wording for the requirements, but not the exception in IBC section 1015.2: Guards shall be located along the open side of walking surfaces, balconies, mezzanine, stairs, ramps, landings, roofs, and similar surfaces intended to be used by building occupants or the public where the change in elevation is more than 30 inches (762 mm) to the floor or roof below or more than 30 inches (762 mm) measured vertically to the grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Guards shall be adequate in strength and attachment in accordance with IBC section 1607.8.
**SPS 362.1020 Corridor continuity.** This is a department exception to the requirements in IBC section 1020.6: Other spaces or rooms constructed as required for corridors, and that are adjacent to a fire-resistance-rated corridor, may 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.
**SPS 362.1029 Spaces under bleachers and grandstands.** The requirements in IBC section 1029.1.1.1 are not included as part of chs. SPS 361 to 366.
**SPS 362.1101 Design of Type A and B units.** These are department rules in addition to the requirements in IBC section 1101.2 and ICC/ANSI A117.1 sections 1003 and 1004:

(1m) **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.

(2m) **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.
SPS 362.1103 Scoping requirements-limited access spaces. Substitute the following wording for the requirements in IBC section 1103.2.7:

(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) Non-occupiable spaces accessed only by ladders, catwalks, crawl spaces, freight elevators, very narrow passageways, or tunnels are not required to be accessible.
SPS 362.1104 Accessible route. 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 IBC section 1104.3.2.
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.

(b) 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.dspswi.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.

(4) MULTISTORY UNITS. Substitute the following wording for IBC section 1107.7.2: A multistory dwelling or sleeping unit that is not provided with elevator service is not required to be a Type B unit. Where a multistory unit is provided with external elevator service to only one floor, the floor provided with elevator service shall be the primary entry to the unit, shall comply with the requirements for a Type B unit and a toilet facility shall be provided on that floor.
SPS 362.1111 Signage. **(1) SIGNS.** (a) General. Substitute the following wording for the requirements for location 1 in IBC section 1111.1: 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 1111.2: 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 1111.3. Note: Refer to s. SPS 362.0400 (5) for requirements for no−smoking signs.
SPS 362.1203 Natural ventilation. This is a department rule in addition to the requirements in IBC section 1203.5: The use of natural ventilation shall be permitted in any of the following:

1. Occupancies specified in s. SPS Table 364.0402.
2. Any occupancy with an engineered design, approved by the department, that satisfies the ventilation needs of the occupancy.
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.
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.
SPS 362.1210 Toilet rooms.

(1m) PRIVACY AND ACCESS. This is a department rule in addition to the requirements in IBC section 1210: 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 this subsection does not apply to the following:

(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.

(d) Compartments are not required for water closets in prison or jail cells.

(2m) URINALS SEPARATION. Substitute the following wording for the requirements in IBC section 1210.3.2: Urinals shall be arranged individually with or without partitions.
SPS 362.1405 Exterior walls.

(1m) Substitute the following wording for the requirements, but not the exceptions, in IBC section 1405.3.1: Class I and II vapor retarders. Class I or II vapor retarders shall be provided on the interior side of frame walls and ceiling assemblies.

(2m) This is a department exception in addition to the exceptions in IBC section 1405.3.1: Where other approved means to avoid condensation in unventilated framed wall, floor, roof and ceiling cavities, and box sills are provided.

(3m) 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.
SPS 362.1503 Secondary Roof drainage. These are department rules in addition to IBC section 1503.4: Design and installation of roof drainage systems shall comply with IBC section 1503 and all applicable provisions in ch. SPS 382.
SPS 362.1505 Roof covering classification. The requirements in Footnote a. in IBC Table 1505.1 are not included as part of chs. SPS 361 to 366.
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.
SPS 362.1507 Roof slope.

(1) This is a department exception to the requirements in IBC section 1507.12.1: Thermo-set 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.
**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:

A. Flat-roof snow load, \( P_f \)
B. Snow exposure factor, \( C_e \)
C. Snow load importance factor, \( I \)
D. Thermal factor, \( C_t \)
E. Any sloped-roof snow load, \( P_s \)
F. Any unbalanced, drift or sliding snow loads.

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**SPS 362.1604 Alternate standards.** 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 ch. SPS 361 subch. VI.
SPS 362.1607 Live loads.

(1) RESIDENTIAL FLOOR LOADS. Substitute the following wording and live loads for the requirements in line 25 and footnote j. of IBC Table 1607.1:

<table>
<thead>
<tr>
<th>Occupancy or Use</th>
<th>Uniform (psf)</th>
<th>Concentrated (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25. Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninhabitable attics without storage (i)</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Uninhabitable attics with storage (i), (j), (k)</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Habitable attics</td>
<td>40</td>
<td>--</td>
</tr>
<tr>
<td>Hotels and Group R-2</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Private rooms and corridors serving them Public rooms and corridors serving them</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

G. 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 1607.7.3: Minimum live loads for garages having trucks or buses shall be as specified in IBC section 1607.7.3 but may 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.
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:

\[ S = S_s(I_s)(C_b C_w C_s C_a) \]

Where:
- \( S \) = Alternate unbalanced roof snow load
- \( S_s \) = Ground snow load from IBC Figure 1608.2
- \( I_s \) = Importance factor from IBC section 1608.1 [ASCE 7, Table 7−4]
- \( C_b \) = Basic roof snow load factor of 0.8
- \( C_w \) = Wind exposure factor of 1.0
- \( C_s \) = Slope factor; see Tables 362.1608–1 and 362.1608–2
- \( C_a \) = Accumulation factor; see Table 362.1608–3

(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 20 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 proposed structure, then an analysis as required by subd. 1. shall be performed, or an alternate engineering method shall be applied to the existing roof.
by the taller structure, the existing roof or supporting elements shall be strengthened to support those loads, in accordance with chs. SPS 361 to 366.

(b) Buildings on adjoining properties. Where an existing roof, regardless of the date of its construction, is horizontally within 20 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.
**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.
SPS 362.1613 Earthquake loads. This is a department informational note to be used under IBC section 1613.5: Note: A website maintained by the U. S. Geological Survey, at earthquake.usgs.gov/designmaps/us/application.php 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.
SPS 362.1700 Structural tests and special inspections. The requirements in IBC chapter 17, except for the requirements in IBC sections 1706 to 1709, are not included as part of chs. SPS 361 to 366.
SPS 362.1802 Definitions. In addition to the definitions in IBC section 1802.1, the following term has the meaning given in s. SPS 362.0202 (1): “Neutral plane.”
SPS 362.1803 Deep foundations. Item 5 in IBC section 1803.5.5 is not included as part of this code.
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 improvement 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.
**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.
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.
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.
**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.
SPS 362.1809 Frost–protected shallow foundations.

(1) 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:

   (a) That the structure is designed using a frost–protected–shallow foundation.
   
   (b) The minimum monthly average temperature that the structure must be maintained at to avoid frost damage to the foundation.

(2) This is a department exception in addition to the exception in IBC 1809.5: Floating slabs used with non–masonry, unheated, single–story buildings in Risk Category I that are less than 12,000 square feet are exempt from the requirements for frost protection.
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.
Feff 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 Feff 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:
\[ Ru = \left( \frac{1.75}{(eEr)^{0.5}} \right) \left( \log(10Nb) \right) - 100 \right) \left( Fo \right) \left( Fs \right) \left( Fp \right) \left( Fh \right) \]

Where:  
Ru is the ultimate axial compression capacity in kips.  
e is the hammer efficiency.  
Er is the hammer energy in foot−pounds.  
Nb is the final penetration resistance in blows per inch.  
Fo is an overall correction factor.  
Fs is a correction factor for soil type.  
Fp is a correction factor for pile type.  
Fh 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 Fo : 0.94.  
Soil Fs : 1.00 for mixed soil profile.  
0.87 for sandy soil profile.  
1.20 for clayey soil profile.  
Pile Fp : 1.00 for closed−ended pipe.  
1.02 for open−ended pipe.  
0.80 for H−Section piles.  
Hammer Fh : 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 chs. SPS 361 to 366.

(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:

\[ Mn = 3(f'c)0.5(Sm) \]

(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.
SPS 362.1908 Shotcrete clearance. Substitute the following wording for the exception under IBC section 1908.4.2: 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.
**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>
<thead>
<tr>
<th>Loading Conditions</th>
<th>Type of Material</th>
<th>Openings (Percent of Total Wall Area)</th>
<th>0 to 20</th>
<th>More than 20</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Joint to Joint</td>
<td>Joint to Corner</td>
<td>Joint to Joint</td>
</tr>
<tr>
<td>Load–bearing</td>
<td>Clay units</td>
<td>140</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Concrete units</td>
<td>60</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Nonload–bearing walls</td>
<td>Clay units</td>
<td>100</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Concrete units</td>
<td>50</td>
<td>25</td>
<td>30</td>
</tr>
</tbody>
</table>

†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.
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.
SPS 362.2211 Steel trusses spanning 60 feet or greater. The requirements in IBC section 2211.3.3 are not included as part of chs. SPS 361 to 366.
SPS 362.2303 Wood trusses spanning 60 feet or greater. The requirements in IBC section 2303.4.1.3 are not included as part of chs. SPS 361 to 366.
SPS 362.2304 Girder ends. This is a department rule in addition to the requirements in IBC section 2304.12.2.1: A moisture barrier shall be provided between an untreated or nondurable wood girder and an exterior masonry or concrete bearing surface.
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.
SPS 362.2503 Gypsum board and plaster. The requirements in IBC section 2503.1 are not included as part of this code.
SPS 362.2510 Water–resistive barriers. This is a department rule in addition to the requirements in IBC section 2510.6: The vertical leg of flashing at the base of a wall with two layers of a water–resistive barrier shall be installed behind both layers of the water–resistive barrier.
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.
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 an 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) URINALS. Urinals shall be placed against walls at least 6 feet 8 inches high.
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.
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, except that urinals may be substituted for up to 67 percent of the required number of water closets in Group A and E occupancies.
2. Where drinking fountains are required, other reasonable alternatives are acceptable, as approved by the department.
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 (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.

(e) *Alternative to IBC Table 2902.1.* This is a department alternative to the minimum fixture requirements of IBC Table 2902.1: The required number of toilet fixtures may be based on the actual occupancy load rather than the load determined by square footage per IBC Table 1004.1.1. The actual occupancy load shall be based on justification found acceptable to the department.

(2) (a) *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.

(b) This is a department exception to the requirements in IBC section 2902.2: Separate facilities may not be required in all occupancies when the number of fixtures is provided as required under IBC Table 2902.1 in individual user toilet rooms.

(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.
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.
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 chs. SPS 361 to 366, 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.
SPS 362.3002 Hoistway enclosures.

(1) ELEVATOR CAR TO ACCOMMODATE AMBULANCE STRETCHER. Substitute the following wording for IBC section 3002.4:

(a) 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:

1. A building four or more stories above or four or more stories below grade plane.
2. Any floor above or below the level affording fire department vehicle access, if the floor accommodates any one of the following occupancies:
   (a) Group I.
   (b) R−2.
   (c) Outpatient clinic and ambulatory health care facility.

(b) 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.

(c) 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.

(2) VENTING. This is a department rule in addition to the requirements in IBC section 3002: 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.

(3) AREA OF VENTS. This is a department rule in addition to the requirements in IBC section 3002: Where vent openings automatically open upon detection of smoke in the elevator lobbies or hoistway, upon power failure and upon activation of a manual override control, 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.”

(4) PLUMBING AND MECHANICAL SYSTEMS. Substitute the following wording for the requirements and the exception in IBC section 3002.9:

(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.
SPS 362.3003 Standardized fire service elevator keys. Substitute the following for the requirements in IBC section 3003.3. All elevators shall be equipped to operate with a standardized fire service elevator key in accordance with ch. SPS 318.
SPS 362.3005 Machine rooms.

(1) SCOPE. This is a department rule in addition to the requirements in IBC section 3005: 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 3005.1: 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 3005.2: 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 3005.3: 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.

(4m) SHUNT TRIP. The following is an exception to IBC section 3005.5. A sprinkler of a sidewall type installed 24 inches or less above the elevator pit floor may not require a heat detector or other means to disconnect the main line power supply.

(5) PLUMBING SYSTEMS. Substitute the following wording for the requirements in IBC section 3005.6: Plumbing systems not used in connection with the operation of the elevator may not be located in elevator equipment rooms.
**SPS 362.3100 Special construction.** These are department rules in addition to the requirements in IBC chapter 31: Mausoleum structures shall be designed, constructed, and maintained in accordance with chs. SPS 361 to 366. 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.”
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.
SPS 362.3103 Temporary structures. This is a department rule in addition to the requirements in IBC section 3103: Under IBC sections 3103.1.2 and 3103.2, the requirements for permits and construction documents for temporary structures are at the option of the local code official.
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.
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.
SPS 362.3200 Encroachments into the public right–of–way. The requirements in IBC chapter 32 are not included as part of chs. SPS 361 to 366.
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.
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.”
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).

a. ADDITION. This is a department rule in addition to the requirements in IBC chapter 35: NFPA 45−2015, Standard on Fire Protection for Laboratories Using Chemicals, is incorporated by reference into chs. SPS 361 to 366.

Note: NFPA standards may be viewed online free of charge at NFPA.org or purchased from the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269–9101. Copies of the standard adopted under this chapter are on file in the offices of the department and the legislative reference bureau.
SPS 362.3600 Appendices.

(1) EXCLUSIONS. The provisions in IBC Appendices A, B, D, F to K, and M are not included as part of chs. SPS 361 to 366.

(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 chs. SPS 361 to 366 as outlined in ss. SPS 361.01 and 361.02 (2) and (3).