

BOARD OF APPEALS

December 17, 2015

Members Present: Chairman Wayne Larson, Harold Thompsen, Jeff Furstenau

Others Present: Melissa Gaulrapp, Ryan Erickson, James Showalter, Bruce Taralson, and Gretchen Morlan.

Chairperson Larson called the meeting to order. Member Furstenau moved to approve the minutes of the December 3, 2015 meeting and Member Thompsen seconded the motion. All members present voted aye and the motion was declared carried. Ms. Gaulrapp presented as a substitute for Mr. Ron Strand, Board Secretary. Ms. Gaulrapp noted that there was no old business to address and that Mr. Showalter would be presenting to the Board at this hearing.

Item 1 – Review of changes to the 2015 International Residential Code, Chapters 1-3

Chapter 1

Section R102.7.1 Relocations are now included in work that cannot make any existing structure unsafe.

Section R104.6 The term “*owner’s authorized agent*” is now an acceptable contact to make before gaining right to enter.

Section R104.8 has been split into two. Staff recommends continuing the existing local **AMENDMENT**.

Section R104.10.1 Staff recommends continuing the existing local **AMENDMENT** deleting this section in its entirety.

Section R104.11 Text was added requiring the Building Official to respond in writing when denying a request to use alternate materials.

Section R105.2 Staff recommends continuing the existing local **AMENDMENT** to items 1, 2, 7 and 9, and deleting item 10.

Section R105.3.1.1 Staff recommends adding a local **AMENDMENT** deleting this section. Mr. Showalter explained to the Board that this amendment and several others throughout the code are intended to avoid conflict with the current flood code.

Section R106.1.1 – R106.1.3 has been reorganized by splitting up one and moving it to a new section number.

Section R106.1.4 Staff recommends continuing the existing local **AMENDMENT** deleting this section.

Section R112.2.1 and Section R112.2.2 Mr. Showalter explained that these two sections have been deleted, therefore, the existing local **AMENDMENTS** are no longer needed.

Chapter 2

Mr. Showalter stated that there were a number of changes in Chapter 2 to reflect new terminology, but that there was no change in intent.

Chapter 3

Section R301.2.1 Basic wind speed is now called: “*Ultimate Design Wind Speed*”. Mr. Showalter explained that this definition was changed to assist engineers; an equation is included in a later section that reverts to the effective wind speed to the same as has been.

Section R301.2.1.1 Cold-formed steel light frame construction is referenced now and must comply with the steel sections in the floors, walls and roof construction chapters.

Section R301.2.1.1.1 An entire section regarding sunrooms has been added including reference to a standard that allows different methods of construction other than conventional stick framed sunrooms.

Section R301.2.1.2 Reference change to the new section. Member Thompsen requested the values for Table R301.2(1):

Ground Snow Load is: 50

Wind Speed: 90

Wind-Borne Debris: No

Seismic Design Category: A

Weathering: Severe

Frost Line Depth: 4.5'

Termite: None

Winter Design Temp: -18 F

Ice Barrier Underlayment: Yes

Flood Hazards: 1978

Air Freezing Index: 4,000

Mean Annual Temp: 41.5 F

Mr. Showalter stated that Topographical Effects and Special Wind Region values were skipped due to changes in the relevant figures. He stated he would supply those values to the Board at the next meeting.

Figure R301.2(4)C has been deleted.

Section R301.2.1.2.1 A new section that essentially amends section 2.2 of ASTM E 1996.

Figure R301.2(7) Component and cladding pressure zones have different numbers for the range of roof slopes, but this is due to the use of ultimate wind speeds versus basic wind speed. Mr. Showalter stated that the numbers appear different, however, conversion tables bring us back to the same wind speed as the 2012 edition.

Table and Section R301.2.1.3 This section and table are now labeled "*Wind Speed Conversions*".

Section R301.2.1.4 Exposure category A has been deleted. Exposure category D requirements are now applicable to exposures B or C if they are within 600 feet of the flat area that defines exposure D.

Table R301.2.2.2.1 The table related to braced wall adjustment factor has been deleted. Mr. Showalter noted that this data has instead been incorporated into Chapter 6.

Section R301.2.2.2.1 The reference to Table R301.2.2.2.1 has been removed since the table was deleted.

Section R301.2.4 Staff recommends keeping the existing local **AMENDMENT** which deletes this section and its subsection R301.2.4.1 in their entirety.

Section R301.3 This section has been re-written to coordinate with the wall bracing requirements of CH 6. It also clarifies the exceptions by bringing the story height limits from Chapter 6 to the sections for each material listed in this section.

Table R301.7 This table was expanded to include ceiling finishes with brittle and flexible finishes.

Section R302.2 This section is now written so we do not need an amendment to allow a common 2 hour wall between units, however, staff recommends adding a local **AMENDMENT** to allow two 1 hour walls as the fire separation between buildings.

Table R302.1(1) This table has changed to allow for roof eaves to have no fire rating when solid blocking is installed between the top plates and the roof sheathing. We have an existing local **AMENDMENT** which changes the dimensions on this table and staff recommends keeping the existing local **AMENDMENT** along with the new changes to the table.

Table R302.1(1) This table has been changed to allow fireblocking in lieu of rating the eave just as the previous table did.

Section R302.5.1 Staff recommends keeping the existing local **AMENDMENT** to remove the requirement that the door between the house and garage need to be self-closing.

Section R302.10.1 Cellulose fiber loose-fill insulation where there previously was an exception from the smoke-developed index maximum of 450, is now required to meet 450 max if tested in accordance with CAN/ULC 102.2.

Section R302.11.1 Cellulose insulation used for fireblocking must now be tested in accordance with ASTM 119 or UL263.

Section R302.13 This section has been relocated from Chapter 5, and language has been added to allow penetrations for protection.

Section R303.1 Skylights are now able to be considered for natural ventilation.

Section R303.4 Staff recommends keeping the existing local **AMENDMENT** to delete this section.

Section R303.5.1 This section has been re-written and references are added to point to the mechanical sections related to certain types of exhaust systems that have their own requirements based on their proximity to intake openings.

Section R303.7 and Section R303.8 R303.7 has been split into two sections. Language has been removed to clarify requirements.

Section R304.1 The requirement for at least one room to be 120 square feet or larger has been removed. Mr. Showalter stated this is to accommodate for minimalist housing structures.

Section R305.1 The minimum height requirement for bathrooms and laundry rooms has been reduced to 6'-8" and the exception for beams and ducts to extend as low as 6'-4" has been extended to habitable space.

Section R307.1 Staff recommends keeping the existing local **AMENDMENT** which requires 24" of space in front of water closets and bidets.

Section R308.4.2 This section now requires glazing in walls perpendicular to and within 2 feet of doors to be safety glazing only if the glazing is on the hinge side of a door that swings toward the glazing. Mr. Showalter stated that this has been clarified as previous wording was unclear.

Section R308.4.5 Showers, saunas and steam rooms are now included as hazardous locations, and if there is glazing within 60" of these locations, safety glazing is required. Mr. Showalter stated this previously applied to bathrooms only.

Section R308.4.7 This section is clarified to ensure that safety glazing is only required if it is located within 60" of the bottom tread nosing and within a 180 degree arc. Figure R308.4.7 was added to demonstrate this, but there is no reference to the figure in the text.

Section R308.6.9.1 This is a new section allowing skylights to use testing reports of different size skylights if they follow one of two comparative analysis methods.

Section R309.3 Staff recommends keeping the existing local **AMENDMENT** deleting this section.

Section R310.1.1 The last sentence was added to allow use of window opening control devices which would be used to comply with the window fall protection requirements of section R312.

Section R310.2.2 Staff recommends keeping the existing local **AMENDMENT** allowing below grade egress sill height to be no more than 48" above the floor.

Section R310.2.3.1 Staff recommends keeping the existing local **AMENDMENT** to allow a 16"x30" platform inside the window well in lieu of a ladder. This existing local **AMENDMENT** also allows for terraced window wells.

Section R310.5 and R310.6 These sections have been added to clarify when emergency escape and rescue openings are required based on additions and alterations. Mr. Showalter stated that all new basement additions will be required to have an escape route.

Section R311.1 Language was added to require the required egress door to open into a yard or court so as to not be less restrictive than the requirements for emergency egress openings.

Section R311.3 Staff recommends keeping the existing local **AMENDMENT** that excepts a landing at an exterior door other than the required exit door if the total rise of the stairs is less than 30" above grade.

Section R311.3.1 Staff recommends keeping the existing local **AMENDMENT** that allows the required landing to be 8" below the top of the threshold instead of 7 ¾" to be consistent with our maximum riser local **AMENDMENT**.

Section R311.3.2 Staff recommends keeping the existing local **AMENDMENT** that allows a landing at 8" below the threshold instead of 7 ¾" and excepts a landing at the top of the flight if the rise is less than 30". Mr. Showalter stated that this is in order to be consistent with riser heights.

Section R311.7.3 The maximum vertical rise of a stairway before an intermediate landing is required has been increased by 3 inches from 12 ft to 147 inches.

Section R311.7.5.1 Staff recommends keeping the existing local **AMENDMENT** to increase maximum riser height to 8". Also a new exception is added that does not limit the opening between adjacent treads for spiral stairways where previously it was limited to a 4" sphere.

Section R311.7.5.2 Staff recommends keeping the existing local **AMENDMENT** to decrease minimum tread depth to 9 inches, and allow the top tread of a flight of stairs to be greater than 3/8" deeper than the rest of the treads as long as a landing is not required and the depth is at least 18".

Section R311.7.5.2.1 Staff recommends keeping the existing local **AMENDMENT** to allow the 9 inch tread depth for winder stairs.

Section R311.7.6 Staff recommends keeping the existing local **AMENDMENT** to allow no landing at the top of exterior stairs other than the required exit stair as long as the total rise is less than 30".

Section R311.7.10.1 This section has been re-written to allow for design flexibility, although no significant technical changes have occurred.

Section R311.7.11 - Section R311.7.12.2 Alternating Tread Devices and Ships Ladders have been added to the stair provisions.

Section R311.8.1 Ramps other than those serving the required exit are now allowed to have a slope not greater than 1 unit in 8. Mr. Showalter stated that previous requirements were 1 unit in 12.

Section R312.1.1 Staff recommends keeping the existing local **AMENDMENT** to allow the height of a deck to be measured at the deck as opposed to 36" away from the deck.

Section R312.1.2 The requirement for guards to be 36" tall no longer needs to be measured from adjacent fixed seating. This was a new section in the 2009 IRC.

Section R312.1.1 This section has been re-written to say “*compliance options*” versus “*exceptions*”. No technical change.

Mr. Ryan Erickson, City of Fargo Fire Marshall, addressed the Board with the following information:

Section R313.1 staff recommends adding a local **AMENDMENT** to read as follows: An automatic residential sprinkler system shall be installed in townhouses where the townhouses are located on a private street or private fire department access road that is required to be greater than 150 feet in length as required by section 503 of the International Fire Code.

Mr. Erickson noted that the City of Fargo is seeing increased pressure from developers to allow private drives and private streets. Currently due to local amendments, townhomes are not required to be sprinklered if built under the International Residential Code. Access on private drives can become obstructed due to a lack of available parking, and enforcement is the duty of the property owner. Enforcement by the fire department is difficult. Sprinkler systems would reduce the risk for loss of life in these occupancies.

Section R313.1.1 staff recommends adding a local **AMENDMENT** to read as follows : Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with ~~Section P2904~~ or NFPA 13D or NFPA 13R or NFPA 13.

Section R313.2 staff recommends adding a local **AMENDMENT** deleting this section in its entirety.

Section R313.2.1 staff recommends adding a local **AMENDMENT** deleting this section in its entirety.

Mr. Erickson noted that North Dakota State Building Code, Chapter 54-21.3-03 Item 4, prohibits sprinkler requirement for single family home or residential buildings that contains no more than 2 dwelling units.

Chairperson Larson inquired whether a vote would be taken at the end of the code hearings. Member Thompson recommended accepting this amendment at the end of amendments. Chairperson Larson was in agreement with the recommendation. Member Thompson asked Mr. Erickson if an email of this information was sent to the Inspections Department. Mr. Erickson responded that an email had been sent to Mr. Ron Strand in the Inspections Department.

Mr. Showalter continued:

Section R314 This section has been reorganized with little to no technical changes. In an attempt to prevent nuisance alarms triggered by steam from bathrooms and the products created from cooking appliances, there are now minimum distances required between smoke alarms and bathrooms and cooking appliances as long as this does not prevent placement of a smoke alarm in a required location.

Section R314 Staff recommends keeping the existing local **AMENDMENT** that requires smoke alarms to be installed in rooms adjacent to hallways serving bedrooms where the ceiling height is more than 24” higher than the hallway.

Section R315 This section was re-organized with a few technical changes. Mr. Showalter stated that there was confusion in the past about the language in this section and what needed to be monitored.

Section R316.4 23/32” wood structural panel is now an accepted material for use as a thermal barrier.

Section R316.5.3 A new material has been added to the list of approved ignition barriers in attics: ¼” fiber cement panel, soffit or backer board.

Section R316.5.11 This section has been clarified to allow the entire rim joist area to have exposed foam without a thermal barrier.

Section R316.5.12 and Section R316.8 A new section has been added that requires foam plastic used on exterior walls as sheathing to comply with the standard SBCA FS 100 for wind pressure resistance.

Section R317.4 A new exception has been added to the requirement for treated or naturally decay resistant columns to include deck posts on a concrete pier or metal pedestal as long as it is 1" above a concrete slab or 6" above the exposed earth.

Section R317.3 Stainless steel fasteners now have a standard that they need to comply with when used with preservative or fire treated wood.

Section R317.4 The requirements for plastic composite deck components have been changed to just "*plastic*" and moved to Section R507.3.

Section R319 No technical change except that additional identification can be required to facilitate emergency response. Also it has been clarified that the street and avenue numbers cannot be spelled out.

Section R320 Dwellings with guest rooms are now required to comply with Chapter 11 of the IBC unless there are five or fewer guestrooms in an owner-occupied lodging house built under the IRC.

Section R322 Staff recommends keeping the existing local **AMENDMENT** deleting this section.

Section R324 This is a new section governing solar energy systems including photovoltaic shingles.

Section R325 This is a new section that governs mezzanines.

Section R326 Staff recommends adding a local **AMENDMENT** deleting this section as Cass County Public Health uses a different code and they enforce pool regulations.

There being no further business to come before the Board, the meeting was adjourned at 10:20AM.

Respectfully submitted,

Melissa Gaulrapp
Acting Board Secretary