# Chapter Comm 62

# **BUILDINGS AND STRUCTURES**

Pedestrian walkways and tunnels.

Safeguards during construction.

Protection of adjoining property.

Encroachments into the public right-of-way.

Structural tests and special inspections.

Grading and fill in flood hazard areas.

Foundation and soil investigation.

General requirements for concrete.

Masonry construction materials.

Empirical design of masonry.

Minimum standards and quality.

Glass and glazing for elevators.

Additional criteria for toilets.

Comm 62.0100	Administration.	Comm 62.1603	Construction documents.
Comm 62.0202	Definitions.	Comm 62.1604	Alternate evaluations.
Comm 62.0307	Pyrophoric materials.	Comm 62.1607	Live loads.
Comm 62.0310	Use and occupancy classification.	Comm 62.1608	Snow loads.
Comm 62.0400	Special detailed requirements based on use and occupancy.	Comm 62.1611	Roof drains.
Comm 62.0401		Comm 62,1612	Flood loads.
Comm 62.0402		Comm 62,1613	Earthquake loads.
	Motor vehicle-related occupancies.	Comm 62.1700	Structural tests and special
Comm 62.0412		Comm 62.1802	Foundation and soil invest
	Information required.	Comm 62.1802	Grading and fill in flood h
Comm 62.0415		Comm 62.1805	Footings and foundations.
	Allowable materials.	Comm 62.1803	Flood hazard areas.
	Fire separation distance.	Comm 62.1807	
	Fire-resistance ratings.	Comm 62.1808	Pier and pile foundations.
	Connections between buildings.		Driven pile foundations.
	Fire wall identification.	Comm 62.1810	Concrete pile foundations.
	Shaft enclosures.	Comm 62.1901	General requirements for
	Ducts and air-transfer openings.	Comm 62.1903	Specifications for concrete
Comm 62.0901		Comm 62.1908	Deletions.
Comm 62.0902	1	Comm 62.1913	Shotcrete clearance.
	Automatic fire sprinkler systems.	Comm 62.1915	Column approvals.
	Alternative automatic fire–extinguishing systems.	Comm 62.2101	Masonry construction mat
Comm 62.0907		Comm 62.2103	Cast stone masonry units.
Comm 62.0909		Comm 62.2105	Masonry quality.
Comm 62.0910		Comm 62.2109	Empirical design of masor
Comm 62.1004		Comm 62.2204	Connections.
Comm 62.1004		Comm 62.2206	Steel Joists.
	Doors, gates and turnstiles.	Comm 62.2303	Minimum standards and q
Comm 62.1008		Comm 62.2304	Girder ends.
Comm 62.1014		Comm 62.2409	Glass and glazing for elev
Comm 62.1014		Comm 62.2503	Gypsum board and plaster
	Exit access travel distance.	Comm 62.2701	Electrical code.
	Corridor continuity.	Comm 62.2900	Additional criteria for toile
Comm 62.1017		Comm 62.2901	Plumbing code.
		Comm 62.2902	Plumbing fixtures.
	Vertical exit enclosures.	Comm 62.3001	Elevators.
Comm 62.1101		Comm 62.3004	Hoistways.
Comm 62.1103 Comm 62.1104		Comm 62.3006	Machine rooms.
		Comm 62.3100	Special construction.
Comm 62.1107	6 16 1	Comm 62.3102	Blower equipment.
Comm 62.1110	Signage.	Comm 62.3102	Temporary structures.
Comm 62.1200		Comm 62.3103	Pedestrian walkways and
Comm 62.1204		Comm 62.3104	
Comm 62.1206			Swimming pool enclosure
Comm 62.1210		Comm 62.3200	Encroachments into the pu
Comm 62.1405		Comm 62.3300	Safeguards during constru
Comm 62.1407	I I I I I I I I I I I I I I I I I I I	Comm 62.3307	Protection of adjoining pro
Comm 62.1505		Comm 62.3400	Existing structures.
Comm 62.1506		Comm 62.3500	Referenced standards.
Comm 62.1507	Roof slope.	Comm 62.3600	Appendices.

Note: Chapter Comm 62 as it existed on June 30, 2002 was repealed and a new chapter Comm 62 was created, Register December 2001 No. 552, effective July 1, 2002.

Comm 62.0100 Administration. The requirements in IBC chapter 1 are not included as part of this code.

Note: The sections in this chapter are generally numbered to correspond with the section numbering in the IBC, e.g., s. Comm 62.0202 corresponds to IBC section 202. Note: As used throughout this code, "not included as part of this code" is intended to convey that the referenced requirements are not incorporated herein, and therefore cannot be enforced through this code. However, local ordinances may include the referenced requirements, as specified in s. Comm 61.03

Note: IBC section 101.2 addresses the scope of the IBC. For the scope of the Wisconsin Commercial Building Code, see s. Comm 61.02. Three or more attached townhouses, as referenced in an exception under IBC section 101.2, are included within the scope listed in s. Comm 61.02. Detached one– and two–family dwellings, as likewise referenced in an exception under IBC section 101.2, and elsewhere in the IBC, are not included within the scope listed in s. Comm 61.02, but are regulated in Wisconsin by chs. Comm 20 to 25, in accordance with subch. II of ch. 101, Stats.

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

Comm 62.0202 Definitions. (1) ADDITIONS. These are department definitions for this chapter in addition to the definitions in IBC section 202:

(a) "Air retarder" means a material or combination of materials collectively having a maximum air leakage rate of 0.06 cfm/ft.<sup>2</sup> at 0.30 in. H<sub>2</sub>O, when tested in accordance with ASTM E 783, installed to resist air leakage into the exterior envelope.

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

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

(a) "Approved" means acceptable to the department.

### WISCONSIN ADMINISTRATIVE CODE

(c) "Historic building" means a "qualified historic building" as defined in s. 101.121 (2) (c), Stats.

Note: Section 101.121 (2) (c), Stats. reads as follows:

'Qualified historic building' means a historic building which:

 Is listed on, or has been nominated by the state historical society for listing on, the national register of historic places in Wisconsin or the state register of historic places;

 Is included in a district which is listed on, or has been nominated by the state historical society for listing on, the national register of historic places in Wisconsin or the state register of historic places, and has been determined by the state historical society to contribute to the historic significance of the district;

2m. Is determined by the state historical society to be eligible for listing on the national register of historic places in Wisconsin or the state register of historic places;3. Is listed on a certified local register of historic property; or

4. Is included in a district which is listed on a certified local register of historic property, and has been determined by the city, village, town or county to contribute to the historic significance of the district.

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

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 01–139: renum. (1) (b) to be (2) (c) and renum. (1) (c) to (k) to be (1) (b) to (j) Register June 2002 No. 558, eff. 7–1–02; CR 04–016: am. (1) (a), renum. (1) (b) to (j) to be (1) (c) to (j) and Comm 61.04 (4), cr. (1) (b) and (3), r. and cr. (2) (b) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: am. (1) (intro.) and (3), renum. (1) (c), (d) and (e) to (j) to be Comm 61.04 (5), (6) and (8) to (13) and am. (5) and (8) to (11) Register February 2008 No. 626, eff. 3–1–08; correction made in (2) (c) under. s. 13.92 (4) (b) 7., Stats., Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.0307 Pyrophoric materials.** This is a department informational note to be used under IBC section 307.4:

**Note:** See ch. Comm 14 for additional requirements for pyrophoric materials. **History:** CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.0310 Use and occupancy classification.** This is a department informational note to be used under IBC section 310.2:

**Note:** See s. Comm 61.02 Notes for statutory definitions of adult family home and community-based residential facility. See s. Comm 61.04 for definitions of dwelling unit and multifamily dwelling.

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

**Comm 62.0400 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. Comm 14.

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

(a) The construction of a new building.

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

**Note:** The collection and temporary storage of recyclable materials that are flammable or combustible is regulated by ch. Comm 14. Storage of liquids that are flammable or combustible is regulated by ch. Comm 10. 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. Comm 20 to 25 instead of all other requirements of this code.

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

**Comm 62.0401 Chapter Comm 10 compliance.** This is a department informational note to be used under IBC section 401.1:

**Note:** See ch. Comm 10 for additional requirements for motor vehicle service stations and for storage, handling, processing and transporting of flammable and combustible liquids.

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

**Comm 62.0402** Lease plan. The requirements in IBC section 402.3 are not included as part of this code.

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

**Comm 62.0406 Motor vehicle-related occupancies.** PARKING GARAGES. Substitute the following wording for the requirements and exception in IBC section 406.2.8: Heating equipment shall be installed in accordance with the *International Mechanical Code*.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: r. and recr. Register December 2004 No. 588, eff. 1–1–05; CR 06–120: r. (2), renum. (1) to be Comm 62.0406 Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.0412** Aircraft-related occupancies. Substitute the following wording for exception 1 in IBC section 412.2.4: Heating equipment that is suspended at least 10 feet above the upper surface of wings or engine enclosures of the highest aircraft which may be housed in the hangar; or at least 8 feet above the floor in shops, offices and other sections of the hangar communicating with storage or service areas.

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

**Comm 62.0414 Information required.** The requirements in IBC section 414.1.3 are not included as part of this code. **History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02.

**Comm 62.0415 Hazardous materials. (1)** Substitute the following wording for the corresponding definition in IBC section 415.2: Immediately dangerous to life and health (IDLH). The concentration of air–borne contaminants which poses a threat of death, immediate or delayed permanent adverse health effects, or effects which could prevent escape from such an environment. This contaminant concentration level is established by the National Institute of Occupational Safety and Health based on both toxicity and flammability. It generally is expressed in parts per million by volume, or milligrams per cubic meter.

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

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

**Comm 62.0603 Allowable materials.** Substitute the following wording for application 18 in IBC section 603.1: Sprayed fire–resistant materials and intumescent and mastic fire–

DEPARTMENT OF COMMERCE

resistant coating, determined on the basis of fire-resistance tests in accordance with Section 703.2.

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

**Comm 62.0702** Fire separation distance. Substitute the following definition for the corresponding definition listed in IBC section 702: The distance measured from the building face to the closest interior lot line, to the centerline of a street alley or public way, to a permanent no-build easement line, or to an imaginary line between 2 buildings on the same property. The distance shall be measured at right angles from the lot line.

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

**Comm 62.0703 Fire-resistance ratings.** Substitute the following wording for the requirements, but not the exception, in IBC section 703.2: The fire-resistance rating of building elements shall be determined in accordance with the test procedures set forth in ASTM E 119 or in accordance with IBC section 703.3. Materials and methods of construction used to protect joints and penetrations in fire-resistance-rated building elements shall not reduce the required fire-resistance rating.

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

**Comm 62.0704 Connections between buildings.** This is a department exception to the requirements in IBC section 704.1: This section does not apply to connections between buildings, that are in compliance with IBC section 3104.

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

**Comm 62.0705 Fire wall identification.** These are department rules in addition to the requirements in IBC section 705:

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

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

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

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

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

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

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

**Comm 62.0707 Shaft enclosures. (1)** Substitute the following wording for the 7.2 exception in IBC section 707.2: Is not part of a required exit, except as permitted in section 1020.1.

(2) This is a department exception to the requirement in IBC section 707.2: Elevators in open parking garages that serve only the parking garage are not required to be enclosed.

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

**Comm 62.0716 Ducts and air-transfer openings.** (1) PENETRATIONS OF SHAFT ENCLOSURES. This is a department exception to the requirements in IBC section 716.5.3: Smoke dampers are not required in ducts that are used in the exhaust portion of laboratory ventilating systems which are designed and installed in accordance with NFPA 45. (2) SMOKE DAMPERS IN HEALTH CARE FACILITIES. This is a department exception to the requirements in IBC section 716.5.5: Smoke dampers are not required in Group I–2 duct penetrations of smoke barriers in fully ducted HVAC systems.

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

**Comm 62.0901** Fire protection systems. (1) MODIFICATIONS. Substitute the following informational note for the requirements in IBC section 901.3.

Note: Chapter Comm 14 has requirements relating to shutting down or impairing fire sprinkler systems. Chapter Comm 61 has requirements relating to availability of sprinkler documents and to submittal and approval of plans prior to altering, modifying, or removing sprinkler systems.

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

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

**Note:** NFPA 1963 contains the specifications for national standard hose thread. **History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02.

**Comm 62.0902 Definition.** Substitute the following definition and informational note for the corresponding definition listed in IBC section 902.1: "Automatic sprinkler system" or "Automatic fire sprinkler system" has the meaning given in s. 145.01 (2), Stats.

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

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

**Comm 62.0903 Automatic fire sprinkler systems. (1)** ALTERNATIVE PROTECTION. Substitute the following wording for the requirements in IBC section 903.1.1: Alternative automatic fire-extinguishing systems complying with IBC section 904 shall be permitted in lieu of automatic sprinkler protection where recognized by the applicable standard.

(2) 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.

(3) 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.

(4) 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.

**(5)** GROUPE. Substitute the following wording for the requirements in IBC section 903.2.2:

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

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

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

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

(6) GROUPR. Substitute the following wording for the requirements in IBC section 903.2.7:

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

(b) An automatic fire sprinkler system need not be installed in a multifamily dwelling where the floor areas or the number of dwelling units do not exceed any of the thresholds established in Table 62.0903. The floor areas specified in the thresholds do not include any of the following:

- 1. Areas that are outside a building, as in the following:
- a. Porches that are open to the outside atmosphere.
- b. Exterior stairs.
- c. Exterior platforms.
- d. Exterior landings.
- e. Exterior decks.
- 2. An attached garage that meets all of the following criteria:
- a. Has a floor area of 600 square feet or less.
- b. Serves a single dwelling unit.
- c. Is accessed directly from the dwelling unit.

d. Is separated from the remainder of the building by at least 1-hour rated fire-resistive construction.

**Note:** Housing units that receive federal funding may be required by federal regulations to have sprinkler protection regardless of building size.

**Note:** See Appendix A for a listing of municipalities that the department believes have preexisting stricter sprinkler ordinances, and a listing of thresholds those municipalities may apply which are more restrictive than in Table 62.0903.

3. This paragraph does not apply after December 31, 2010. Note: The application of paragraph (b) applies to plans submitted for department review prior to January 1, 2011 and subsequently approved. See s. Comm 61.36 concerning plan approval expirations and extensions. Under s. Comm 61.36 (2) (b), a request to the extend the expiration of a plan approval for a one-time 2-year period may be granted by the secretary provided: 1) the approved plan is for a multifamily dwelling containing less than 11 dwelling units; 2) the original plan was submitted for department review prior to January 1, 2011; and 3) the request is submitted prior to expiration of the original plan approval. This type of extension is at the discretion of the secretary.

### Table 62.0903 Maximum Floor Areas and Number of Dwelling Units Where a Sprinkler System Is Not Required in a Multifamily Dwelling

Class of Construction	Total Floor Area of Non-dwelling Unit Por- tions (Common use areas, such as corri- dors, stairways, base- ments, cellars, vesti- bules, community rooms, laundry rooms, pools, etc.)	Total Floor Area Within Individual Dwelling Units	Number of Units
Type IA	16,000 sq ft		
Type IB	12,000 sq ft		
Type IIA	8,000 sq ft		
Type IIB		16,000 sq ft	8 units
Type III	5,600 sq ft		
Type IV			
Type VA			
Type VB	4,800 sq ft		

(c) An automatic sprinkler system installed in a multifamily dwelling may conform with sub. (14) provided the multifamily dwelling complies with all of the following:

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

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

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

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

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

(d) 1. An automatic fire sprinkler system need not be installed in a townhouse provided the townhouse complies with all of the following:

a. The townhouse is not more than 3 stories above grade plane in height.

b. The townhouse does not contain more than 20 dwelling units.

c. The total gross floor area of all the individual dwelling units within the townhouse does not exceed 16,000 square feet.

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

3. An automatic sprinkler system installed in a townhouse may conform with sub. (14) 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-resistive-rated separation walls constructed in accordance with the requirements of IBC section 705 and do not contain any openings and plumbing equipment or mechanical equipment. The separation wall does not have to comply with the structural stability requirements of IBC section 705.2 and the horizontal continuity requirements of IBC section 705.5.

4. An automatic sprinkler system need not be installed a townhouse provided the townhouse is constructed of at least 2-hour fire resistance as defined under s. 101.14 (4m) (a) 5m., Stats.

**Note:** Section 101.14 (4m) (a) 5m. reads "'Two-hour fire resistance' means 2-hour fire separations for all walls that separate dwelling units, exit corridors and exit stair enclosures and for all floors and ceilings, so that the specified walls, floors and ceilings are capable of resisting fire for a period not shorter than 2 hours."

(6m) STUDENT HOUSING. These are department rules in addition to the requirements in IBC section 903.2.7:

(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. Except as provided in this subd. 2., an automatic fire sprinkler system shall be provided by January 1, 2006 throughout every residence hall and dormitory greater than 60 feet in height, the initial construction of which was begun before 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 by January 1, 2008 throughout Ogg Residence Hall at the University of Wisconsin–Madison.

Removed by Register June 2009 No. 642. For current adm. code see: http://docs.legis.wisconsin.gov/code/admin\_code .

23

3. 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.

4. 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.

5. 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.

(8) GROUP S-2. Substitute the following wording for the requirements, but not the exception, in IBC section 903.2.9: An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with IBC section 406.4 where located beneath other groups.

(9) GROUP S-2 EXCEPTION. This is an additional department exception to the requirements in IBC section 903.2.9: Enclosed parking garages for fire apparatus and fire department vehicles that are located beneath fire stations.

(10) COMMERCIAL PARKING GARAGE EXCEPTION. This is a department exception to the requirements in IBC section 903.2.9.1: Enclosed parking garages for fire apparatus and fire department vehicles where within the fire stations.

(11) BUILDINGS OVER 60 FEET IN HEIGHT. This is a department rule in addition to the requirements in IBC section 903.2.10.3:

(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 fireresistance-rated floor/ceiling assemblies. 4. Special industrial occupancies complying with the criteria outlined in IBC section 503.1.2.

5. Occupancies of Group F-2 when omission of the automatic fire sprinkler system is approved in accordance with s. Comm 61.22.

(12) 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.

(13) 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 and ground–floor patios of dwelling units where the building is of Type V construction. 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 that are constructed of open wood joist construction.

(14) 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 multifamily dwellings shall be installed throughout in accordance with NFPA 13D, except as provided in par. (b).

(b) Multipurpose piping systems shall conform with s. Comm 82.40 (3) (e) 2. a. and b.

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

Note: See ch. Comm 14 for requirements for inspection, testing, and maintenance of fire sprinkler systems.

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

**Comm 62.0904 Alternative automatic fire–extinguishing systems. (1)** Substitute the following wording and informational note for the requirements in IBC section 904.1: Automatic fire–extinguishing systems, other than automatic sprinkler systems, shall be designed and installed in accordance with the provisions of IBC section 904 and the applicable referenced standards.

**Note:** See ch. Comm 14 for requirements for inspection, testing, and maintenance of alternate automatic fire–extinguishing systems.

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

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

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

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

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

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

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

b. Each manual-wet sprinkler system shall be provided with a fire department connection. The fire department connection

shall be installed in an accessible location acceptable to the fire chief.

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

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

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

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

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

h. The connection of a manual–wet sprinkler system to a plumbing water supply system shall be protected against back-flow conditions in accordance with ch. Comm 82.

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

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

3. Installer qualifications. The installation or alteration of a manual–wet sprinkler system shall be performed by a licensed individual as specified for the installation of an automatic fire sprinkler system under subch. V of ch. Comm 5.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 01–139: am. (2) (b) 8. Register June 2002 No. 558, eff. 7–1–02; CR 04–016: renum. (intro.), (1) and (2) to be (2) (intro.), (a) and (b), and r. and recr. (2) (b) 2. c., cr. (1) Register December 2004 No. 588, eff. 1-1-05.

**Comm 62.0907** 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. Comm 14 for requirements for performance and maintenance of fire alarm systems and their components.

(2) CONSTRUCTION DOCUMENTS. The requirements in IBC section 907.1.1 are not included as part of this code.

(3) GROUPI. Substitute the following wording for the requirements, but not the exception, in IBC section 907.2.6: A manual fire alarm system shall be installed in Group I occupancies. An electrically supervised, automatic smoke detection system shall be provided throughout the occupancy, except as provided in IBC sections 907.2.6.1 to 907.2.6.3.

(4) GROUP M. Substitute the following wording for the requirements, but not the exception, in IBC section 907.2.7: A manual fire alarm system shall be installed in Group M occupancies having an occupant load of 500 or more persons, or more than 100 persons above or below a story that includes the lowest level of exit discharge. The initiation of a signal from a manual fire alarm box shall initiate alarm notification appliances as required by IBC section 907.9.

(5) SMOKE ALARMS. These are department informational notes to be used under IBC section 907.2.10 (intro.):

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

**Note:** Section 101.145 (4), Stats., addresses retroactivity requirements for buildings constructed prior to the effective date of this section. This statute section applies beyond the application of this code, as established in s. Comm 61.03 (2), and states "The owner of a residential building the initial construction of which is commenced before, on or after May 23, 1978, shall install and maintain a functional smoke detector in the basement and at the head of any stairway on each floor level of the building and shall install a functional smoke detector either in each sleeping room of each unit or elsewhere in the unit within 6 feet of each sleeping area and not in a kitchen."

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

(6) PROTECTIVE COVERS. Substitute the following wording for the requirements in IBC section 907.3.5: 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.

(7) EMPLOYEE WORK AREAS. Substitute the following wording for the requirements in IBC section 907.9.1.2: Where employee work areas have audible alarm coverage, the alarm system shall be designed so that visible notification appliances can be integrated into the system.

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

**Comm 62.0909 Smoke control systems. (1)** INSPEC-TION 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.

(7) SYSTEM ACCEPTANCE. The requirements in IBC section 909.19 are not included as part of this code.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02, CR 06–120: renum. (5) and (6) to be (6) and (7), cr. (5) Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.0910 Smoke and heat vents, and draft curtains. (1)** EXCEPTION. Substitute the following wording for exception 1. in IBC section 910.1: Buildings protected by an approved automatic sprinkler system.

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

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

**Comm 62.1004 Egress for outdoor areas.** Substitute the following wording for the requirements, but not the exceptions, in IBC section 1004.8: Yards, patios, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be based on the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of the occupant load of the building shall be based on the sum of the occupant load of the building plus the outdoor areas.

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

**Comm 62.1007 Accessible means of egress.** Substitute the following wording for the requirements under IBC section 1007.3 exception 3.: The clear width of 48 inches between handrails and the area of refuge is not required at exit stairways in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with IBC section 903.3.1.1 or 903.3.1.2.

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

**Comm 62.1008 Doors, gates and turnstiles.** (1) CLEAR DOOR OPENINGS FOR NONACCESSIBLE STALLS. This is a department exception to the requirements in IBC section 1008.1.1: The clear door opening for a nonaccessible toilet stall, shower stall, or other similar compartment, may be less than 32–inches wide.

(2) DOOR ARRANGEMENT. This is a department exception to the requirements in IBC section 1008.1.7: Where ample maneuvering space is provided between the doors such that use by an individual in a wheelchair will not block the operation of the doors.

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

**Comm 62.1009 Solid risers not required.** Substitute the following wording for the exception 2. in IBC section 1009.3.3: Solid risers are not required in Group I–3, F, H and S occupancies, other than parking structures accessible to the public.

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

**Comm 62.1014 Exit access.** This is a department exception to the requirements in IBC section 1014.3: The length of a

common path of egress travel requirements shall not be limited within townhouse dwelling units provided the townhouse complies with all of the following:

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

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

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

**Comm 62.1015 Refrigerated spaces.** Substitute the following wording for the exception in IBC section 1015.5: Where using refrigerants in quantities limited to the amounts based on the volume set forth in ch. Comm 45.

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

**Comm 62.1016 Exit access travel distance. (1)** Substitute the following wording for the requirements, but not the exceptions, in IBC section 1016.1:

(a) Exits shall be so located on each story such that the maximum length of exit access travel, measured from the most remote point within a story to the entrance to an exit along the natural and unobstructed path of egress travel, shall not exceed the distances given in Table 1016.1.

(b) Where the path of exit access includes unenclosed stairways or ramps within the exit access, the distance of travel on such means of egress components shall also be included in the travel distance measurement. The measurement along stairways shall be made on a plane parallel and tangent to the stair tread nosings in the center of the stairway.

(2) Substitute the following wording for the exception 3. in IBC section 1016.1: In other than occupancy Groups H and I, the exit access travel distance to a maximum of 50 percent of the exits is permitted to be measured from the most remote point within a building to an exit using unenclosed stairways or ramps when connecting a maximum of 2 stories. The two connected stories shall be provided with at least two means of egress. Such interconnected stories shall not be open to other stories. The measurement along stairways shall be made on a plane parallel and tangent to the stair tread nosings in the center of the stairway.

(3) This is a department exception to the requirements in IBC section 1016.1: In other than occupancy Groups H and I, exit access travel distance is permitted to be measured from the most remote point within a building to an exit using unenclosed stairways or ramps in the first and second stories in building equipped throughout with an automatic sprinkler system in accordance with IBC section 903.3.1.1. The first and second stories shall be provided with at least two means of egress. Such interconnected stories shall not be open to other stories. The measurement along stairways shall be made on a plane parallel and tangent to the stair tread nosings in the center of the stairway.

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

**Comm 62.1017 Corridor continuity.** This is a department exception to the requirements in IBC section 1017.5: Other spaces or rooms constructed as required for corridors, and that are adjacent to a fire–resistance–rated corridor, shall not be construed as intervening rooms; and may be open to the corridor when all of the following are satisfied:

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

in IBC Table 508.2.(3) The spaces are arranged so as to not obstruct access to the required exits.

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

**Comm 62.1019 Minimum number of exits. (1)** Substitute the following wording for the requirements in IBC section 1019.1: All rooms and spaces within each story shall be provided with and have access to the minimum number of approved independent exits required by Table 1019.1 based on the occupant load of the story. For the purposes of this chapter, occupied roof shall be provided with exits as required for stories. The required number of exits from any story, basement or individual space shall be maintained until arrival at grade or the public way.

(2) These are department exceptions to the requirements in IBC section 1019.1:

(a) As modified by IBC section 1015.1.

(b) As modified by IBC section 1019.2.

(c) Rooms and spaces within each story provided with and having access to a means of egress that complies with Exception 3 or 4 in IBC section 1016.1 shall not be required to be provided the minimum number of approved independent exits required by Table 1019.1 on each story.

(d) Buildings of Group I–3 occupancy that are used as guard towers, provided the towers are no higher than 2 stories above grade, accommodate no more than 10 occupants, and have a travel distance of no more than 75 feet.

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

**Comm 62.1020** Vertical exit enclosures. The exceptions 4., 8., and 9. in IBC section 1020.1 are not included as part of this code.

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

**Comm 62.1101 Design.** These are department rules in addition to the requirements in IBC section 1101.2 and ICC/ANSI A117.1 sections 1003 and 1004:

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

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

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

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

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

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

Comm62.1103Scopingrequirements.(1)DETACHED BUILDINGS.The requirements in IBC section1103.2.4 are not included as part of this code.

(2) LIMITED ACCESS SPACES. Substitute the following wording for the requirements in IBC section 1103.2.8: (a) 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.

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

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

**Comm 62.1104** Accessible route. (1) GOVERNMENT-OWNED OR -OPERATED FACILITIES. This is a department limitation to the exception in IBC section 1104.4, Exception 1.: Government-owned or -operated facilities that are outside the scope of sub. (2) and IBC section 1104.3.2.

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

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

**Comm 62.1107 General dwelling unit and sleeping unit exceptions. (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 or sleeping units intended to be occupied as a residence, every dwelling 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 or sleeping units intended to be occupied as a residence, every dwelling 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 or sleeping units intended to be occupied as a residence, every dwelling 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 or sleeping units intended to be occupied as a residence, every dwelling and sleeping unit intended to be occupied as a residence shall be a Type B unit.

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

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

(c) Group R-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 or sleeping units intended to be occupied as a residence, every dwelling 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 request a reduction in the number of Type A or Type B dwelling units due to site impracticality through the petition for variance procedures specified in ch. Comm 61.

27

### DEPARTMENT OF COMMERCE

Comm 62.1200

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

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

**Comm 62.1110 Signage. (1)** PUBLIC PARKING. (a) *General.* Substitute the following wording for the requirements for location 1 in IBC section 1110.1: Except as specified par. (b), accessible parking spaces required in IBC section 1106 for the general public shall be identified with a sign complying with the accessible parking sign requirements specified in s. Trans 200.07.

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

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

(2) DIRECTIONAL AND INFORMATIONAL SIGNS. (a) Substitute the following wording for the introductory paragraph of IBC section 1110.3: Signs indicating directional information or information about functional spaces or signage indicating special accessibility provisions shall be provided as follows:

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

**Note:** Refer to s. 101.123, Stats., for requirements for designating smoking areas. **History:** CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1200 Carbon monoxide alarms.** These are department rules in addition to the requirements in IBC chapter 12:

(1) DEFINITIONS. In this section:

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

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

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

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

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

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

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

**Note:** Section 101.145 (1) (b) 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. 4.

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

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

1. In the basement of the building if the basement has a fuel-burning appliance. 2. Within 15 feet of each sleeping area of a unit that has a fuel-burning appliance.

 Within 15 feet of each sleeping area of a unit that has a teel outling appliance.
Within 15 feet of each sleeping area of a unit that is immediately adjacent to a unit that has a fuel-burning appliance.

4. In each room that has a fuel-burning appliance and that is not used as a sleeping area. A carbon monoxide detector shall be installed under this subdivision not more than 75 feet from the fuel-burning appliance.

5. In each hallway leading from a unit that has a fuel-burning appliance, in a location that is within 75 feet from the unit, except that, if there is no electrical outlet within this distance, the owner shall place the carbon monoxide detector at the closest available electrical outlet in the hallway.

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

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

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

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

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

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

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

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

1. A false alarm from a carbon monoxide detector if the carbon monoxide detector was reasonably maintained by the owner of the residential building.

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

2. The installation of carbon monoxide alarms or detectors in accordance with s. 101.149 (2) and (3), Stats., shall be throughout the entire building where a portion of the building includes a residential building.

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

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

5. The installation of carbon monoxide alarms or detectors is not required in buildings if construction of the building was initiated before October 1, 2008, or if the department approved the plans for the construction of the building under s. Comm 61.30, provided the building does not have an attached enclosed garage and either of the following circumstances applies:

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

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

(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. Comm 61.30 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. Comm 61.30.

(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. Comm 61.30 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. Comm 61.30.

(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. Comm 5.73 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 commerce or the department of health services determines after an inspection of a building under this section or s. 254.74 (1g) that the owner of the building has violated sub. (2) or (3), the respective department shall issue an order requiring the person to correct the violation within 5 days or within such shorter period as the respective department determines is necessary to protect public health and safety. If the person does not correct the violation within the time required, he or she shall forfeit \$50 for each day of violation occurring after the date on which the respective department finds that the violation was not corrected.

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

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

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

2. For a 2nd or subsequent offense, the person is guilty of a Class I felony. History: CR 08–085: cr. Register May 2009 No. 641, eff. 6–1–09; corrections in (3) (a) to (d) and (4) made under s. 13.92 (4) (b) 2. and 7., Stats., Register May 2009 No. 641.

Comm 62.1204 Interior environment. Substitute the following wording for the requirements and exception in IBC section 1204.1: Interior spaces intended for human occupancy shall conform to the IMC.

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

Comm 62.1206 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. Comm 82 for requirements for storm water piping.

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

Comm 62.1210 Toilet rooms. These are department rules in addition to the requirements in IBC section 1210.5:

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

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

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

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

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

Comm 62.1405 Wall coverings. (1) EXTERIOR WIN-DOWS AND DOORS. The requirements in IBC section 1405.12 are not included as part of this code.

(2) POLYSTYRENE SHEATHING. This is a department rule in addition to the requirements in IBC section 1405.13.1:

(a) Extruded polystyrene sheathing having all of the characteristics in par. (b) may be utilized as the required backing material for vinyl siding when used in accordance with all of the limitations in par. (c).

(b) 1. Extruded, rigid, and cellular.

2. Type IV, as specified in ASTM C 578.

3. Thickness of at least one inch.

(c) 1. On-center stud spacing of 16 inches or less.

2. Mean roof height of 40 feet or less.

3. Wind exposure category of B or C, as established in IBC section 1609.4; and the building is not sited on the upper half of an isolated hill or escarpment meeting conditions 1, 2, and 3 in IBC section 1609.1.1.1.

**History:** CR 04–016: cr. Register December 2004 No. 588, eff. 1–1–05; CR 06–120: am. (2) (c) 3. Register February 2008 No. 626, eff. 3–1–08.

Comm 62.1407 Metal composite materials. (1) APPROVAL. Substitute the following wording for the requirements in IBC section 1407.5: Results of approved tests or an engineering analysis shall be made available to the code official upon request to verify compliance with the requirements of IBC chapter 16 for wind loads.

(2) FIRE-RESISTANCE RATING. Substitute the following wording for the requirements in IBC section 1407.8: Where MCM systems are used on exterior walls required to have a fire-resistance rating in accordance with IBC section 704, evidence shall be made available to the code official upon request that the required fireresistance rating is maintained.

(3) LABELING. The requirements in IBC section 1407.13 are not included as part of this code.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: cr. (4) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: am. (title) and (2), r. (3), renum. (4) to be (3) and am. Register February 2008 No. 626, eff. 3 - 1 - 08.

Comm 62.1505 Roof covering classification. The requirements in Footnote a in IBC Table 1505.1 are not included as part of this code.

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

Comm 62.1506 Roof covering materials. Substitute the following wording for the requirements in IBC section 1506.3: Roof covering materials shall conform to the applicable standards listed in IBC chapter 15.

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

DEPARTMENT OF COMMERCE

**Comm 62.1507 Roof slope.** (1) This is a department exception to the requirements in IBC section 1507.12.1: Thermoset single–ply membrane roofs may have a design slope of less than 2 percent, if permitted by the manufacturer's literature or listing criteria.

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

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

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

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

**Comm 62.1603 Construction documents. (1)** FLOOR DESIGN DATA. Item 5 under the exception in IBC section 1603.1 is not included as part of this code.

(2) 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.

(3) FLOOD DESIGN. The requirements in IBC section 1603.1.6 are not included as part of this code.

(4) SPECIAL INSTRUCTIONS. The requirements in IBC section 1603.1.8 are not included as part of this code.

(5) LIVE LOADS POSTED. Substitute the following wording for the requirements in IBC section 1603.3: 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.

(6) OCCUPANCY PERMITS. The requirements in IBC section 1603.4 are not included as part of this code.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: renum. (1) and (2) to be (3) and (4), cr. (1) and (2) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: renum. (1) to (4) to be (2) and (4) to (6), cr. (1) and (3) Register February 2008 No. 626. eff. 3–1–08.

**Comm 62.1604 Alternate evaluations. (1)** IN-SITU LOAD TESTS. Substitute the following wording for the requirements in IBC section 1604.6: The building official is authorized to require an engineering analysis or a load test, or both, of any construction whenever there is reason to question the safety of the construction for the intended occupancy.

(2) ALTERNATE APPROVALS. Substitute the following wording for the requirements in IBC section 1604.7: Materials and methods of construction that are not capable of being designed by approved engineering analysis or that do not comply with the applicable material design standards listed in IBC chapter 35 shall be submitted for approval in accordance with subch. V of ch. Comm 61.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: renum. to be (1), cr. (2) Register December 2004 No. 588, eff. 1–1–05.

**Comm 62.1607 Live loads.** (1) RESIDENTIAL FLOOR LOADS. Substitute the following wording and live loads for the requirements in line 28 and footnote j of IBC Table 1607.1:

Table 1607.1 Minimum Uniformly Distributed Live Loads and Minimum Concentrated Live Loads<sup>g</sup>

Occupancy or Use	Uniform (psf)	Concentrated (lbs.)
28. Residential		
Three or more attached dwelling units not more than 3		
stories high, with separate means of egress for each unit		
Uninhabitable attics without storage <sup>i</sup>	5	
Uninhabitable attics with storage <sup>i, j, k</sup>	20	
All other areas except balconies	40	
Hotels and Group $R-2^{-1}$		
Private rooms and corridors serving them	40	
Public rooms and corridors serving them	100	

j. For attics with storage and constructed with trusses, this live load need only be applied to those portions of the bottom chord where there are two or more adjacent trusses with the same web configuration capable of containing a rectangle 42 inches high by 2 feet wide or greater, located within the plane of he 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 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) CONCENTRATED LOADS. Substitute the following wording for the requirements in IBC section 1607.4: Floors and other similar surfaces shall be designed to support the uniformly distributed live loads prescribed in IBC section 1607.3 or the concentrated load, in pounds, given in IBC Table 1607.1, whichever produces the greater load effects. Unless otherwise specified, the indicated concentration shall be assumed to be uniformly distributed over an area 2.5 feet by 2.5 feet and shall be located so as to produce the maximum load effects in the structural members.

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

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: renum. to (3), cr. (1), (2), (4) and (5) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: r. and recr. (1) and Table 1607.1, r. (4) and (5) Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1608 Snow loads. (1)** UNBALANCED SNOW LOADS. This is a department alternative to the requirements in IBC section 1608.1: Unbalanced snow loads on a hip or gable roof may be calculated in accordance with the following equation:

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

WISCONSIN ADMINISTRATIVE CODE

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 62.1608–1 and 62.1608–2

 $C_a$  = Accumulation factor; see Table 62.1608–3

Table	62.1	608-	-1

Non-Slippe	ery Roof <sup>a</sup>
<b>Roof Slope,</b> α	Factor, Cs
$\alpha \leq 30^{\circ}$	1.0
$30^{\circ} < \alpha \leq 70^{\circ}$	$(70^{\circ} - \alpha) / 40^{\circ}$
70° < α	0

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

Table 62.1608-2	
Unchatmated Slippon	Deefa

Unobstructed S	ippery koof"
<b>Roof Slope,</b> $\alpha$	Factor, Cs
$\alpha \leq 15^{\circ}$	1.0
$15^{\circ} < \alpha \leq 60^{\circ}$	$(60^{\circ} - \alpha) / 45^{\circ}$
$60^{\circ} < \alpha$	0

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

Table 62.1608–3 Accumulation Factor

Roof Slope, $\alpha$ Factor, Ca $\alpha \leq 15^{\circ}$ N/A. Analysis for balanced loading only.	Accumulation	in racior
anced loading only.	Roof Slope, $\alpha$	Factor, Ca
	$\alpha \leq 15^{\circ}$	•
$15^{\circ} < \alpha \le 20^{\circ} \qquad \qquad 0.25 + \alpha / 20^{\circ}$	$15^{\circ} < \alpha \leq 20^{\circ}$	$0.25 + \alpha / 20^{\circ}$
$20^{\circ} < \alpha \le 90^{\circ} \qquad 1.25$	$20^{\circ} < \alpha \leq 90^{\circ}$	1.25

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

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

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

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

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: cr. (3) and (4) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: r. (1) and (2), renum. (3) and (4) to be (1) and (2) and am. (1) (intro.), (2) (intro.) and (a) 1. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1611 Roof drains.** This is a department informational note to be used under IBC section 1611.1:

**Note:** See ch. Comm 82 for requirements to not connect a secondary roof–drain system to a primary roof–drain system, and to discharge a secondary roof–drain system to the ground surface.

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

**Comm 62.1612** Flood loads. The requirements in IBC section 1612 are not included as part of this code.

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

**Comm 62.1613 Earthquake loads. (1)** Exception 1 in IBC section 1613.1 is not included as part of this code.

(2) The requirements in IBC section 1613.4 are not included as part of this code.

(3) This is a department informational note to be used under IBC section 1613.5:

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

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

**Comm 62.1700** Structural tests and special inspections. The requirements in IBC chapter 17, except for the requirements in IBC sections 1710 to 1715, are not included as part of this code.

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

**Comm 62.1802 Foundation and soil investigation.** (1) GENERAL. Substitute the following wording for the requirements in IBC section 1802.1: Foundation and soils investigations shall be conducted in conformance with IBC sections 1802.2 through 1802.6.

(2) WHERE REQUIRED. Substitute the following wording for the requirements, but not the exception, in IBC section 1802.2: The owner or applicant shall make a foundation and soils investigation available to the building official, upon request, where required in IBC sections 1802.2.1 through 1802.2.7.

(3) QUESTIONABLE SOIL. Substitute the following wording for the requirements in IBC section 1802.2.1: Where the classification, strength or compressibility of the soil is in doubt, or where a load-bearing value superior to that specified in this code is claimed, an investigation complying with the provisions of IBC sections 1802.4 through 1802.6 shall be made.

(4) EXPANSIVE SOILS. Substitute the following wording for the requirements in IBC section 1802.2.2: In areas likely to have expansive soil, soil tests shall be conducted to determine where such soils do exist.

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

**Comm 62.1803 Grading and fill in flood hazard areas.** The requirements in IBC section 1803.4 are not included as part of this code.

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

**Comm 62.1805 Footings and foundations.** (1) ALTERNATE SETBACK AND CLEARANCE. Substitute the following wording for the requirements in IBC section 1805.3.5: Alternate setbacks and clearances are permitted, subject to the approval of the building official.

(2) SHALLOW POST FOUNDATIONS. This is a department alternative to the requirements in IBC section 1805.7.2: The design criteria in ANSI/ASAE EP 486.1 may be used in lieu of the design criteria in IBC section 1805.7.2.

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

**Comm 62.1807** Flood hazard areas. The requirements in IBC section 1807.1.2.1 are not included as part of this code. History: CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1808 Pier and pile foundations. (1)** DEFI-NITION OF NEUTRAL PLANE. This is a department definition in addition to the definitions in IBC section 1808.1: NEUTRAL PLANE. A pile's neutral plane is the level at which drag load, accumulated from the top down, added to the long-term static service load, equals the upward acting shaft resistance accumulated from the bottom up, added to the pile's toe resistance.

(2) DOWNDRAG. This is a department rule in addition to the requirements in IBC section 1808.2.2: Investigations and reports

31

for pier or pile foundations shall include analysis of whether downdrag is anticipated. Where downdrag is anticipated, the report shall include a determination of the position of the pile's neutral plane, an estimate of the soil settlement at the neutral plane, and a determination of the maximum load at the neutral plane.

(3) DETERMINATION OF ALLOWABLE LOADS. Substitute the following wording for the requirements in IBC section 1808.2.8.1:

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

(b) The factor of safety to be used for pier or pile 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 load capacity.

(e) 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 allowable capacity.

(f) A minimum factor of safety of 2.0 shall be used for occupiable structures provided that all of the conditions in pars. (a) to (e) are met. A minimum factor of safety of 1.5 may be used for nonoccupiable structures, provided that the deep foundations are required only to control settlement, and it can be demonstrated that deep foundations are not required to prevent a bearing capacity failure.

(4) LOAD TESTS. This is a department alternative to the requirements in IBC section 1808.2.8.3: The ultimate capacity of the pile shall be defined as the load at which the average pile head deflection is defined by the following equation:

 $\delta = (PI/AE) + 0.15" + (B/120)$ 

Where:

 $\delta$  = average pile head deflection, inches

P = applied load, pounds

l = pile length, inches

A = transformed pile area of pile (to steel)

E = modulus of elasticity (of steel)

B = outside diameter (or width) of pile, inches

The calculation shall be predicated on an assumed end-bearing condition.

(5) PILES IN SUBSIDING AREAS. Substitute the following wording for the requirements in IBC section 1808.2.11:

(a) Where piles 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 piles by the subsiding upper strata.

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

(c) The position of the pile'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 pile, which occurs at the neutral plane, shall be determined.

(6) SPECIAL INSPECTION. The requirements in IBC section 1808.2.22 are not included as part of this code.

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

**Comm 62.1809 Driven pile foundations.** Substitute the following wording for the requirements in IBC section

1809.1.3: Any substantial sudden increase in rate of penetration of a timber pile shall be investigated for possible damage. If the sudden increase in rate of penetration cannot be correlated to soil strata, the pile shall be removed for inspection or rejected, or shall be assigned a reduced capacity commensurate with the loss of end-bearing in lieu of removing or rejecting the pile.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 06–120: renum. Comm 62.1808 to be Comm 62.1809 and am. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1810 Concrete pile foundations.** (1) DIMENSIONS FOR DRILLED OR AUGERED UNCASED PILES. Substitute the following wording for the exception in IBC section 1810.3.2: The length of the pile is permitted to exceed 30 times the diameter, provided that the design and installation of the pile foundation is under the direct supervision of a registered design professional knowledgeable in the field of soil mechanics and pile foundations.

(2) DIMENSIONS FOR DRIVEN UNCASED PILES. Substitute the following wording for the exception in IBC section 1810.4.2: The length of the pile is permitted to exceed 30 times the diameter, provided that the design and installation of the pile foundation is under the direct supervision of a registered design professional knowledgeable in the field of soil mechanics and pile foundations.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 06–120: renum. Comm 62.1809 to be Comm 62.1810 and am. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1901 General requirements for concrete.** (1) CONSTRUCTION DOCUMENTS. The requirements in IBC section 1901.4 are not included as part of this code.

(2) SPECIAL INSPECTION. The requirements in IBC section 1901.5 are not included as part of this code.

**History:** CR 04–016: cr. Register December 2004 No. 588, eff. 1–1–05; CR 06–120: r. and recr. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1903** Specifications for concrete. Substitute the following wording for the requirements in IBC section 1903.1: Materials used to produce concrete, concrete itself and testing thereof shall comply with the applicable standards listed in ACI 318.

**History:** CR 04–016: cr. Register December 2004 No. 588, eff. 1–1–05; CR 06–120: am. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1908 Deletions. (1)** Exception (a) in IBC section 1908.1.15 is not included as part of this code.

(2) The exception under (b) in IBC section 1908.1.15 is not included as part of this code.

(3) Exception 1 under (c) in IBC section 1908.1.15 is not included as part of this code.

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

**Comm 62.1913** Shotcrete clearance. The exception in IBC section 1913.4.2 is not included as part of this code.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 06–120: renum. Comm 62.1914 to be Comm 62.1913 and am. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.1915 Column approvals.** Substitute the following wording for the requirements in IBC section 1915.6: Details of column connections and splices shall be shop–fabricated by approved methods and testing. Shop–fabricated concrete–filled pipe columns shall be inspected by a representative of the manufacturer at the plant.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 06–120: renum. Comm 62.1916 to be Comm 62.1915 and am. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.2101 Masonry construction materials.** (1) PRESTRESSED MASONRY. Substitute the following wording for the requirements in IBC section 2101.2.3: Prestressed masonry shall be designed in accordance with chapters 1 and 4 of ACI 530/ASCE 5/TMS 402 and IBC section 2106.

(2) CONSTRUCTION DOCUMENTS. The requirements in IBC section 2101.3 are not included as part of this code.

(3) FIREPLACE DRAWINGS. The requirements in IBC section 2101.3.1 are not included as part of this code.

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

**Comm 62.2103 Cast stone masonry units.** These are department rules in addition to the requirements in IBC section 2103.4:

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

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

(3) Cast stone masonry units shall have a minimum compres-

sive strength of 6500 psi and a maximum water absorption of 6% when tested as 2-x 2–inch cylinders or cubes.

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

**Comm 62.2105 Masonry quality.** The requirements in IBC section 2105.1 are not included as part of this code. **History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02.

**Comm 62.2109 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) OPENINGS. This is a department rule in addition to the requirements in IBC section 2109.4.1: Unless evidence is provided to show that openings do not cause lateral stability and stress requirements to be exceeded, the amount of openings in a masonry wall shall not exceed the limits set forth in Table 62.2109–1.

### Table 62.2109–1

Maximum Ratio of Laterally Unsupported Height or

### Length to Thickness for Exterior Walls With Openings<sup>†</sup>

Type of Masonry	Percent of Openings at Any Horizontal Plane of Wall			
	20	40	60	Over 60
Single wythe walls of solid or grouted walls of solid units	20	16	12	Submit design
All other masonry	18	14	10	calculations

†The percentage of openings shall be calculated for each 100 lineal feet of wall or portion thereof at any horizontal plane of wall.

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

masonry to allow for expected growth of clay products and shrinkage of concrete products.

(a) *Expansion and shrinkage*. Joints commensurate with lateral stability requirements shall be installed in all exterior

(b) *Vertical jointing*. Vertical movement joints shall be provided at a spacing in compliance with Table 62.2109–2.

## Table 62.2109–2

## **Maximum Spacing Of Exterior Masonry Movement Joints**

Between Unrestrained Ends<sup>†</sup> (Feet)

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

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

**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.

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

**Comm 62.2204 Connections. (1)** WELDING. Substitute the following wording and informational note for the requirements in IBC section 2204.1: The details of design, workmanship

and technique for welding, inspection of welding, and qualifications of welding operators shall conform to the requirements of the specifications listed in IBC sections 2205, 2206, 2207, 2209 and 2210.

**Note:** The rules pertaining to registration of structural welders are specified in ch. Comm 5.

(2) BOLTS. Substitute the following wording for the requirements in IBC section 2204.2: The design, installation and inspection of bolts shall be in accordance with the requirements of the specifications listed in IBC sections 2205, 2206, 2209 and 2210. **History:** CR 06–120: cr. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.2206 Steel Joists.** The requirements in IBC sections 2206.3 to 2206.5 are not included as part of this code.

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

DEPARTMENT OF COMMERCE

Comm 62.2902

**Comm 62.2303 Minimum standards and quality. (1)** LABELING. Substitute the following for the requirements in IBC section 2303.2.1 item 1.: The identification mark of an approved agency.

(2) TRUSS DESIGN DRAWINGS. The requirements in IBC section 2303.4.1.2 to 2303.4.1.4 are not included as part of this code.

(3) TRUSSES. Substitute the following wording for the requirements in IBC section 2303.4.2: In addition to IBC sections 2303.4.1, 2303.4.1.1 and 2303.4.1.5 through 2303.4.1.7, the design, manufacture and quality assurance of metal-plate-connected wood trusses shall be in accordance with TPI 1.

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

**Comm 62.2304** Girder ends. This is a department rule in addition to the requirements in IBC section 2304.11.2.5: A moisture barrier shall be provided between an untreated or nondurable wood girder and an exterior masonry or concrete bearing surface.

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

**Comm 62.2409 Glass and glazing for elevators.** This is a department informational note to be used under IBC section 2409:

**Note:** See ch. Comm 18 [ASME A17.1] for additional glass and glazing requirements relating to elevators. Those requirements include a prohibition against elevator hoistway windows that give a false appearance of a floor level.

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

**Comm 62.2503 Gypsum board and plaster.** The requirements in IBC section 2503.1 are not included as part of this code.

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

**Comm 62.2701 Electrical code.** This is a department informational note to be used under IBC section 2701.1:

Note: As defined in s. Comm 61.04 (6), "ICC Electrical Code" means ch. Comm 16.

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

**Comm 62.2900** 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. Comm 91.10 and 91.11 may be substituted for water closets required under IBC chapter 29.

2. Privies recognized under ch. Comm 91 may be substituted for water closets required under IBC chapter 29 in any of the following situations:

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

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

c. As approved by the department.

3. Portable restrooms recognized under ch. Comm 91 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, waterbased lavatories shall be provided in numbers to accommodate the number of people served by the water closets and urinals.

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

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

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

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

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

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

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

**Comm 62.2901 Plumbing code.** This is a department informational note to be used under IBC section 2901.1:

**Note:** As defined in s. Comm 61.04 (12) and (13), "IPC and International Plumbing Code" and "IPSC and International Private Sewage Code" mean chs. Comm 81 to 87.

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

**Comm 62.2902 Plumbing fixtures. (1)** MINIMUM NUM-BER OF FIXTURES. (a) *Exceptions*. These are department exceptions to the requirements in IBC section 2902.1:

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

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

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

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

5. Service sinks may be omitted for any occupancy where privies have been substituted for water closets under s. Comm 62.2900 (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 Comm 90 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. Comm 90.

**Note:** Chapter Comm 91 has requirements for equal speed of access to toilets for each gender, at facilities where the public congregates that do not fall under the scope of this chapter.

(c) *Substitutions in IBC Table 2902.1*. 1. Substitute the following wording for the water closets heading in IBC Table 2902.1: Water closets<sup>e</sup> (see s. Comm 62.2902 (1) (a) 1. for urinals).

2. Substitute the following wording for the drinking fountains heading in IBC Table 2902.1: Drinking fountains (see s. Comm 62.2902 (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.

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

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

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

(3) DISTRIBUTION OF PLUMBING FACILITIES AND NUMBER OF OCCUPANTS OF EACH SEX. Substitute the following wording for the requirements in IBC section 2902.3: Except as otherwise specified in IBC Table 2902.1, the required water closets, lavatories, and showers or bathtubs shall be distributed equally between the sexes based on the percentage of each sex anticipated in the occupant load. The occupant load shall be composed of 50% of each sex, unless statistical data approved by the code official indicate a different distribution of the sexes.

(4) PUBLIC FACILITIES. This is a department exception to the requirements in IBC section 2902.4: 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 2902.4:

**Note:** Additional location 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 2902.4.3: All toilet facilities shall be free of charge.

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

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

**Comm 62.3001 Elevators. (1)** SCOPE. Substitute the following wording for the requirements in IBC section 3001.1: This chapter governs the design, construction, installation, alteration and repair of elevators, dumbwaiters, escalators, moving walks and their components.

(2) REFERENCED STANDARDS. Substitute the following wording for the requirements in IBC section 3001.2: Except as otherwise provided for in this code, the design, construction, installation, alteration, repair and maintenance of elevators, dumbwaiters, escalators, moving walks and their components shall comply with ch. Comm 18. (3) 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. Comm 18.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–043: cr. (4) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: r. (4) Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.3004 Hoistways. (1)** VENTING. This is a department rule in addition to the requirements in IBC section 3004.3: A ventilation opening in a hoistway wall, where provided, shall have guards securely anchored to the supporting structure inside the hoistway. The guards shall consist of a wiremesh screen of at least 0.0915–inch diameter steel wire with openings that will reject a ball one–inch in diameter, or expanded metal screen of equivalent strength and open area.

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

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

(b) *Elevator pits.* Drains or sumps complying with ss. Comm 82.33 and 82.36 shall be provided in elevator pits. Connection of these drains and sumps to a sanitary system is prohibited.

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 01–111: r. and recr. (2) Register June 2002 No. 558, eff. 7–1–02; CR 04–016: am. (2) (intro.) Register February 2008 No. 526, eff. 3–1–05; CR 06–120: am. (2) (intro.) Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.3006 Machine rooms. (1)** ACCESS. This is a department informational note to be used under IBC section 3006.1:

**Note:** See ch. Comm 18 for additional machine room access requirements. Those requirements include a prohibition against accessing an elevator machine room through a toilet room, sleeping room or private space; and a prohibition against accessing other spaces in a building through an elevator machine room.

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

(3) SHUNT TRIP. Substitute the following wording for the requirements in IBC section 3006.5: Where elevator hoistways or elevator machine rooms containing elevator control equipment are protected with automatic sprinklers, a means installed in accordance with NFPA 72, section 6.15.4, Elevator Shutdown, shall be provided to disconnect automatically the main line power supply to the affected elevator prior to the application of water. This means shall not be self-resetting. The activation of sprinklers outside the hoistway or machine room shall not disconnect the main line power supply.

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

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 01–111: renum. (1) and (2) to be (2) and (3) and cr. (1) Register June 2002 No. 558, eff. 7–1–02; CR 04–016: renum. (3) to be (4), cr. (3) Register December 2004 No. 588, eff. 1–1–05.

**Comm 62.3100 Special construction.** These are department rules in addition to the requirements in IBC chapter 31: Public mausoleum structures shall be designed, constructed and maintained in accordance with this code. Mausoleums shall be classified as a Group S–1 storage occupancy and shall be constructed of reinforced concrete or other materials of similar durability.

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

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

35

DEPARTMENT OF COMMERCE

Comm 62.3600

**Comm 62.3102 Blower equipment.** Substitute the following wording for requirement 2 in IBC section 3102.8.1.2: Blowers shall be provided with inlet screens, belt guards and other protective devices as required to provide protection from injury. **History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 06–120: am. Register February 2008 No. 626, eff. 3–1–08.

**Comm 62.3103 Temporary structures.** This is a department rule in addition to the requirements in IBC section 3103: Under IBC sections 3103.1.1 and 3103.2, the requirements for permits and construction documents for temporary structures are at the option of the local code official.

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

**Comm 62.3104 Pedestrian walkways and tunnels.** Substitute the following wording for the requirements and exception in IBC section 3104.2: Buildings that are connected in accordance with IBC section 3104 shall be considered to be separate structures.

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

**Comm 62.3109** Swimming pool enclosures. Substitute the following informational note for the requirements in IBC section 3109.

**Note:** See ch. Comm 90 for requirements for swimming pool enclosures. **History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02.

**Comm 62.3200 Encroachments into the public right–of–way.** The requirements in IBC chapter 32 are not included as part of this code.

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

**Comm 62.3300 Safeguards during construction.** Except for the requirements in IBC sections 3302.1 and 3303.5, the requirements in IBC chapter 33 are not included as part of this code.

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

**Comm 62.3307 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

(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

(6) FAILURE TO COMPLY; INJUNCTION. If any excavator fails to comply with this section, any aggrieved person may commence an action to obtain an order under ch. 813 directing such excavator to comply with this section and restraining the excavator from further violation thereof. If the aggrieved person prevails in the action, he or she shall be reimbursed for all his or her costs and disbursements together with such actual attorney fees as may be approved by the court." History: CR 01–139: renum. from Comm 62.3300 (2) Resister June 2002 No.

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

**Comm 62.3400 Existing structures.** The requirements in IBC chapter 34 are not included as part of this code.

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

**Comm 62.3500 Referenced standards. (1)** INTRO-DUCTION. 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. Comm 61.03 (1) (b) and (3) (a).

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

(a) ASTM C 578–1995, Standard Specification for Rigid Cellular Polystyrene Thermal Insulation.

(b) NFPA 30A–2000, Code for Motor Fuel Dispensing Facilities and Repair Garages.

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

(d) NFPA 750–1996, Standard on Water Mist Fire Protection Systems.

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

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

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

ASTM standards may be purchased from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959.

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

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

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

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 01–139: am. Register June 2002 No. 558, eff. 7–1–02; CR 04–016: r. and recr. Register December 2004 No. 588, eff. 1–1–05; CR 06–120: am. (1), r. (2) and (3) (a), renum. (3) (b) to (e) to be (3) (a) to (d) and am. (3) (c) Register February 2008 No. 626, eff. 3–1–08; CR 08–085: cr. (3) (e) and (f) Register May 2009 No. 641, eff. 6–1–09.

**Comm 62.3600 Appendices. (1)** EXCLUSIONS. The provisions in IBC Appendices A, B, D, and F to K are not included as part of this code.

(2) APPENDIX C. The provisions in IBC Appendix C apply to Group U agricultural buildings, as described in IBC section C 101.1, that are not exempt from this code as outlined in ss. Comm 61.01 and 61.02 (2) and (3).

**History:** CR 00–179: cr. Register December 2001 No. 552, eff. 7–1–02; CR 04–016: am. (1) Register December 2004 No. 588, eff. 1–1–05; CR 06–120: am. (1) Register February 2008 No. 626, eff. 3–1–08.