

COMMERCIAL BUILDING CODE UPDATE 2010

Part III of III

**Northwest Wisconsin Building
Inspectors Association
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What's in **Part III of III?**

Part III of III continues with the refresher on Wisconsinisms to the IBC portion [Ch. Comm 62] of the WCBC beginning with Chapter 14 of the IBC

Wisconsinisms

Ch Comm 62

IBC Ch. 14

Comm 62.1405 Wall coverings

- **(1) EXTERIOR WINDOWS AND DOORS.**
(2) POLYSTYRENE SHEATHING.

Comm 62.1405 Wall coverings

- **(1) EXTERIOR WINDOWS AND DOORS.** The requirements in IBC section 1405.12 are not included as part of this code.

Comm 62.1405 Wall coverings

- **(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

Comm 62.1407 Metal composite materials

- **(1) APPROVAL.**
- **(2) FIRE-RESISTANCE RATING.**
- **(3) LABELING.**

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.

Comm 62.1407 Metal composite materials

- **(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 fire-resistance rating is maintained.

Comm 62.1407 Metal composite materials

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

Wisconsinisms

Ch Comm 62

IBC Ch. 15

Comm 62.1505 Roof covering classification.

- The requirements in Footnote a in IBC Table 1505.1 are not included as part of this code.**

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.

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.**

Comm 62.1507 Roof slope.

- **(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**



Comm 62.1507 Roof slope.

- (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.



Comm 62.1507 Roof slope.

- (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.

Wisconsinisms

Ch Comm 62

IBC Ch. 16

Comm 62.1603 Construction documents

- (1) FLOOR DESIGN DATA.
- (2) ROOF SNOW LOAD.
- (3) FLOOD DESIGN.
- (4) SPECIAL INSTRUCTIONS.
- (5) LIVE LOADS POSTED.
- (6) OCCUPANCY PERMITS.

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.**

Comm 62.1603 Const'n Doc's

- **(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.

Comm 62.1603 Construction documents

- **(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.

Comm 62.1603 Construction documents

- **(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.

Comm 62.1603 Construction documents

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

Comm 62.1604 Alternate evaluations

- Comm 62.1604 Alternate evaluations.
- (1) IN-SITU LOAD TESTS.
- (2) ALTERNATE APPROVALS.



Comm 62.1604 Alternate evaluations

- **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.**

Comm 62.1604 Alternate evaluations

- **(2) ALTERNATE APPROVALS.** Substitute the following wording or 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

Comm 62.1607 Live loads

- **Comm 62.1607 Live loads.**
- **(1) RESIDENTIAL FLOOR LOADS.**
- **(2) CONCENTRATED LOADS.**
- **(3) TRUCK AND BUS GARAGES.**

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:
- **Refer to code for Table modifications**

Comm 62.1607 Live loads

- **(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.

Comm 62.1607 Live loads

- **(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

Comm 62.1608 Snow loads

- Comm 62.1608 Snow loads.
- (1) UNBALANCED SNOW LOADS.
- (2) EXISTING ROOFS.



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:
$$S = S_s(I_s)(C_b C_w C_s C_a)$$

Where:

 - S** = Alternate unbalanced roof snow load
 - S_s** = Ground snow load from IBC Figure 1608.2
 - I_s** = Importance factor from IBC section 1608.1 [ASCE 7, Table 7-4]
 - C_b** = Basic roof snow load factor of 0.8
 - C_w** = Wind exposure factor of 1.0
 - C_s** = Slope factor; see Tables 62.1608-1 and 62.1608-2
 - C_a** = Accumulation factor; see Table 62.1608-3
- Refer to rules to see:
- Table 62.1608-1, Table 62.1608-2 and Table 62.1608-3

Comm 62.1608 Snow loads

- **(2) EXISTING ROOFS.** These are department rules in addition to the requirements in IBC section 1608.1
- **(a) *Buildings on the same property.***
- **(b) *Buildings on adjoining properties.***

Comm 62.1608 Snow loads

- **(2) EXISTING ROOFS. (a) Buildings on the same property.**
 - 1. Where an existing roof, regardless of the date of its construction, is horizontally within 15 feet of a proposed, taller structure on the same property, IBC section 1608.1 or an alternate recognized engineering method shall be applied to the existing roof, to address any drifting or sliding of snow onto the existing roof, as caused by the taller structure.**
 - 2. Where an analysis under subd. 1. shows that an existing roof or corresponding supporting elements will not be adequate to support the additional snow load caused by the taller structure, the existing roof or supporting elements shall be strengthened to support those loads, in accordance with this code**

Comm 62.1608 Snow loads

- **(2) EXISTING ROOFS.**
 - (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

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

Comm 62.1612 Flood loads

- **The requirements in IBC section 1612 are not included as part of this code.**

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

Wisconsinisms

Ch Comm 62

IBC Ch. 17

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**

Wisconsinisms

Ch Comm 62

IBC Ch. 18

Comm 62.1802 Foundation and soil investigation.

- **Comm 62.1802 Foundation and soil investigation.**
- **(1) GENERAL.**
- **(2) WHERE REQUIRED.**
- **(3) QUESTIONABLE SOIL.**
- **(4) EXPANSIVE SOILS.**

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.

Comm 62.1802 Foundation and soil investigation.

- **(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.**

Comm 62.1802 Foundation and soil investigation.

- **(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.

Comm 62.1802 Foundation and soil investigation.

- **(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

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.**

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) SHALLOWPOST 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

Comm 62.1807 Flood hazard areas.

- The requirements in IBC section 1807.1.2.1 are not included as part of this code.



Comm 62.1808 Pier and pile foundations.

- **(1) DEFINITION OF NEUTRAL PLANE**
- **(2) DOWNDRAG.**
- **(3) DETERMINATION OF ALLOWABLE LOADS.**
- **(4) LOAD TESTS.**
- **(5) PILES IN SUBSIDING AREAS.**
- **(6) SPECIAL INSPECTION.**

Comm 62.1808 Pier and pile foundations.

- **(1) DEFINITION 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.

Comm 62.1808 Pier and pile foundations.

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

Comm 62.1808 Pier and pile foundations.

- **(3) DETERMINATION OF ALLOWABLE LOADS.**
- **Five criteria are substituted for the language in IBC section 1808.2.8.1**
- **(a) through (f)**



Comm 62.1808 Pier and pile foundations (3)(a).

- **(3) DETERMINATION OF ALLOWABLE LOADS.**
- **(a) The allowable axial and lateral loads on piers or piles shall be determined by an approved formula, load tests or static analysis.**

Comm 62.1808 Pier and pile foundations (3)(b).

- **(3) DETERMINATION OF ALLOWABLE LOADS.**
- **(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.**



Comm 62.1808 Pier and pile foundations (3)(c).

- **(3) DETERMINATION OF ALLOWABLE LOADS.**
- **(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.**

Comm 62.1808 Pier and pile foundations (3)(d).

- **(3) DETERMINATION OF ALLOWABLE LOADS.**
- **(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.**

Comm 62.1808 Pier and pile foundations (3)(e).

- **(3) DETERMINATION OF ALLOWABLE LOADS.**
(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.

Comm 62.1808 Pier and pile foundations (3)(f).

- **(3) DETERMINATION OF ALLOWABLE LOADS.**

(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 non-occupiable 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.

Comm 62.1808 Pier and pile foundations.

- (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:

$$d = (P/AE) + 0.15'' + (B/120)$$

Where:

d = 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.

Comm 62.1808 Pier and pile foundations.

- **(5) PILES IN SUBSIDING AREAS.**
Substitute the following wording for the requirements in IBC section 1808.2.11:
- **Three substitutions are provided, a through c**

Comm 62.1808 Pier and pile foundations (5) (a)

- **(5) PILES IN SUBSIDING AREAS.**
Substitution (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.

Comm 62.1808 Pier and pile foundations (5) (b)

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

Comm 62.1808 Pier and pile foundations (5) (c)

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

Comm 62.1808 Pier and pile foundations.

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

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**

Comm 62.1810 Concrete pile foundations

- (1) DIMENSIONS FOR DRILLED OR AUGERED UNCASSED PILES.
- (2) DIMENSIONS FOR DRIVEN UNCASSED PILES.



Comm 62.1810 Concrete pile foundations

- **(1) DIMENSIONS FOR DRILLED OR AUGERED UNCASSED 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.**

Comm 62.1810 Concrete 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**

Wisconsinisms

Ch Comm 62

IBC Ch. 19

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.

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.**

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.**

Comm 62.1913 Shotcrete clearance.

- The exception in IBC section 1913.4.2 is not included as part of this code.



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.**

Wisconsinisms

Ch Comm 62

IBC Ch. 20

NO

Wisconsinisms!

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Ch Comm 62

IBC Ch. 21

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.

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

Comm 62.2105 Masonry quality

- **The requirements in IBC section 2105.1 are not included as part of this code.**

Comm 62.2109 Empirical design of masonry

- (1) BEARING ON MASONRY
- (2) OPENINGS.
- (3) JOINTING.

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.

Comm 62.2109 Empirical design of masonry

- **(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.
- Refer to rules for Table Table 62.2109–1

Comm 62.2109 Empirical design of masonry

- **(3) JOINTING.** These are department rules in addition to the requirements in IBC section 2109
- **(a) *Expansion and shrinkage.***
- **(b) *Vertical jointing.***
- **(c) *Horizontal jointing.***

Comm 62.2109 Empirical design of masonry

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

Comm 62.2109 Empirical design of masonry

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

Comm 62.2109 Empirical design of masonry

- **(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

Wisconsinisms

Ch Comm 62

IBC Ch. 22

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.

Comm 62.2204 Connections.

- **(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.**

Comm 62.2206 Steel Joists.

- **The requirements in IBC sections 2206.3 to 2206.5 are not included as part of this code.**

Wisconsinisms

Ch Comm 62

IBC Ch. 23

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.**

Comm 62.2303 Minimum standards and quality

- **(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.

Comm 62.2303 Minimum standards and quality

- **(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.**

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
Comm 62.2303 Minimum standards and quality

Wisconsinisms

Ch Comm 62

IBC Ch. 24

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.**

Wisconsinisms

Ch Comm 62

IBC Ch. 25

Comm 62.2503 Gypsum board and plaster.

- **The requirements in IBC section 2503.1 are not included as part of this code.**

Wisconsinisms

Ch Comm 62

IBC Ch. 26

NO

Wisconsinisms!

Wisconsinisms

Ch Comm 62

IBC Ch. 27

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.

Wisconsinisms

Ch Comm 62

IBC Ch. 28

NO

Wisconsinisms!

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Ch Comm 62

IBC Ch. 29

Comm 62.2900 Additional criteria for toilets

- **These are department rules in addition to the requirements in IBC chapter 29:**
 - (1) PLUMBING FIXTURE ALTERNATIVES**
 - (2) PERMANENT OUTDOOR TOILETS**
 - (3) ENCLOSURE OF FIXTURES**

Comm 62.2900 WC Alt. 1

- **(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.**

Comm 62.2900 WC Alt. 2

- **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.**

Comm 62.2900 WC Alt. 3

- **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.**

Comm 62.2900 (1) (b)

Lavatory Alternative

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



Comm 62.2900 Additional criteria for toilets

- **(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.**

Comm 62.2900 Additional criteria for toilets

- **(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

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.**

Comm 62.2902 Plumbing fixtures.

- **(1) MINIMUM NUMBER OF FIXTURES.**
- **(2) LAVATORIES FOR TOILET ROOMS.**
- **(3) DISTRIBUTION OF PLUMBING FACILITIES AND NUMBER OF OCCUPANTS OF EACH SEX.**
- **(4) PUBLIC FACILITIES.**
- **(5) LOCATION OF RESTAURANT TOILET ROOMS.**
- **(6) PAY FACILITIES.**

Comm 62.2902 Plumbing fixtures.

- **(1) MINIMUM NUMBER OF FIXTURES. (a) 5 *Exceptions.***
- **(b) *Additional fixtures.***
- **(c) *Substitutions in IBC Table 2902.1.***
- **(d) *Addition to IBC Table 2902.1.***



Comm 62.2902(1) – 5 Except's to Min. No. of fixtures.

- Exceptions 1. & 2.
- 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.



Comm 62.2902(1) – 5 Except's to Min. No. of fixtures.

- **Exception 3.**
- **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.**

Comm 62.2902(1) – 5 Except's to Min. No. of fixtures.

- **Exceptions 4. and 5.**
- **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.**

Comm 62.2902 Plumbing fixture Substitutions in Table 2902.1

- ***(c) Substitutions in IBC Table 2902.1.***
- ***Five Substitutions are made***
- ***Substitutions 1. & 2.***
- **1. Substitute the following wording for the water closets heading in IBC Table 2902.1: Water closets (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.).**

Comm 62.2902 Plumbing fixture Substitutions in Table 2902.1

- *(c) Substitutions in IBC Table 2902.1.*
- *Substitutions 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.

Comm 62.2902 Plumbing fixture Substitutions in Table 2902.1

- **(c) *Substitutions in IBC Table 2902.1.***
- ***Substitutions 4. & 5.***
- **4. Substitute the following wording for the required number of bathtubs or showers in storage occupancies in IBC Table 2902.1: See the *International Plumbing Code.***
- **5. Substitute the following wording for the required number of bathtubs or showers in factory and industrial occupancies in IBC Table 2902.1: See the *International Plumbing Code.***

Comm 62.2902 Plumbing fixtures – Add'n to Table 2902.1

- **(1) MINIMUM NUMBER OF FIXTURES.**
- **(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.**

Comm 62.2902 Plumbing fixtures.

- **(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.

Comm 62.2902 Plumbing fixtures.

- **(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.

Comm 62.2902 Plb'g Fixtures.

- **(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 occ's 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.**

Comm 62.2902 Plumbing fixtures.

- **(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.**

Comm 62.2902 Plumbing fixtures.

- **(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**

Wisconsinisms

Ch Comm 62

IBC Ch. 30

Comm 62.3001 Elevators..

- (1) SCOPE.
- (2) REFERENCED STANDARDS
- (3) CHANGE IN USE.



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**

Comm 62.3001 Elevators..

- **(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.

Comm 62.3001 Elevators..

- **(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

Comm 62.3004 Hoistways

- (1) VENTING.
- (2) PLUMBING AND MECHANICAL SYSTEMS.



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 wire-mesh screen of at least 0.0915-inch diameter steel wire with openings that will reject a ball one-inch in diameter, or expanded metal screen of equivalent strength and open area.

Comm 62.3004 Hoistways

- **(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

Comm 62.3006 Machine rooms

- **(1) ACCESS.**
- **(2) PRESSURIZATION. This is**
- **(3) SHUNT TRIP.**
- **(4) PLUMBING SYSTEMS.**

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 build'g through an elevator machine room

Comm 62.3006 Machine rooms

- **(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.

Comm 62.3006 Machine rooms

- **(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.

Comm 62.3006 Machine rooms

- **(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

Wisconsinisms

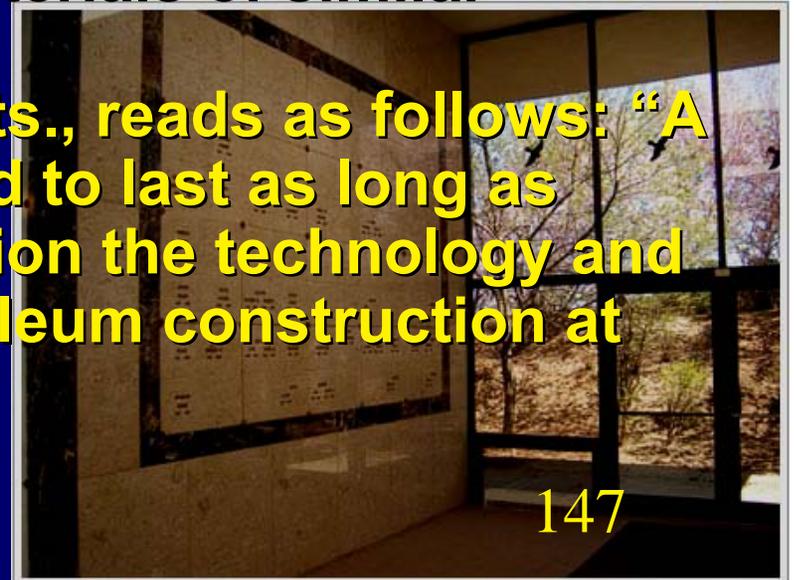
Ch Comm 62

IBC Ch. 31

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.”



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.**



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

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.**



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**



Wisconsinisms

Ch Comm 62

IBC Ch. 32

Comm 62.3200 Encroachments into the public right-of-way.

- **The requirements in IBC chapter 32 are not included as part of this code.**

Wisconsinisms

Ch Comm 62

IBC Ch. 33

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.**

Comm 62.3307 Protection of adjoining property.

- This Wisconsinism adds a reprint of the 6 Statutory Sections 101.111 (1) to (6), Stats., under IBC chapter 33.
- The Sections cover (1) DEFINITION [excavator], (2) CAVE-IN-PREVENTION, (3) LIABILITY FOR UNDERPINNING AND FOUNDATION EXTENSIONS, (4) NOTICE [to adj. owners], (5) EMPLOYEES NOT LIABLE and (6) FAILURE TO COMPLY; INJUNCTION



Comm 62.3307 Protection of adjoining property.

- **Sections 101.111 (1) and (2), Stats., read as follows:**
 - “(1) DEFINITION. In this section ‘excavator’ means any owner of an interest in land making or causing to be made an excavation.**
 - (2) CAVE-IN-PREVENTION. Any excavator shall protect the excavation site in such a manner so as to prevent the soil of adjoining property from caving in or settling.**

Comm 62.3307 Protection of adjoining property.

- **Sections 101.111 (3) , Stats., reads:**
(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.

Comm 62.3307 Protection of adjoining property.

- **Section 101.111 (4), Stats., reads:**
(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.

Comm 62.3307 Protection of adjoining property.

- Sections 101.111 (5), Stats., reads:
(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.



Comm 62.3307 Protection of adjoining property.

- Sections 101.111 (6), Stats., reads:
(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.

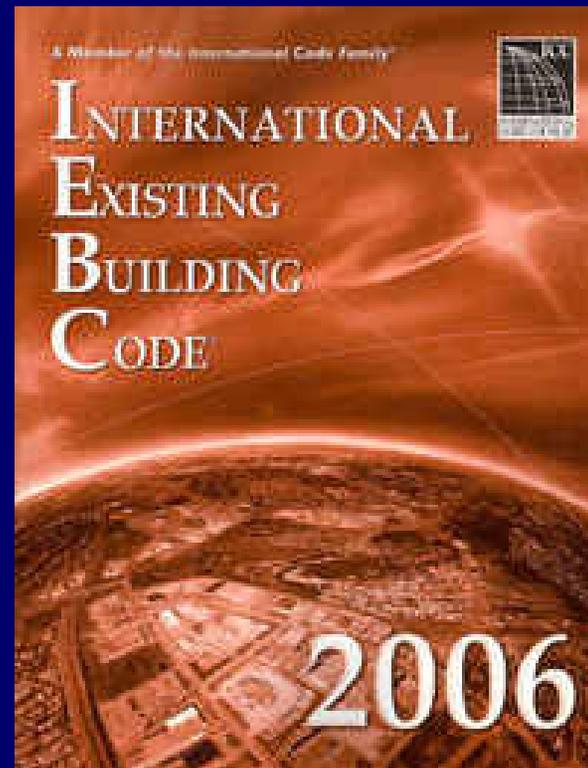
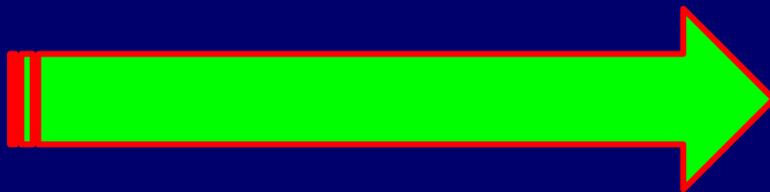
Wisconsinisms

Ch Comm 62

IBC Ch. 34

Comm 62.3400 Existing structures.

- The requirements in IBC chapter 34 are not included as part of this code.



Wisconsinisms

Ch Comm 62

IBC Ch. 35

Comm 62.3500 Referenced standards

- **(1) INTRODUCTION.**
- **Substitute the following wording for the introductory paragraph in IBC chapter 35: This chapter lists the standards that are referenced in various sections of this document. The standards are listed herein by the promulgating agency of the standard, the standard identification, the effective date and title, and the section or sections of this document that reference the standard. The application of the referenced standards shall be as specified in s. Comm 61.03 (1) (b) and (3) (a).**

Comm 62.3500 Referenced standards

- **(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.

Comm 62.3500 Referenced standards

- 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

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Ch Comm 62
IBC Appendices

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).

IBC Wisconsinisms

Chs Comm 63 - 66

That's another seminar

Questions ???

