Ordinance No. 6009

AN ORDINANCE TO ADOPT THE 2012 INTERNATIONAL RESIDENTIAL CODE BY AMENDING CHAPTER 15.13 OF THE RAPID CITY MUNICIPAL CODE

WHEREAS, in Chapter 15.13 of the Rapid City Municipal Code, the City of Rapid City has adopted the 2009 edition of the International Residential Code; and

WHEREAS, the City wishes to amend R.C.M.C. Chapter 15.13 to adopt the 2012 edition of the International Residential Code; and

WHEREAS, the City wishes to retain the different or additional requirements it had adopted with regard to the 2009 edition of the International Residential Code and apply them to the 2012 edition of the International Residential Code; and

WHEREAS, when a property owner chooses to install a fire sprinkler system, the Residential Code as adopted in Rapid City does not contain any regulations which govern or concern the design and installation of a fire sprinkler system; and

WHEREAS, the Common Council wishes to adopt provisions related to the design and installation of fire sprinkler systems when the property owner elects to install such a system; and

WHEREAS, the Common Council desires to amend R.C.M.C. Chapter 15.13 to adopt the 2012 edition of the International Residential Code and to incorporate the additional requirements within the International Residential Code.

NOW THEREFORE, BE IT ORDAINED by the City of Rapid City, that Chapter 15.13 of the Rapid City Municipal Code is hereby amended to read in its entirety as follows:

CHAPTER 15.13: INTERNATIONAL RESIDENTIAL CODE

Section

15.13.130 IRC Chapter 3, Section R302.5.1, Opening protection–Amended.
~~15.13.130 IRC Chapter 3, Section 302.6, Dwelling/garage fire separation–Amended.~~
15.13.140 IRC Chapter 3, Section R302.12, Draftstopping–Amended.
15.13.150 IRC Chapter 3, Section R303.1, Habitable rooms–Amended.
15.13.160 IRC Chapter 3, Section R309.3, Flood hazard areas–Amended.
15.13.170 IRC Chapter 3, Section R310.1, Emergency escape and rescue required–Amended.
~~15.13.180 IRC Chapter 3, Section R310.1.1, Minimum opening area–Amended.~~
15.13.~~190~~180 IRC Chapter 3, Section R310.2.1, Ladder and steps–Amended.
15.13.~~200~~190 IRC Chapter 3, Section R311.3.1, Floor elevations at the required egress doors–Amended.
15.13.~~210~~200 IRC Chapter 3, Section R311.7.~~4~~5, Stair treads and risers–Amended.
15.13.~~220~~210 IRC Chapter 3, Section R311.7.9.3, Circular stairways–Added.
15.13.~~230~~220 IRC Chapter 3, Section R317.1.1, Field treatment–Amended.
15.13.~~240~~230 IRC Chapter 3, Section R318, Protection against subterranean termites–Deleted.
15.13.~~250~~240 IRC Chapter 3, Section R322, Flood-resistant construction–Amended.
15.13.~~260~~250 IRC Chapter 4, Section R401.1, Application–Amended.
15.13.~~270~~260 IRC Chapter 4, Section R403.1.4.1, Frost protection–Amended.
~~15.13.280 IRC Chapter 4, Section R405.01, Concrete or masonry foundations–Amended.~~
15.13.~~290~~270 IRC Chapter 4, Section R408.~~0~~7, Flood resistance ~~required~~ –Amended.
15.13.280 IRC Chapter 5, Section 501.3, Fire protection of floors – Amended.
15.13.~~300~~290 IRC Chapter 5, Section R506.2.3, Vapor retarder–Deleted.
~~15.13.310 IRC Chapter 6, Section R601.3, Vapor retarders–Deleted.~~
15.13.~~320~~300 IRC Chapter 6, Section R602.3(5), Table–Amended.
15.13.~~330~~310 IRC Chapter 9, Section R903.4.1, Secondary (emergency o~~O~~verflow) drains ~~and~~or scuppers–Amended.
15.13.~~340~~320 IRC Chapter 9, Section R905.2.7.1, Ice barrier–Amended.
15.13.330 IRC Section R907.3, Recovering versus replacement – Amended.
15.13.~~350~~340 IRC Chapter 11–Amended.
15.13.350 IRC Section P2904.1, Dwelling unit fire sprinkler systems – General – Amended.
15.13.360 IRC Section P2904.1.1, Required sprinkler locations – Deleted.
15.13.~~360~~370 IRC Appendix E, Section AE101.1, General–Amended.
15.13.~~370~~380 IRC Appendix J, Section AJ102.5, Flood hazard areas–Amended.
15.13.~~380~~390 IRC Appendix H, Section AH~~106.1~~105.2, ~~General~~Footings–Amended.
15.13.~~390~~400 IRC Appendix H, Section AH~~107~~106, Special provisions for aluminum screen enclosures in hurricane-prone regions–Deleted.

15.13.010 Adoption.

There is adopted by the ~~c~~City that certain code recommended by the International Code Council known as the International Residential Code for One- and Two-Family Dwellings, ~~2009~~ 2012 edition, specifically Chapters 1-11, Chapter 44, and Appendices E, J, K, & H thereof. The City also adopts Section P2904 Dwelling Unit Fire Sprinkler systems as amended within this Code. The code is adopted for 1- and 2-family dwellings only. A copy of same is on file in the office of the City Building Official.

15.13.020 IRC Chapter 1–Deleted in part and replaced in part.

The following sections of IRC Chapter 1 are hereby deleted and replaced with comparable provisions found in Chapter 15.04 Administration of the Rapid City Municipal Code.

Section R104 Duties and powers of the building official
Section R105 Permits
Section R106 Construction documents
Section R107 Temporary structures and uses
Section R108 Fees
Section R110 Certificate of occupancy
Section R112 Board of appeals
Section R113 Violations
Section R114 Stop work order

15.13.030 IRC Chapter 1, Section R101.2, Scope–Amended.

IRC Chapter 1, Section R101.2, Scope, is hereby amended to read in its entirety as follows:

~~**SECTION R101**~~
~~**GENERAL**~~

R101.2 Scope. The provisions of the International Residential Code for One- and Two-family Dwellings shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory structures.

EXCEPTION: Live/work units complying with the requirements of Section 419 of the International Building Code shall be permitted to be built as one-and two-family dwellings or townhouses.

15.13.040 IRC Chapter 1, Section R102.7, Existing structures–Amended.

IRC Chapter 1, Section R102.7, Existing structures, is hereby amended to read in its entirety as follows:

~~**SECTION R102**~~
~~**APPLICABILITY**~~

R102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically

covered in this code or, the International Property Maintenance Code for the general safety and welfare of the occupants and the public.

15.13.050 IRC Chapter 1, Section R103.1, Creation of enforcement agency–Amended.

IRC Chapter 1, Section R103.1, Creation of enforcement agency, is hereby amended to read in its entirety as follows:

SECTION R103
BUILDING PERMIT REVIEW TEAM

R103.1 Creation of enforcement agency. The Building Permit Review Team is hereby created, and the official in charge thereof shall be known as the Building Official.

15.13.060 IRC Chapter 1, Section R104.10.1, Areas prone to flooding–Amended.

IRC Chapter 1, Section R104.10.1, Areas prone to flooding, is hereby amended to read as follows:

SECTION R104
DUTIES AND POWERS OF THE BUILDING OFFICIAL

R104.10.1 Areas prone to flooding. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.070060 IRC Chapter 1, Section R109.1, Types of inspections–Amended.

IRC Chapter 1, Section R109.1, Types of inspections, is hereby amended to read in its entirety as follows:

SECTION R109
INSPECTIONS

R109.1 Types of inspections. For onsite construction, from time to time the Building Official, upon notification from the permit holder or his agent, may make or cause to be made any necessary inspections, and if any inspection is made shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code or Chapter 15.04.

15.13.080070 IRC Chapter 1, Section R109.1.3, Floodplain inspections–Amended.

IRC Chapter 1, Section R109.1.3, Floodplain inspections, is hereby amended to read in its entirety as follows:

R109.1.3 Floodplain inspections. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.~~090~~080 IRC Chapter 2, Section R202, Definitions–Amended.

~~IRC Chapter 2, Section R202, Definitions, is hereby amended to read as follows:~~

~~SECTION R202~~
~~DEFINITIONS~~

All definitions will remain the same as in Section R202 except for those specifically changed as follows:

ACCESSORY STRUCTURE. A structure not over one story in height, the use of which is customarily accessory to and incidental to that of the dwelling(s) and which is located on the same property.

TOWNHOUSE. A single-family dwelling unit constructed in a group of two or more attached units in which each unit extends from foundation to roof and with a yard or public way on at least two sides.

15.13.~~100~~090 IRC Chapter 3, Table R301.2(1), Climatic and geographic design criteria–Amended.

IRC Chapter 3, Table R301.2(1), Climatic and geographic design criteria, is hereby amended by inserting the following information into the table.

~~SECTION R301~~
~~DESIGN CRITERIA~~

~~Table R301.2(1)~~

~~Ground Snow Load - 42 psf and as per ASCE 705; Wind speed - 90 mph; Seismic Design Category - B; Weathering - Moderate; Frost line depth - 42"; Termite - None to slight; Winter Design Temp - -7° F; Ice Barrier Underlayment Required - Yes; Flood Hazards - 2-18-98~~June 2013~~; Air Freezing Index - 1548; and Mean Annual Temp - 48 ° F. (Table 100-B)~~

TABLE 100-B CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Ground Snow Level	*Wind Speed*	*Seismic Design Category*	*Subject to Damage From*			*Winter Design Temperature*	*Ice Barrier Underlayment Required*	*Flood Hazards*	*Air Freezing Index*	*Mean Annual Temp*
			Weathering	*Frost Line Depth*	*Termite*					
42 psf[1]	~~90~~ 115[2]	~~NA~~footnote[3]	Moderate	42"	None to slight	-7	yes	~~2-18-98~~ June 2013	1548	48°F

[1] The ground snow load for Rapid C~~e~~ity shall be 42 psf and as per ASCE 705.
[2] Wind loads shall be in accordance with Chapters 26 to 30 of ASCE 7-10 and shall be based upon the Occupancy Category of

the building under design. Buildings shall at a minimum be designed to Occupancy Category II having an ultimate wind speed velocity of 115 mph.

[3] Seismic loads shall be in accordance with Section 1613 of IBC 2012 and ASCE 7-10. In the absence of specific site information, the building shall be designed in accordance with the following:

Short Period Acceleration (S_s) = 0.125 g

1-Second Period Acceleration (S_1) = 0.043 g

Site Class = D

15.13.~~110~~100 IRC Chapter 3, Section R301.2.4, Floodplain construction–Amended.

IRC Chapter 3, Section R301.2.4, Floodplain construction, is hereby amended to read in its entirety as follows:

R301.2.4 Floodplain construction.

~~**R301.2.4.1 Alternative provisions.**~~ See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.110 IRC Chapter 3, Section R301.2.4.1, Alternative provisions–Amended.

IRC Chapter 3, Section R301.2.4.1, Alternative provisions, is hereby amended to read in its entirety as follows:

R301.2.4.1 Alternative provisions. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.120 IRC Chapter 3, Section R302.2, Townhouses–Amended.

IRC Chapter 3, Section R302.2, Townhouses, is hereby amended to read in its entirety as follows:

~~**SECTION R302**~~
~~**FIRE-RESISTANT CONSTRUCTION**~~

R302.2 Townhouses. Each townhouse shall be considered a separate building and shall be separated by fire- resistance-rated wall assemblies meeting the requirements of Section R302.1 for exterior walls.

Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTME 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be installed in accordance with Chapters 34 through 43.

Penetrations of electrical outlet boxes shall be in accordance with Section R302.4.

15.13.130 IRC Chapter 3, Section R302.5.1, Opening protection–Amended.

IRC Chapter 3, Section R302.5.1 Opening protection, is hereby amended to read in its entirety as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

~~**15.13.130 IRC Chapter 3, Section 302.6, Dwelling/garage fire separation–Amended.**~~

~~IRC Chapter 3, Section 302.6, Dwelling/garage fire separation, is hereby amended to read as follows:~~

~~**R302.6 Dwelling/garage fire separation.** The garage shall be separated as required by Table R302.6. Openings in garage walls shall comply with Section R302.5. This provision does not apply to garage walls that are perpendicular to the adjacent dwelling unit wall.~~

~~**TABLE R302.6 DWELLING/GARAGE SEPARATION MATERIAL**~~

~~From the residence and attics~~	~~Not less than 1/2-inch gypsum board or equivalent applied to the garage side~~
~~From all habitable rooms above the garage~~	~~Not less than 5/8-inch Type X gypsum board or equivalent~~
~~Structure(s) supporting floor/ceiling~~	~~Not less than 5/8-inch gypsum board or equivalent assemblies used for separation required by this section~~
~~Garages located less than 3 feet from a equivalent applied to dwelling unit on the same lot that are within this area~~	~~Not less than 1/2-inch gypsum board or the interior side of exterior walls~~

15.13.140 IRC Chapter 3, Section R302.12, Draftstopping–Amended.

IRC Chapter 3, Section R302.12, Draftstopping, is hereby amended to read in its entirety as follows:

R302.12 Draftstopping. In combustible construction where there is usable space both above and below the concealed space of a floor/ceiling assembly, draft stops shall be installed so that the area of the concealed space does not exceed 1500 square feet ~~(92.9 m^2)~~. Draft stopping shall

divide the concealed space into approximately equal areas. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below, draft stopping shall be provided in floor/ceiling assemblies under the following circumstances:

1. Ceiling is suspended under the floor framing.

2. Floor framing is constructed of truss-type open-web or perforated members.

15.13.150 IRC Chapter 3, Section R303.1, Habitable rooms–Amended.

IRC Chapter 3, Section R303.1, Habitable rooms, is hereby amended to read in its entirety as follows:

~~**SECTION R303**~~
~~**LIGHT, VENTILATION AND HEATING**~~

R303.1 Habitable rooms. All habitable rooms shall have an aggregate glazing area of not less than 6 percent of the floor area of such rooms. Natural ventilation shall be through windows, doors, louvers or other approved openings to the outdoor air. Such openings shall be provided with ready access or shall otherwise be readily controllable by the building occupants. The minimum openable area to the outdoors shall be 3 percent of the floor area being ventilated.

Exceptions:

1. The glazed areas need not be openable where the opening is not required by Section R310 and an approved mechanical ventilation system capable of producing 0.35 air change per hour in the room is installed or a whole-house mechanical ventilation system is installed capable of supplying outdoor ventilation air of 15 cubic feet per minute (cfm) (78 L/s) per occupant computed on the basis of two occupants for the first bedroom and one occupant for each additional bedroom.

2. The glazed areas need not be installed in rooms where Exception 1 above is satisfied and artificial light is provided capable of producing an average illumination of 6 foot candles (65 lux) over the area of the room at a height of 30 inches (762 mm) above the floor level.

3. Use of sunroom additions and patio covers, as defined in Section R202, shall be permitted for natural ventilation if in excess of 40 percent of the exterior sunroom walls are open, or are enclosed only by insect screening.

4. Media and theater rooms.

15.13.160 IRC Chapter 3, Section R309.3, Flood hazard areas–Amended.

IRC Chapter 3, Section R309.3, Flood hazard areas, is hereby amended to read in its entirety as follows:

~~**SECTION R309**~~
~~**GARAGES AND CARPORTS**~~

R309.3 Flood hazard areas. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.170 IRC Chapter 3, Section R310.1, Emergency escape and rescue required– Amended.

IRC Chapter 3, Section R310.1, Emergency escape and rescue required, is hereby amended to read in its entirety as follows:

~~**SECTION R310**~~
~~**EMERGENCY ESCAPE AND RESCUE OPENINGS**~~

R310.1 Emergency escape and rescue required. Basements, habitable attics and every sleeping room shall have at least one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, emergency egress and rescue openings shall be required in each sleeping room. Where emergency escape and rescue openings are provided they shall have a sill height of not more than 48 inches ~~above the floor~~measured from the finished floor to the bottom of the clear opening. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the emergency escape and rescue opening from the inside. Emergency escape and rescue openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2. Emergency escape and rescue openings shall open directly into a public way, or to a yard or court that opens to a public way.

Exceptions:

1. Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m^2).

2. Where emergency escape and rescue openings are provided within 5 feet of grade, they shall have a sill height of not more than 48 inches measured from the finished floor to the bottom of the clear opening.

~~**15.13.180 IRC Chapter 3, Section R310.1.1, Minimum opening area– Amended.**~~

~~IRC Chapter 3, Section R310.1.1, Minimum opening area, is hereby amended to read as follows:~~

~~**R310.1.1 Minimum opening area.** All emergency escape and rescue openings shall have a minimum net clear opening of 5.7 square feet (0.530 m^2).~~

15.13.~~190~~180 IRC Chapter 3, Section R310.2.1, Ladder and steps–Amended.

IRC Chapter 3, Section R310.2.1, Ladder and steps, is hereby amended to read in its entirety as follows:

R310.2.1 Ladder and steps. Window wells with a vertical depth greater than 48 inches shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply with Sections R311.7 and R311.8. Ladders or rungs shall have an inside width of at least 12 inches (305 mm), shall project at least 3 inches (76 mm) from the wall and shall be spaced not more than 18 inches (457 mm) on center vertically for the full height of the window well.

15.13.~~200~~190 IRC Chapter 3, Section R311.3.1, Floor elevations at the required egress doors–Amended.

IRC Chapter 3, Section R311.3.1, Floor elevations at the required egress doors, is hereby amended to read in its entirety as follows:

~~**SECTION R311**~~
~~**MEANS OF EGRESS**~~

R311.3.1 Floor elevations at the required egress doors. Landings or floors at the required egress door shall not be more than 1 1/2 inches (38 mm) lower than the top of the threshold.

Exceptions~~:~~: The exterior landing or floor shall not be more than 8 inches below the top of the threshold provided the door does not swing over the landing or floor.

When exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

15.13.~~210~~200 IRC Chapter 3, Section R311.7.45, Stair treads and risers–Amended.

IRC Chapter 3, Section R311.7.45, Stair treads and risers~~,~~; Section R311.7.5.1, Risers, Section R311.7.5.2, Treads; Section R311.7.5.2.1, Winder treads; Section R311.7.5.3, Nosings; and Section R311.7.5.4, Exterior wood/plastic composite stair treads are ~~is~~ hereby amended to read in their entirety as follows:

R311.7.4 Stair treads and risers. Stair treads and risers shall meet the requirements of this section. For the purposes of this section all dimensions and dimensioned surfaces shall be exclusive of carpets, rugs or runners.

R311.7.45.1 Risers ~~height~~. The maximum riser height shall be 8 inches. The minimum riser height shall be 4 inches. The riser shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). Risers shall be vertical or sloped from the underside of the

nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted provided that the opening between treads does not permit the passage of a 4-inch-diameter (102 mm) sphere.

Exception: The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

R311.45.7.2 Treads ~~depth.~~ The minimum tread depth shall be 9 inches. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the treads leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). ~~Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within 3/8 inch (9.5 mm) of the rectangular tread depth.~~

R311.7.5.2.1 Winder treads. Winder treads shall have a minimum tread depth of 9 inches measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. Winder treads shall have a minimum tread depth of 6 inches (152 mm) at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than 3/8 inch (9.5 mm). Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within 3/8 inch (9.5 mm) of the rectangular tread depth.

R311.7.45.3 ~~Profile~~Nosings. The radius of curvature at the nosing shall be no greater than 9/16 inch (14 mm). A nosing not less than 3/4 inch (19 mm) but not more than 1 1/4 inches (32 mm) shall be provided on stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5 mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosings shall not exceed 1/2 inch (12.7 mm). ~~Risers shall be vertical or sloped under the tread above from the underside of the nosing above at an angle not more than 30 degrees (0.51 rad) from the vertical. Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter (102 mm) sphere.~~

Exceptions:

~~1.~~ A nosing is not required where the tread depth is a minimum of 11 inches (279 mm).

~~2. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.~~

R311.7.5.4 Exterior wood/plastic composite stair treads. Wood/plastic composite stair treads shall comply with the provisions of Section R507.3.

15.13.~~220~~210 IRC Chapter 3, Section R311.7.9.3, Circular stairways–Added.

IRC Chapter 3, Section R311.7.9.3, Circular stairways is hereby added to read as follows:

R311.7.9.3 Circular stairways. See Section 1009.8 of the ~~2009~~2012 International Building Code.

15.13.~~230~~220 IRC Chapter 3, Section R317.1.1, Field treatment–Amended.

IRC Chapter 3, Section R317.1.1, Field treatment, is hereby amended to read in its entirety as follows:

~~**SECTION R317**~~
~~**PROTECTION OF WOOD AND WOOD BASED PRODUCTS AGAINST DECAY**~~

R317.1.1 Field treatment. Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated.

15.13.~~240~~230 IRC Chapter 3, Section R318, Protection against subterranean termites–Deleted.

IRC Chapter 3, Section R318, Protection against subterranean termites, is hereby deleted in its entirety.

~~**SECTION R318**~~
~~**PROTECTION AGAINST SUBTERRANEAN TERMITES**~~

15.13.~~250~~240 IRC Chapter 3, Section R322, Flood-resistant construction–Amended.

IRC Chapter 3, Section R322, Flood-resistant construction, is hereby amended to read in its entirety as follows.

~~**SECTION R322**~~
~~**FLOOD-RESISTANT CONSTRUCTION**~~

R322 Flood-resistant construction. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.~~260~~250 IRC Chapter 4, Section R401.1, Application–Amended.

IRC Chapter 4, Section R401.1, Application, is hereby amended to read in its entirety as follows:

~~**SECTION R401**~~
~~**GENERAL**~~

R401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. Wood foundations shall be designed and installed in accordance with AF&PA Report No. 7.

Exception: The provisions of this chapter shall be permitted to be used for wood foundations only in the following situations:

1. In buildings that have no more than two floors and a roof.

2. When interior basement and foundation walls are provided at intervals not exceeding 50 feet (15240 mm).

3. A one-story wood or metal frame building, not used for human occupancy and not over 1,000 square feet in floor area, when the clear span of the roof framing elements (bearing walls) do not exceed 24 feet may be supported on a concrete slab with thickened edge, as approved by the building official.

~~Wood foundations in Seismic Design Category D0, D1 or D2 shall be designed in accordance with accepted engineering practice.~~

15.13.~~270~~260 IRC Chapter 4, Section R403.1.4.1, Frost protection–Amended.

IRC Chapter 4, Section R403.1.4.1, Frost protection, is hereby amended to read in its entirety as follows:

~~**SECTION R403**~~
~~**FOOTINGS**~~

R403.1.4.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.(1);

2. Constructing in accordance with Section R403.3;

3. Constructing in accordance with ASCE 32; or

4. Erected on solid rock.

Exceptions:

1. Protection of freestanding accessory structures with an area of 1,000 square feet or less, of light-framed construction, with an eave height of 10 feet (3048 mm) or less shall not be required.

2. Protection of freestanding accessory structures with an area of 400 square feet ($37m^2$) or less, of other than light-framed construction, with an eave height of 10 feet (3048 mm) or less shall not be required.

3. Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

Footings shall not bear on frozen soil unless the frozen condition is permanent.

~~**15.13.280 IRC Chapter 4, Section R405.01, Concrete or masonry foundations–Amended.**~~

~~IRC Chapter 4, Section R405.01, Concrete or masonry foundations, is hereby amended to read as follows:~~

~~**SECTION R405**~~
~~**FOUNDATION DRAINAGE**~~

~~**R405.1 Concrete or masonry foundations.** Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper, and the drainage tiles or perforated pipe shall be placed on a minimum of 2 inches (51 mm) of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.~~

15.13.~~290~~270 IRC Chapter 4, Section R408.~~0~~7, Flood resistance ~~required~~ –Amended.

IRC Chapter 4, Section R408.~~0~~7, Flood resistance required, is hereby amended to read in its entirety as follows:

R408.~~0~~7 Flood resistance ~~required~~. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.280 IRC Chapter 5, Section 501.3, Fire protection of floors – Amended.

IRC Chapter 5, Section 501.3, Fire protection of floors, is hereby deleted in its entirety.

15.13.~~300~~290 IRC Chapter 5, Section R506.2.3, Vapor retarder–Deleted.

IRC Chapter 5, Section R506.2.3, Vapor retarder, is hereby deleted in its entirety.

~~**SECTION R506**~~
~~**CONCRETE FLOORS (ON GROUND)**~~

~~**15.13.310 IRC Chapter 6, Section R601.3, Vapor retarders–Deleted.**~~

~~– IRC Chapter 6, Section R601.3, Vapor retarders, is hereby deleted in its entirety.~~

~~**– SECTION R601**~~
~~**– MEANS OF EGRESS**~~

15.13.~~320~~300 IRC Chapter 6, Section R602.3(5), Table–Amended.

IRC Chapter 6, Section R602.3(5), Table, is hereby amended as follows:

TABLE R602.3(5)
SIZE, HEIGHT AND SPACING OF WOOD STUDS[ad]

[a.] Listed heights are distances between points of lateral support placed perpendicular to the plane of the wall. Increases in unsupported height are permitted where justified by analysis.

[d.] Stud size, supporting two floors only, shall comply with the column heading for supporting one floor, roof, and ceiling.

15.13.~~330~~310 IRC Chapter 9, Section R903.4.1, Secondary (emergency o~~O~~verflow) drains ~~and~~or scuppers–Amended.

IRC Chapter 9, Section R903.4.1, Secondary (emergency o~~O~~verflow) drains ~~and~~or scuppers, is hereby amended to read in its entirety as follows:

~~**CHAPTER 9**~~
~~**REQUIREMENTS FOR ROOF COVERINGS**~~

R903.4.1 Secondary (emergency o~~O~~verflow) drains ~~and~~or scuppers. Where roof drains are required, secondary emergency overflow roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason. Overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51 mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains and having a minimum opening height of 4 inches (102 mm) shall be installed in the adjacent parapet walls with the inlet flow located 2 inches (51 mm) above the low point of the roof served. The installation and sizing of overflow drains, leaders and conductors shall comply with the current Plumbing codes adopted by the City of Rapid City ~~for Plumbing~~.

Overflow drains shall discharge to an approved location and shall not be connected to roof drain lines.

15.13.~~340~~320 IRC Chapter 9, Section R905.2.7.1, Ice barrier–Amended.

IRC Chapter 9, Section R905.2.7.1, Ice barrier, is hereby amended to read in its entirety as follows:

R905.2.7.1 Ice barrier. In areas where there has been a history of ice forming along the eaves causing a backup of water as designated in Table R301.2(1), an ice barrier that consists of a least two layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet, shall be used in lieu of normal underlayment and extend from the lowest edges of all roof surfaces to a point at least 24 inches (610 mm) inside the exterior wall line of the building.

Exception: Detached accessory structures that contain no conditioned floor area.

If the ice ~~dam~~shield is not inspected, the contractor shall provide an affidavit that the ice ~~dam was~~ shield materials were installed properly.

15.13.330 IRC Section R907.3, Recovering versus replacement – Amended.

IRC Section R907.3 Recovering versus replacement is hereby amended to read in its entirety as follows:

R907.3 Recovering versus replacement. New roof coverings shall not be installed without first removing all existing layers of roof coverings so that the bare wood can be viewed.

Exceptions:

1. Complete and separate roofing systems, such as standing-seam metal roof systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.

2. Installation of metal panel, metal shingle and concrete and clay tile roof coverings over existing wood shake roofs shall be permitted when the application is in accordance with Section R907.4.

3. The application of new protective coating over existing spray polyurethane foam roofing systems shall be permitted without tear-off of existing roof coverings.

4. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section R905.

15.13.~~350~~340 IRC Chapter 11–Amended.

IRC Chapter 11, is hereby amended to read in its entirety as follows:

~~**CHAPTER 11**~~
~~**ENERGY EFFICIENCY**~~

Habitable living spaces shall be insulated to the following specifications: R-30 in the attic and R-11 in exterior walls.

Exception: Manufactured sunroom components.

15.13.350 IRC Section P2904.1, Dwelling unit fire sprinkler systems – General – Amended.

IRC Chapter 29, Section P2904.1, General, is hereby amended to read in its entirety as follows:

P2904.1 General. Section P2904 shall apply only when the property owner elects to install a fire sprinkler system and shall not be used to require installation of a fire sprinkler system. To the extent that a property owner chooses to install a fire sprinkler system in all or some of a structure, the design and installation of such a residential fire sprinkler system shall be in accordance with NFPA 13D or Section P2904, which shall be considered equivalent to NFPA 13D. Section P2904 shall apply to stand-alone and multipurpose wet-pipe sprinkler systems that do not include the use of antifreeze. A multipurpose fire sprinkler system shall provide domestic water to both fire sprinklers and plumbing fixtures. A stand-alone sprinkler system shall be separate and independent from the water distribution system. A backflow preventer shall not be required to separate a stand-alone sprinkler system from the water distribution system.

15.13.360 IRC Section P2904.1.1, Required sprinkler locations – Deleted.

IRC Chapter 29, Section P2904.1.1, Required sprinkler locations, is hereby deleted in its entirety.

15.13.~~360~~370 IRC Appendix E, Section AE101.1, General–Amended.

IRC Appendix E, Section AE101.1, General, is hereby amended to read in its entirety as follows:

~~**APPENDIX E**~~
~~**MANUFACTURED HOUSING USED AS DWELLINGS**~~
~~**SECTION AE101 SCOPE**~~

AE101.l General. These provisions shall be applicable to all manufactured homes used as a single dwelling unit and shall apply to the following:

1. Construction, alteration and repair of any foundation system which is necessary to provide for the installation of a manufactured home unit.

2. Construction, installation, addition, alteration, repair or maintenance of the building service equipment which is necessary for connecting manufactured homes to water, fuel, or power supplies and sewage systems.

3. Alterations, additions or repairs to existing manufactured homes. The construction, alteration, moving, demolition, repair and use of accessory buildings and structures and their building service equipment shall comply with the requirements of the codes adopted by this jurisdiction.

These provisions shall not be applicable to the design and construction of manufactured homes and shall not be deemed to authorize either modifications or additions to manufactured homes where otherwise prohibited.

Exception: In addition to these provisions, new and replacement manufactured homes to be located in flood hazard areas shall meet the applicable requirements of Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.~~370~~380 IRC Appendix J, Section AJ102.5, Flood hazard areas–Amended.

IRC Appendix J, Section AJ102.5, Flood hazard areas, is amended to read in its entirety as follows:

~~**APPENDIX J**~~
~~**EXISTING BUILDINGS AND STRUCTURES**~~
~~**SECTION AJ101 SCOPE**~~

AJ102.5 Flood hazard areas. Work performed in existing buildings located in a flood hazard area shall be subject to the provisions of Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.~~380~~390 IRC Appendix H, Section AH~~106.1~~105.2, ~~General~~Footings–Amended.

IRC Appendix H, Section AH~~106.1~~105.2, ~~General~~Footings, is hereby amended to read in its entirety as follows:

~~**APPENDIX H**~~
~~**PATIO COVERS**~~
~~**SECTION AH106**~~
~~**FOOTINGS**~~

AH~~106.1~~105.2, ~~General~~Footings. A patio cover shall be permitted to be supported on a slab on grade without footings, provided the slab conforms to the provisions of Section R506 of this code, is not less than 3.5 inches (89 mm) thick and the columns do not support live and dead loads in excess of 750 pounds (3.34 kN) per column.

15.13.~~390~~400 IRC Appendix H, Section AH~~107~~106, Special provisions for aluminum screen enclosures in hurricane-prone regions–Deleted.

~~**SECTION AH107**~~

~~**SPECIAL PROVISIONS FOR ALUMINUM SCREEN ENCLOSURES IN HURRICANE-PRONE REGIONS**~~

IRC Appendix H, Section AH~~107~~106, is hereby deleted in its entirety.

CITY OF RAPID CITY

_____
Mayor

ATTEST

_____
Finance Officer

(seal)

First Reading:
Second Reading:
Published:
Effective: