

ORDINANCE NO. 5819

AN ORDINANCE ADOPTING THE 2009 INTERNATIONAL RESIDENTIAL CODE BY REPEALING CHAPTER 15.13 OF THE RAPID CITY MUNICIPAL CODE IN ITS ENTIRETY AND ADOPTING A NEW CHAPTER 15.13 OF THE RAPID CITY MUNICIPAL CODE

BE IT ORDAINED by the City of Rapid City that Chapter 15.13 of the Rapid City Municipal Code is repealed in its entirety.

BE IT FURTHER ORDAINED by the City of Rapid City that a new Chapter 15.13 of the Rapid City Municipal Code, entitled International Residential Code, be and is hereby adopted as follows:

15.13.010 Adoption

There is adopted by the city that certain code recommended by the International Code Council known as the International Residential Code for One- and Two-Family Dwellings, 2009 edition, specifically Chapters 1-11, Chapter 44, and Appendices E, J, K, & H thereof. The code is adopted for One- and Two-family Dwellings only. A copy of same is on file in the office of the City Building Official.

BE IT FURTHER ORDAINED that the International Residential Code for One- and Two-Family Dwellings, as adopted, be hereinafter amended as follows:

**SECTION R101
GENERAL**

15.13.020 IRC Chapter 1, Section R101.2, SCOPE – AMENDED

IRC, Chapter 1, Section R101.2, **SCOPE**, is hereby amended to read as follows:

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. ~~Fire suppression required by Section 419.5 of the *International*~~

~~Building Code when constructed under the International Residential Code for One and Two Family Dwellings shall conform to Section 903.3.1.3 of the International Building Code.~~

SECTION R102 APPLICABILITY

15.13.030 IRC Chapter 1, Section R102.7, EXISTING STRUCTURES – AMENDED

IRC, Chapter 1, Section R102.7, **EXISTING STRUCTURES**, is hereby amended to read as follows:

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, the *International Property Maintenance Code* ~~or the International Fire Code, or as is deemed necessary by the Building Official~~ for the general safety and welfare of the occupants and the public.

SECTION R103 ~~DEPARTMENT OF BUILDING SAFETY~~ BUILDING PERMIT REVIEW TEAM

15.13.040 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 as follows:

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

SECTION R104 DUTIES AND POWERS OF THE BUILDING OFFICIAL

15.13.050 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:

R104.10.1 Areas prone to flooding. ~~The building official shall not grant modifications to any provision related to areas prone to flooding as established by table R301.2(1) without the~~

~~granting of a variance to such provisions by the board of appeals.~~ [See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

SECTION R105 PERMITS

15.13.060 IRC, Chapter 1, Section R105.2, WORK EXEMPT FROM PERMIT – AMENDED

IRC, Chapter 1, Section R105.2, **WORK EXEMPT FROM PERMIT** is hereby amended to read as follows:

R105.2 Work exempt from permit. Permits shall not be required for the following. Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

1. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed ~~200~~ 120 square feet (~~18.58~~ M²).
2. Fences not over 6 feet (1829 mm) high.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. ~~Sidewalks and driveways.~~ Deck, platforms, walks, and driveways not more than 30 inches above grade and not over any basement or story below.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than ~~24 inches (610 mm)~~ 18 inches deep, do not exceed 5,000 gallons (19,000 L) and are installed entirely above ground.
8. Swings and other playground equipment.
9. Window awnings supported by an exterior wall which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
10. ~~Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.~~ Replacement of siding and windows except for dwellings and accessory structures located in a designated historic district or if individually listed in National Register of Historic Places per SDCL 1-19-11.1.
11. Dumpsters.
12. Gutters, downspouts, and storm windows.
13. Window replacement - where the rough opening is not altered.
14. Structures or work performed on properties of the government of the United States of America, State of South Dakota, and County of Pennington.

Unless otherwise exempted, separate plumbing, electrical, and mechanical permits will be required for the above exempted items.

15.13.070 IRC Chapter 1, Section R105.3.1.1, DETERMINATION OF SUBSTANTIALLY IMPROVED OR SUBSTANTIALLY DAMAGED EXISTING BUILDINGS IN FLOOD HAZARD AREAS – AMENDED

IRC Chapter 1, Section R105.3.1.1, **DETERMINATION OF SUBSTANTIALLY IMPROVED OR SUBSTANTIALLY DAMAGED EXISTING BUILDINGS IN FLOOD HAZARD AREAS**, is hereby amended to read as follows:

R105.3.1.1 Substantially improved or substantially damaged existing building in areas prone to flooding. ~~For applications for reconstruction, rehabilitation, addition or other improvement of existing buildings or structures located in an area prone to flooding as established by Table R301.2(1), the building official shall examine or cause to be examined the construction documents and shall prepare a finding with regard to the value of the proposed work. For buildings that have sustained damage of any origin, the value of the proposed work shall include the cost to repair the building or structure to its predamaged condition. If the building official finds that the value of proposed work equals or exceeds 50 percent of the market value of the building or structure before the damage has occurred or the improvement is started, the finding shall be provided to the board of appeals for a determination of substantial improvement or substantial damage. Applications determined by the board of appeals to constitute substantial improvement or substantial damage shall require all existing portions of the entire building or structure to meet the requirements of Section R322.~~
See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.13.080 IRC Chapter 1, Section R105.5, EXPIRATION – AMENDED

IRC Chapter 1, Section R105.5, **EXPIRATION**, is hereby amended to read as follows:

R105.5 Expiration. Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. The requirement that all work authorized by a building permit be commenced within 180 days does not operate to change timelines established in any notice and/or order issued by the Building Official or his designee.

15.13.090 IRC Chapter 1, Section R105.9, PRELIMINARY INSPECTION. – DELETED

IRC Chapter 1, Section R105.9, **PRELIMINARY INSPECTION**, is hereby deleted in its entirety.

R105.9 Preliminary Inspection. ~~Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.~~

SECTION R106 CONSTRUCTION DOCUMENTS

15.13.100 IRC Chapter 1, Section R106.1.3, INFORMATION FOR CONSTRUCTION IN FLOOD HAZARD – AMENDED

IRC Chapter 1, Section R106.1.3, **INFORMATION FOR CONSTRUCTION IN FLOOD HAZARD**, is hereby amended to read as follows:

R106.1.3 Information for construction in areas prone to flooding. ~~For buildings and structures located in whole or in part in flood hazard areas as established by Table R301.2(1), construction documents shall include:~~

- ~~1. Delineation of flood hazard areas, floodway boundaries and flood zones and the design flood—elevation, as appropriate;~~
- ~~2. The elevation of the proposed lowest floor, including *basement*, in areas of shallow flooding (AO Zones), the height of the proposed lowest floor, including *basement*, above the highest adjacent *grade*;~~
- ~~3. The elevation of the bottom of the lowest horizontal structural member in coastal high hazard areas (V Zone); and~~
- ~~4. If design flood elevations are not included on the community's Flood Insurance Rate Map (FIRM), the *building official* and the applicant shall obtain and reasonably utilize any design flood elevation and floodway data available from other sources.~~

[See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

15.13.110 IRC Chapter 1, Section R106.3.1, **APPROVAL REVIEW OF CONSTRUCTION DOCUMENTS** – AMENDED

IRC Chapter 1, Section R106.3.1, **APPROVAL REVIEW OF CONSTRUCTION DOCUMENTS**, is hereby amended to read as follows:

R106.3.1 Approval Review of construction documents. When the building official issues a permit, the construction documents shall be ~~approved~~ reviewed in writing or by stamp. One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or his or her authorized representative.

15.13.120 IRC Chapter 1, Section R106.4, AMENDED CONSTRUCTION DOCUMENTS - AMENDED

IRC Chapter 1, Section R106.4, **AMENDED CONSTRUCTION DOCUMENTS**, is hereby amended to read as follows:

R106.4 Amended construction documents. Work shall be installed in accordance with the ~~approved~~ reviewed construction documents, and any changes made during construction that are not in compliance with the ~~approved~~ reviewed construction documents shall be resubmitted for ~~approval~~ review as an amended set of construction documents.

15.13.130 IRC Chapter 1, Section R106.5, RETENTION OF CONSTRUCTION DOCUMENTS - AMENDED

IRC Chapter 1, Section R106.5, **RETENTION OF CONSTRUCTION DOCUMENTS**, is hereby amended to read as follows:

R106.5 Retention of construction documents. One set of ~~approved~~ reviewed construction documents shall be retained by the building official for a period of not less than 180 days from the date of completions of the permitted work, or as required by state or local laws.

SECTION R107 TEMPORARY STRUCTURES AND USES

15.13.140 IRC Chapter 1, Section R107, TEMPORARY STRUCTURES AND USES – DELETED

IRC Chapter 1, Section R107, **TEMPORARY STRUCTURES AND USES**, is hereby deleted in its entirety.

~~**R107.1 General.** *The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.*~~

~~**R107.2 Conformance.** *Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.*~~

~~**R107.3 Temporary power.** *The building official is authorized to give permission to temporarily supply and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part*~~

~~covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.~~

R107.4 Termination of approval. ~~The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued~~

SECTION R108 FEES

15.13.150 IRC Chapter 1, Section R108.1, PAYMENT OF FEES – AMENDED

IRC Chapter 1, Section R108.1, **PAYMENT OF FEES**, is hereby amended to read as follows:

R108.1 Payment of fees. A permit shall not be valid until the fees prescribed by law have been paid. Nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

15.13.160 IRC Chapter 1, Section R108.2, SCHEDULE OF PERMIT FEES – AMENDED

IRC Chapter 1, Section R108.2, **SCHEDULE OF PERMIT FEES**, is hereby amended to read as follows:

R108.2 Schedule of permit fees. On buildings, structures, electrical, gas, mechanical and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the ~~schedule as established by the applicable governing authority~~ resolution adopted by the Common Council.

15.13.170 IRC Chapter 1, Section R108.7, PLAN REVIEW FEES – ADDED

IRC Chapter 1, Section R108.7, **PLAN REVIEW FEES**, is hereby added to read as follows:

R108.7 Plan review fees. When submittal documents are required, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be set by resolution of the Common Council.

The plan review fees specified in this subsection are separate from and in addition to the permit fees specified in Section R108.1.

15.13.180 IRC Chapter 1, Section R108.8, INVESTIGATION FEES FOR WORK WITHOUT A PERMIT – ADDED

IRC Chapter 1, Section R108.8, **INVESTIGATION FEES FOR WORK WITHOUT A PERMIT**, is hereby added to read as follows:

R108.8 Investigation fees for work without a permit. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The minimum investigation fee shall be set by the Common Council. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

SECTION R109 INSPECTIONS

15.13.190 IRC Chapter 1, Section R109.0, GENERAL - ADDED

IRC Chapter 1, Section R109.0, **GENERAL**, is hereby added to read as follows.

R109.0 General. All construction or work for which a permit is required shall be subject to inspection by the building official and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the building official. In addition, certain types of construction shall have continuous inspection as specified in Section 1701 of the 2009 International Building Code.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of the Rapid City Municipal Code. Inspections do not give authority to violate or fail to follow other provisions of the Rapid City Municipal Code.

It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

A survey of the lot may be required by the building official to verify that the structure is located in accordance with the approved plans.

Buildings or structures built without one or more required inspections, as specified by Section R109 of this Code and Chapter 17 of the *International Building Code* may be classed as an unsafe building or structure and action taken as specified by Section 115 for unsafe buildings or structures of this code. Buildings or structures wired, plumbed, provided with mechanical equipment, vents, connectors, chimneys without required inspections, as specified by the currently adopted Electrical Code, as locally amended; the currently adopted Plumbing Code, as amended; the currently adopted Mechanical Code, as locally amended, may be classed as an unsafe building or structure and action taken as specified by Section 115 for unsafe buildings or structures of the currently adopted edition of the *International Building Code*.

15.13.200 IRC Chapter 1, Section R109.1.3, FLOODPLAIN INSPECTIONS - AMENDED

IRC Chapter 1, Section 109.1.3, **FLOODPLAIN INSPECTIONS**, is hereby amended to read as follows:

R109.1.3 Floodplain inspections. ~~For construction in areas prone to flooding as established by Table R301.2(1), upon placement of the lowest floor, including *basement*, and prior to further vertical construction, the *building official* shall require submission of documentation, prepared and sealed by a registered *design professional*, of the elevation of the lowest floor, including *basement*, required in~~ [Section R322. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

SECTION R112 BOARD OF APPEALS

15.13.210 IRC Chapter 1, Section R112, BOARD OF APPEALS – DISCUSS

IRC Chapter 1, Section R112, **BOARD OF APPEALS**, is hereby amended to read as follows:

R112.1 General. ~~In order to hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The *building official* shall be an ex officio member of said board but shall have no vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *building official*.~~

R112.2 Limitations on authority. ~~An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. The board shall have no authority to waive requirements of this code.~~

R112.2.1 Determination of substantial improvement in areas prone to flooding. ~~When the *building official* provides a finding required in Section R105.3.1.1, the board of appeals shall determine whether the value of the proposed work constitutes a substantial improvement. A substantial improvement means any repair, reconstruction, rehabilitation, *addition* or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the improvement or repair is started. If the building or structure has sustained substantial damage, all repairs are considered substantial improvement regardless of the actual repair work performed. The term does not include:~~

- ~~1. Improvements of a building or structure required to correct existing health, sanitary or safety code violations identified by the *building official* and which are the minimum necessary to assure safe living conditions; or~~
- ~~2. Any alteration of an historic building or structure, provided that the alteration will not preclude the continued designation as an historic building or structure. For the purpose of this exclusion, an historic building is:

 - ~~2.1. *Listed* or preliminarily determined to be eligible for *listing* in the National Register of Historic Places; or~~
 - ~~2.2. Determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or~~
 - ~~2.3. Designated as historic under a state or local historic preservation program that is *approved* by the Department of Interior.~~~~

R112.2.2 Criteria for issuance of a variance for areas prone to flooding. ~~A variance shall be issued only upon:~~

- ~~1. A showing of good and sufficient cause that the unique characteristics of the size, configuration or topography of the site render the elevation standards in Section R322 inappropriate.~~
- ~~2. A determination that failure to grant the variance would result in exceptional hardship by rendering the *lot* undevelopable.~~
- ~~3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.~~
- ~~4. A determination that the variance is the minimum necessary to afford relief, considering the flood hazard.~~
- ~~5. Submission to the applicant of written notice specifying the difference between the design flood elevation and the elevation to which the building is to be built, stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced floor elevation, and stating that construction below the design flood elevation increases risks to life and property.~~

R112.3 Qualifications. ~~The board of appeals shall consist of members who are qualified by experience and training to pass on matters pertaining to building construction and are not employees of the *jurisdiction*.~~

R112.4 Administration. ~~The *building official* shall take immediate action in accordance with the decision of the board.~~

R112.1 Board of Appeals. In order to hear and decide appeals of orders, decisions or determinations made by the city's building official or their designee relative to the application and interpretation of this code, there is hereby created a board of appeals to be known as the

Rapid City International Residential Code Board of Appeals (IRC Board of Appeals). The decision of the IRC Board of Appeals shall be final.

R112.2 Membership and bylaws. The membership of the IRC Board of Appeals described in subsection A shall be identical to the membership of the City's Residential Contractor Board. The officers of the Residential Contractor Board shall hold the same positions on the IRC Board of Appeals as they hold on the Residential Contractor Board. When the members of the Residential Contractor Board are sitting as the IRC Board of Appeals they shall make clear on the record that they are hearing a matter on their agenda in that capacity and not as the Residential Contractor Board. The IRC Board of Appeals will have the authority to adopt by-laws governing the conduct of meetings. In the absence of by-laws to the contrary the meetings of the IRC Board of Appeals shall be governed by the latest edition of Roberts Rules of Order.

R112.3 Appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted, the provisions of this code do not fully apply, or that a request to use an alternate material, design or method of construction under Section R104.11 has been requested and denied. If the appeal is based on a claim that an alternate material, design or method of construction was improperly denied, the appellant must submit what alternate material, design or method of construction they are proposing. The appellant also has the burden to demonstrate to the Board that the alternative method or material that they are proposing is an equally good or better form of construction. The Board shall have no authority to waive the requirements of the International Residential Code as adopted by the City.

R112.4 Notice of Appeal. All appeals must be submitted in writing to the building official or their designee within 10 business days of the order, decision or determination of the building official being appealed from. Once the appeal is received by the building official, the members of the IRC Board of Appeals shall be contacted to schedule a meeting at which the appeal will be heard. The hearing on the appeal shall be held no sooner than 7 days after the appeal is received by the City.

R112.5 Hearings. All hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official, any member of the City's staff or any person whose interests are affected shall be given an opportunity to be heard.

SECTION R115 RESIDENTIAL CONTRACTOR LICENSES

15.13.220 IRC Chapter 1, Section R115, RESIDENTIAL CONTRACTOR LICENSES – ADDED

IRC Chapter 1, Section R115, **RESIDENTIAL CONTRACTOR LICENSES**, is hereby added to read as follows:

R115.1 Definitions.

For the purposes of this chapter, the following definitions shall apply.

- A. **CONSTRUCTION SUPERVISOR.** The individual who has passed the Residential Contractor Board's examination and has been designated by a residential building contractor or residential roofing contractor as the person responsible for the personal supervision of residential building contracting or residential roofing contracting.
- B. **EMPLOYEE.** A person whose compensation for construction work is reported by the employer on an Internal Revenue Service W-2 Form and is also otherwise considered an employee under applicable law.
- C. **FIRM.** A partnership, limited partnership, limited liability partnership, limited liability limited partnership, limited liability company, corporation or other legal entity.
- D. **OFFICER.** When used in reference to a firm, as defined above, an individual who is a limited or general partner in any type of partnership, a member or manager of a limited liability company, or an officer or director of a corporation
- E. **PERSONAL SUPERVISION.** The construction supervisor's oversight and direction of the residential building contracting that includes the following:
 - 1. A construction supervisor is available to employees supervised and city inspectors.
 - 2. A construction supervisor is able to and does determine that all work performed is in compliance with this chapter and all city ordinances, rules, regulations, and state law.
- F. **RESIDENTIAL BUILDING CONTRACTING.** The enlargement, alteration, repair, improvement, conversion or new construction of any 1-family or 2-family dwelling, or any accessory building or structure associated with a 1-family or 2-family dwelling for which a building permit is required.
- G. **RESIDENTIAL BUILDING CONTRACTOR.** A person or firm who for compensation or other consideration undertakes or offers to undertake residential building contracting.
- H. **RESIDENTIAL ROOFING CONTRACTING.** The alteration, repair or improvement of the roof of any 1-family or 2-family dwelling for which a building permit is required.
- I. **RESIDENTIAL ROOFING CONTRACTOR.** A person or firm who for compensation or other consideration undertakes or offers to undertake residential roofing contracting.

R115.2 License required.

- A. It is unlawful for any person or firm to conduct, carry on or engage in residential building contracting, or act in the capacity of a residential building contractor, without first obtaining from the City of Rapid City a valid residential building contractor's license.
- B. It is unlawful for any person or firm to conduct, carry on or engage in residential roofing contracting, or act in the capacity of a residential roofing contractor, without first obtaining from the City of Rapid City a valid residential roofing contractor's license
- C. The following exceptions do not require a license:
 - 1. Employees of a licensee if they are under the personal supervision of a construction supervisor;
 - 2. Persons engaged in other construction trades for which licenses are required by the city when that person is performing work commensurate with the respective license;
 - 3. A landlord for work to be done on his or her property when the landlord is acting as his or her own contractor. A landlord may not build more than 1 single-family dwelling in a 3-year period without obtaining a contractor's license; and
 - 4. A homeowner who builds, constructs, alters, repairs, adds to or demolishes any building or structure or any portion thereof that constitutes the owner's residence or a building or structure accessory thereto that is intended for the owner's personal use. An owner may not build more than 1 single-family dwelling in a 3-year period without obtaining a contractor's license, provided he or she occupies the dwelling a minimum of 1 year after the final inspection is approved.
- D. The holder of a residential building contractor's license may undertake residential roofing contracting without the requirement for a separate residential roofing contractor's license

R115.3 License application.

- A. License Application. Any person or firm desiring to engage in the business of residential building contracting or residential roofing contracting shall first make an application for a license therefor to the building official on forms furnished by the Building Inspection Division.
- B. Designation of Construction Supervisor. Each applicant shall designate on its application at least one construction supervisor who shall sit for the examination. If the applicant is a natural person, that person may designate himself or an employee as construction supervisor. If the applicant is a firm, it may designate an officer or employee of the firm as construction supervisor. An applicant may designate multiple construction supervisors, all of whom, upon successful completion of the examination, shall be listed on the license issued to the contractor. No applicant may designate a construction supervisor that has already been designated as construction supervisor by another licensee, and no person or firm shall hold more than one license.

- C. Proof of excise tax number. Applicants for a residential contractor's license and residential roofing contractor's license shall be required to supply a copy of their South Dakota excise tax license.
- D. South Dakota address and phone number. Applicants for a residential contractor's license and residential roofing contractor's license shall be required to furnish the name, address and phone number of an agent residing in South Dakota. Any firm required to file organizing or incorporating documents with the Secretary of State shall furnish proof that it is a validly existing legal entity authorized to transact business in South Dakota.
- E. License application fees. Each person applying for a residential contractor's license or residential roofing contractor's license shall pay the required fee. The fee for new licenses, examinations, and renewal of licenses shall be set by resolution of the Common Council.

R115.4 Examination.

- A. Construction Supervisor's Examination. Before a license may be issued, at least one designated construction supervisor shall be required to pass an examination as to his or her qualifications to perform residential building contracting or residential roofing contracting. The examination shall be given under the direction of the building official. Any person who fails the examination shall not be eligible to take another examination until at least 30 days have lapsed from the date of the last examination. Applicants shall pay the examination fee for each exam given.
- B. Exception to Examination Requirement. The Building Official may approve the issuance of a license where all other qualifications are met and the contractor presents a valid current residential contractor license or a valid current residential roofing contractor license issued by any other governmental agency giving an examination, the scope and character of which, in the discretion of the building official, is at least equal to that given by the Residential Contractor Board.

R115.5 Insurance.

- A. Liability Insurance. Liability insurance shall be required of every residential contractor and every residential roofing contractor. Every applicant for a residential contractor's license or residential roofing contractor's license shall present to the building official for review a valid certificate of insurance at the time of application. It shall be the duty of every residential contractor and every residential roofing contractor to continually maintain valid liability insurance. The minimum required general aggregate liability shall be \$1,000,000 with \$300,000 fire damage and \$1,000,000 each occurrence.
- B. Worker's compensation insurance. In accordance with South Dakota state law, proof of worker's compensation insurance shall be verified prior to the issuance of a license.

R 115.6 License use.

- A. Supervision required. No licensed residential building contractor or licensed residential roofing contractor shall allow his or her name to be used by any other person directly or indirectly, either to obtain a building permit or to perform residential building contracting or residential roofing contracting outside his or her personal supervision. Any subcontractor working for a licensed contractor shall also be licensed.
- B. Termination or Separation of Designated Construction Supervisor. It shall be the duty of each residential building contractor and residential roofing contractor to immediately notify the building official in writing upon the designation of a new construction supervisor or the termination or separation of a designated construction supervisor listed on the contractor's license.
 - 1. Upon the termination or separation of a designated construction supervisor, the contractor's license shall expire ten (10) business days following such separation or termination unless
 - i. There is another construction supervisor listed on its license;
 - ii. The contractor immediately designates another construction supervisor who has passed the examination; or
 - iii. The license is extended as provided herein.
 - 2. The contractor may, within ten business days of any such termination or separation, request in writing from the Building Official an extension of its license, and the Building Official shall grant an extension for a period not to exceed 30 days from the date of termination or separation.
 - 3. No contractor may be issued a new permit during the period where no construction supervisor is listed on its license.

R115.7 License term and renewal.

- A. License term and renewal. All residential building contractor licenses issued under the provisions of this chapter shall expire on December 31 of every third year, beginning on December 31, 1994. All residential roofing contractor licenses issued under the provisions of this chapter shall expire on December 31 of every third year, beginning on December 31, 2013. All renewal fees shall be paid on or before December 31 of each successive triennial year. No renewal license may be issued until the designated construction supervisor has completed the requirements for continuing education. Licenses not renewed by the date of expiration shall not be renewed and prior licensees shall be required to reapply for a new license, meeting all requirements of this Chapter including passing an examination and paying all required fees.
- B. Continuing education. The continuing education requirement for license renewal is 1 hour of attendance for every year the license is in effect, at a code class approved by the building official. The class topics shall include, but are not limited to:
 - 1. Requirements of the code;
 - 2. Local amendments to the code;

3. Requirements for group R-3 occupancies;
4. Requirements for group U occupancies; and
5. Roofing requirements.

R115.8 Rapid City Residential Contractor Board.

- A. There is continued, as existed prior to adoption of this Section, the Rapid City Residential Contractors Board. The Board shall consist of 5 members from the residential construction industry, and the building official or his or her designee shall be an ex officio, non-voting member. The members shall be appointed by the Mayor with approval of the Common Council. Members of the Board shall serve for a term of 2 years. The members of the Board, except for city staff, shall serve without compensation for the service.
- B. The Board is authorized to adopt such rules and regulations as shall become necessary with the approval of the Common Council. The Board shall notify all license holding residential contractors and all license holding residential roofing contractors of the proposed rules and regulations within 60 days prior to the delivery of the rules and regulations to the Common Council.
- C. The Board shall hold meetings, as necessary, for transaction of business that may come before it.
- D. The purpose of the Board is to protect the public health, safety and welfare, and to guard against incompetent or dishonest contractors providing unsafe, unstable or short-lived products or services. Board procedures should always be fair and reasonable. Special care should be taken to insure that new or small volume builders can obtain a license without hardship.

R115.9 Violations and penalties.

- A. Double fee. Any person who shall commence any residential building work for which a permit is required by this code without first having obtained a permit therefore shall, if subsequently permitted to obtain a permit, pay double the permit fee fixed by this section for the work; provided, however, that, this provision shall not apply to emergency work when it shall be proved to the satisfaction of the building official that the work was urgently necessary and that it was not practical to obtain a permit therefore before the commencement of the work. In all such cases, a permit must be obtained as soon as it is practical to do so, and if there be an unreasonable delay in obtaining the permit, a double fee as herein provided shall be charged.
- B. Suspension, revocation or refusal to issue. It shall be within the discretion of the building official to suspend, revoke or refuse to issue or renew the license of any residential building contractor or residential roofing contractor who has been doing work without a permit. It shall also be within the discretion of the building official to suspend, revoke, or refuse to issue or renew any residential building contractor's license or any residential roofing contractor's license if the building official finds the following:
 1. Suspension, revocation or refusal to renew is in the public interest; and
 2. Based upon evidence presented, the applicant or licensee:

- a. Has filed an application for a license which is incomplete in any material respect or contains one or more statements which are false or misleading;
 - b. Has engaged in any fraudulent, deceptive, or dishonest act or practice in the performance of residential building contracting or residential roofing contracting;
 - c. Has violated any applicable provision of the International Residential Code, city ordinance, rule, regulation, or state law;
 - d. Fails to maintain the requirements of licensure, including insurance, excise tax license or South Dakota phone and address as required by this Chapter;
 - e. Fails to provide copies of records in his or her possession related to a matter under review;
 - f. Fails to pay fees in a timely manner; or
 - g. Fails to respond to a lawful order or directive of the building official or Residential Contractor Board.
- C. Should any licensee, or applicant for license, under this chapter be aggrieved by the action of the building official, he or she may, within 10 business days, apply to the Residential Contractors Board for a review of the action. Upon the review, the Board may affirm, modify or reverse the action of the building official and may order for good cause the issuance of a license. The decision of the Board shall be final.
- D. The issuance or granting of a permit or approval of plans and specifications shall not be deemed or construed to be a permit for, or an approval of, any violation of any of the provisions of this code. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid, except insofar as the work or use which it authorizes is lawful.
- E. The issuance or granting of a permit or approval of plans shall not prevent the building official from thereafter requiring the correction of errors in the plans and specifications or from preventing construction operations being carried on thereunder when in violation of this chapter or of any other ordinance or from revoking any certificate of approval when issued in error.
- F. Any person or firm violating any of the provisions of this chapter shall be subject to the general penalty provided in Chapter 1.12. Each separate day or any portion thereof during which any violation of this chapter continues shall be deemed to constitute a separate offense, and upon conviction thereof shall be punishable as therein provided.
- G. A licensed contractor who is the subject of a review by the building official shall cooperate fully with the building official. Cooperation includes, but is not limited to:
- 1. Responding fully and promptly to questions raised by the building official;
 - 2. Providing copies of records in the person's possession relative to the matter under review, as requested by the building official; and
 - 3. Appearing at conferences or hearings scheduled by the building official.

SECTION R202 DEFINITIONS

15.13.230 IRC Chapter 2, Section R202, DEFINITIONS – AMENDED

IRC Chapter 2, Section R202, **DEFINITIONS**, is hereby amended to read as follows:

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

ACCESSORY STRUCTURE. ~~A structure not greater than 3,000 square feet (279 m²) in floor area, and not over two stories 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 lot.~~ 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 ~~three~~ 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.

SECTION R301 DESIGN CRITERIA

15.13.240 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.

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; Air Freezing Index – 1548; and Mean Annual Temp - 48°F. (Table 100-B) Wind design – No, Topographic affects.

15.13.250 IRC Chapter 3, Section R301.2.4, FLOODPLAIN CONSTRUCTION – AMENDED

IRC Chapter 3, Section R301.2.4, **FLOODPLAIN CONSTRUCTION**, is hereby amended to read as follows:

R301.2.4 Floodplain construction. ~~Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1) shall be designed and constructed in accordance with Section R322.~~

Exception: ~~Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.~~

R301.2.4.1 Alternative provisions. ~~As an alternative to the requirements in Section R322.3 for buildings and structures located in whole or in part in coastal high hazard areas (V Zones), ASCE 24 is permitted subject to the limitations of this code and the limitations therein.~~

See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

SECTION R302 FIRE-RESISTANT CONSTRUCTION

15.13.260 IRC Chapter 3, Section R302.2, TOWNHOUSES – AMENDED

IRC Chapter 3, Section R302.2, **TOWNHOUSES**, is hereby amended to read as follows:

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 ~~1-hour~~ 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 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.

15.13.270 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 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 board or equivalent	Not less than 5/8-inch Type X gypsum

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.](#)

SECTION R309 GARAGES AND CARPORTS

15.13.300 IRC Chapter 3, Section R309.3, FLOOD HAZARD AREAS – AMENDED

IRC Chapter 3, Section R309.3, For buildings located in **FLOOD HAZARD AREAS**, is hereby amended to read as follows:

R309.3 Flood hazard areas. ~~For buildings located in flood hazard areas as established by Table R301.2(1), garage floors shall be:~~

- ~~1. Elevated to or above the design flood elevation as determined in Section R322; or~~
- ~~2. Located below the design flood elevation provided they are at or above grade on at least one side, are used solely for parking, building access or storage, meet the requirements of Section R322 and are otherwise constructed in accordance with this code.~~

[See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

15.13.310 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 as follows:

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 ~~44 inches (1118 mm)~~ 48 inches above the floor. 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.

Exception: Basements used only to house mechanical equipment and not exceeding total floor area of 200 square feet (18.58 m²).

15.13.320 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 m²).

Exception: ~~Grade floor openings shall have a minimum net clear opening of 5 square feet (0.465 m²).~~

15.13.330 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 as follows:

R310.2.1 Ladder and steps. Window wells with a vertical depth greater than ~~44 inches (1118 mm)~~ 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.

SECTION R311 MEANS OF EGRESS

15.13.340 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 as follows:

R311.3.1 Floor elevations at the required egress doors. Landings or floors at the required egress door shall not be more than 1 ½ inches (38 mm) lower than the top of the threshold.

Exceptions:

The exterior landing or floor shall not be more than ~~7¾ inches (196 mm)~~ 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.

15.13.350 IRC Chapter 3, Section R311.7.4, STAIR TREADS AND RISERS – AMENDED

IRC Chapter 3, Section R311.7.4, **STAIR TREADS AND RISERS**, is hereby amended to read 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.

R311.7.4.1 Riser height. The maximum riser height shall be ~~7¾ inches (196mm)~~ 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).

R311.4.7.2 Tread depth. The minimum tread depth shall be ~~10 inches (254 mm)~~ 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.

Winder treads shall have a minimum tread depth of ~~10 inches (254 mm)~~ 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).

R311.7.4.3 Profile. 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.

15.13.360 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 International Building Code.](#)

SECTION R317

PROTECTION OF WOOD AND WOOD BASED PRODUCTS AGAINST DECAY

15.13.370 IRC Chapter 3, Section R317.1.1, FIELD TREATMENT – AMENDED

IRC Chapter 3, Section R317.1.1, **FIELD TREATMENT**, is hereby amended to read as follows:

R317.1.1 Field treatment. Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated ~~in the field in accordance with A WPA M4.~~

SECTION R318

PROTECTION AGAINST SUBTERRANEAN TERMITES

15.13.380 IRC Chapter 3, Section R318, PROTECTION AGAINST SUBTERRANEAN TERMITES – DELETED

IRC Chapter 3, Section R318, **PROTECTION AGAINST SUBTERRANEAN TERMITES** ites, is hereby deleted in its entirety.

R318.1 Subterranean termite control methods. ~~In areas subject to damage from termites as indicated by Table R301.2(1), methods of protection shall be one of the following methods or a combination of these methods:~~

- ~~1. Chemical termiticide treatment, as provided in Section R318.2.~~
- ~~2. Termite baiting system installed and maintained according to the *label*.~~
- ~~3. Pressure-preservative-treated wood in accordance with the provisions of Section R317.1.~~
- ~~4. Naturally durable termite-resistant wood.~~
- ~~5. Physical barriers as provided in Section R318.3 and used in locations as specified in Section R318.1.~~
- ~~6. Cold-formed steel framing in accordance with Sections R505.2.1 and R603.2.1.~~

R318.1.1 Quality mark. ~~Lumber and plywood required to be pressure-preservative-treated in accordance with Section R318.1 shall bear the quality *mark* of an *approved* inspection agency which maintains continuing supervision, testing and inspection over the quality of the product and which has been *approved* by an accreditation body which complies with the requirements of the American Lumber Standard Committee treated wood program.~~

R318.1.2 Field treatment. ~~Field-cut ends, notches, and drilled holes of pressure-preservative-treated wood shall be retreated in the field in accordance with AWWA M4.~~

R318.2 Chemical termiticide treatment. ~~Chemical termiticide treatment shall include soil treatment and/or field-applied wood treatment. The concentration, rate of application and method of treatment of the chemical termiticide shall be in strict accordance with the termiticide *label*.~~

R318.3 Barriers. ~~*Approved* physical barriers, such as metal or plastic sheeting or collars specifically designed for termite prevention, shall be installed in a manner to prevent termites from entering the structure. Shields placed on top of an exterior foundation wall are permitted to be used only if in combination with another method of protection.~~

R318.4 Foam plastic protection. ~~In areas where the probability of termite infestation is “very heavy” as indicated in Figure R301.2(6), extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below *grade*. The clearance between foam plastics installed above *grade* and exposed earth shall be at least 6 inches (152 mm).~~

Exceptions:

- ~~1. Buildings where the structural members of walls, floors, ceilings and roofs are entirely of noncombustible materials or pressure-preservative-treated wood.—~~

~~2. When in addition to the requirements of Section R318.1, an approved method of protecting the foam plastic and structure from subterranean termite damage is used.~~

~~3. On the interior side of basement walls.~~

SECTION R322 FLOOD-RESISTANT CONSTRUCTION

15.13.390 IRC Chapter 3, Section R322, FLOOD-RESISTANT CONSTRUCTION – AMENDED

IRC Chapter 3, Section 322, **FLOOD-RESISTANT CONSTRUCTION**, is hereby amended to read as follows.

R322.1 General. ~~Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1) shall be designed and constructed in accordance with the provisions contained in this section.~~

Exception: ~~Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.~~

R322.1.1 Alternative provisions. ~~As an alternative to the requirements in Section R322.3 for buildings and structures located in whole or in part in coastal high hazard areas (V Zones), ASCE 24 is permitted subject to the limitations of this code and the limitations therein.~~

R322.1.2 Structural systems. ~~All structural systems of all buildings and structures shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses from flooding equal to the design flood elevation.~~

R322.1.3 Flood-resistant construction. ~~All buildings and structures erected in areas prone to flooding shall be constructed by methods and practices that minimize flood damage.~~

R322.1.4 Establishing the design flood elevation. ~~The design flood elevation shall be used to define areas prone to flooding. At a minimum, the design flood elevation is the higher of:~~

- ~~1. The base flood elevation at the depth of peak elevation of flooding (including wave height) which has a 1 percent (100-year flood) or greater chance of being equaled or exceeded in any given year, or~~
- ~~2. The elevation of the design flood associated with the area designated on a flood hazard map adopted by the community, or otherwise legally designated.~~

R322.1.4.1 Determination of design flood elevations. ~~If design flood elevations are not specified, the *building official* is authorized to require the applicant to:~~

- ~~1. Obtain and reasonably use data available from a federal, state or other source;~~
- ~~or~~
- ~~2. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic engineering practices used to define special flood hazard areas. Determinations shall be undertaken by a registered *design professional* who shall document that the technical methods used reflect currently accepted engineering practice. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval.~~

R322.1.4.2 Determination of impacts. ~~In riverine flood hazard areas where design flood elevations are specified but floodways have not been designated, the applicant shall demonstrate that the effect of the proposed buildings and structures on design flood elevations, including fill, when combined with all other existing and anticipated flood hazard area encroachments, will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.~~

R322.1.5 Lowest floor. ~~The lowest floor shall be the floor of the lowest enclosed area, including *basement*, but excluding any unfinished flood-resistant enclosure that is useable solely for vehicle parking, building access or limited storage provided that such enclosure is not built so as to render the building or structure in violation of this section.~~

R322.1.6 Protection of mechanical and electrical systems. ~~Electrical systems, *equipment* and components; heating, ventilating, air conditioning; plumbing *appliances* and plumbing fixtures; *duct systems*; and other service *equipment* shall be located at or above the elevation required in Section R322.2 (flood hazard areas including A Zones) or R322.3 (coastal high hazard areas including V Zones). If replaced as part of a substantial improvement, electrical systems, *equipment* and components; heating, ventilating, air conditioning and plumbing *appliances* and plumbing fixtures; *duct systems*; and other service *equipment* shall meet the requirements of this section. Systems, fixtures, and *equipment* and components shall not be mounted on or penetrate through walls intended to break away under flood loads.~~

Exception: ~~Locating electrical systems, *equipment* and components; heating, ventilating, air conditioning; plumbing *appliances* and plumbing fixtures; *duct systems*; and other service *equipment* is permitted below the elevation required in Section R322.2 (flood hazard areas including A Zones) or R322.3 (coastal high hazard areas including V Zones) provided that they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in accordance with ASCE 24. Electrical wiring systems are permitted to be located below the required elevation provided they conform to the provisions of the electrical part of this code for wet locations.~~

R322.1.7 Protection of water supply and sanitary sewage systems. ~~New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems in accordance with the plumbing provisions of this code. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into systems and discharges from systems into floodwaters in accordance with the plumbing provisions of this code and Chapter 3 of the *International Private Sewage Disposal Code*.~~

R322.1.8 Flood-resistant materials. ~~Building materials used below the elevation required in Section R322.2 (flood hazard areas including A Zones) or R322.3 (coastal high hazard areas including V Zones) shall comply with the following:~~

- ~~1. All wood, including floor sheathing, shall be pressure preservative treated in accordance with AWPA U1 for the species, product, preservative and end use or be the decay resistant heartwood of redwood, black locust or cedars. Preservatives shall be listed in Section 4 of AWPA U1.~~
- ~~2. Materials and installation methods used for flooring and interior and exterior walls and wall coverings shall conform to the provisions of FEMA/FIA TB 2.~~

R322.1.9 Manufactured homes. ~~New or replacement *manufactured homes* shall be elevated in accordance with Section R322.2 or Section R322.3 in coastal high hazard areas (V Zones). The anchor and tie down requirements of Sections AE604 and AE605 of Appendix E shall apply. The foundation and anchorage of *manufactured homes* to be located in identified floodways shall be designed and constructed in accordance with ASCE 24.~~

R322.1.10 As-built elevation documentation. ~~A registered design professional shall prepare and seal documentation of the elevations specified in Section R322.2 or R322.3.~~

R322.2 Flood hazard areas (including A Zones). ~~All areas that have been determined to be prone to flooding but not subject to high velocity wave action shall be designated as flood hazard areas. Flood hazard areas that have been delineated as subject to wave heights between 11/2 feet (457 mm) and 3 feet (914 mm) shall be designated as Coastal A Zones. All building and structures constructed in whole or in part in flood hazard areas shall be designed and constructed in accordance with Sections R322.2.1 through R322.2.3.~~

R322.2.1 Elevation requirements.

- ~~1. Buildings and structures in flood hazard areas not designated as Coastal A Zones shall have the lowest floors elevated to or above the design flood elevation.~~
- ~~2. Buildings and structures in flood hazard areas designated as Coastal A Zones shall have the lowest floors elevated to or above the base flood elevation plus 1 foot (305 mm), or to the design flood elevation, whichever is higher.~~
- ~~3. In areas of shallow flooding (AO Zones), buildings and structures shall have the lowest floor (including *basement*) elevated at least as high above the highest adjacent *grade* as the depth number specified in feet on the FIRM, or at least 2 feet (610 mm) if a depth number is not specified.~~

~~4. Basement floors that are below *grade* on all sides shall be elevated to or above the design flood elevation.~~

~~**Exception:** Enclosed areas below the design flood elevation, including *basements* whose floors are not below *grade* on all sides, shall meet the requirements of Section R322.2.2.~~

R322.2.2 Enclosed area below design flood elevation. ~~Enclosed areas, including crawl spaces, that are below the design flood elevation shall:~~

- ~~1. Be used solely for parking of vehicles, building access or storage.~~
- ~~2. Be provided with flood openings that meet the following criteria:
 - ~~2.1. There shall be a minimum of two openings on different sides of each enclosed area; if have openings on exterior walls.~~
 - ~~2.2. The total net area of all openings shall be at least 1 square inch (645 mm²) for each square foot (0.093 m²) of enclosed area, or the openings shall be designed and the *construction documents* shall include a statement by a registered *design professional* that the design of the openings will provide for equalization of hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwaters as specified in Section 2.6.2.2 of ASCE 24.~~
 - ~~2.3. The bottom of each opening shall be 1 foot (305 mm) or less above the adjacent ground level.~~
 - ~~2.4. Openings shall be not less than 3 inches (76 mm) in any direction in the plane of the wall.~~
 - ~~2.5. Any louvers, screens or other opening covers shall allow the automatic flow of floodwaters into and out of the enclosed area.~~
 - ~~2.6. Openings installed in doors and windows, that meet requirements 2.1 through 2.5, are acceptable; however, doors and windows without installed openings do not meet the requirements of this section.~~~~

R322.2.3 Foundation design and construction. ~~Foundation walls for all buildings and structures erected in flood hazard areas shall meet the requirements of Chapter 4.~~

~~**Exception:** Unless designed in accordance with Section R404:~~

- ~~1. The unsupported height of 6 inch (152 mm) plain masonry walls shall be no more than 3 feet (914mm).~~
- ~~2. The unsupported height of 8 inch (203 mm) plain masonry walls shall be no more than 4 feet (1219 mm).~~
- ~~3. The unsupported height of 8 inch (203 mm) reinforced masonry walls shall be no more than 8 feet (2438 mm).~~

~~For the purpose of this exception, unsupported height is the distance from the finished *grade* of the under-floor space and the top of the wall.~~

R322.3 Coastal high-hazard areas (including V Zones). ~~Areas that have been determined to be subject to wave heights in excess of 3 feet (914 mm) or subject to high-~~

~~velocity wave action or wave induced erosion shall be designated as coastal high hazard areas. Buildings and structures constructed in whole or in part in coastal high hazard areas shall be designed and constructed in accordance with Sections R322.3.1 through R322.3.6.~~

R322.3.1 Location and site preparation.

- ~~1. New buildings and buildings that are determined to be substantially improved pursuant to Section R105.3.1.1, shall be located landward of the reach of mean high tide.~~
- ~~2. For any alteration of sand dunes and mangrove stands the *building official* shall require submission of an engineering analysis which demonstrates that the proposed *alteration* will not increase the potential for flood damage.~~

R322.3.2 Elevation requirements.

- ~~1. All buildings and structures erected within coastal high hazard areas shall be elevated so that the lowest portion of all structural members supporting the lowest floor, with the exception of mat or raft foundations, piling, pile caps, columns, grade beams and bracing, is:
 - ~~1.1. Located at or above the design flood elevation, if the lowest horizontal structural member is oriented parallel to the direction of wave approach, where parallel shall mean less than or equal to 20 degrees (0.35 rad) from the direction of approach, or~~
 - ~~1.2. Located at the base flood elevation plus 1 foot (305 mm), or the design flood elevation, whichever is higher, if the lowest horizontal structural member is oriented perpendicular to the direction of wave approach, where perpendicular shall mean greater than 20 degrees (0.35 rad) from the direction of approach.~~~~
- ~~2. Basement floors that are below *grade* on all sides are prohibited.~~
- ~~3. The use of fill for structural support is prohibited.~~
- ~~4. Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.~~

Exception: ~~Walls and partitions enclosing areas below the design flood elevation shall meet the requirements of Sections R322.3.4 and R322.3.5.~~

R322.3.3 Foundations. ~~Buildings and structures erected in coastal high hazard areas shall be supported on pilings or columns and shall be adequately anchored to those pilings or columns. Pilings shall have adequate soil penetrations to resist the combined wave and wind loads (lateral and uplift). Water loading values used shall be those associated with the design flood. Wind loading values shall be those required by this code. Pile embedment shall include consideration of decreased resistance capacity caused by scour of soil strata surrounding the piling. Pile systems design and installation shall be certified in accordance with Section R322.3.6. Mat, raft or other foundations that support columns shall not be permitted where soil investigations that are required in accordance with Section R401.4 indicate that soil material under the~~

~~mat, raft or other foundation is subject to scour or erosion from wave velocity flow conditions. Slabs, pools, pool decks and walkways shall be located and constructed to be structurally independent of buildings and structures and their foundations to prevent transfer of flood loads to the buildings and structures during conditions of flooding, scour or erosion from wave velocity flow conditions, unless the buildings and structures and their foundation are designed to resist the additional flood load.~~

R322.3.4 Walls below design flood elevation. ~~Walls and partitions are permitted below the elevated floor, provided that such walls and partitions are not part of the structural support of the building or structure and:~~

- ~~1. Electrical, mechanical, and plumbing system components are not to be mounted on or penetrate through walls that are designed to break away under flood loads; and~~
- ~~2. Are constructed with insect screening or open lattice; or~~
- ~~3. Are designed to break away or collapse without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. Such walls, framing and connections shall have a design safe loading resistance of not less than 10 (479 Pa) and no more than 20 pounds per square foot (958 Pa); or~~
- ~~4. Where wind loading values of this code exceed 20 pounds per square foot (958 Pa), the *construction documents* shall include documentation prepared and sealed by a registered *design professional* that:
 - ~~4.1. The walls and partitions below the design flood elevation have been designed to collapse from a water load less than that which would occur during the design flood.~~
 - ~~4.2. The elevated portion of the building and supporting foundation system have been designed to with stand the effects of wind and flood loads acting simultaneously on all building components (structural and nonstructural). Water loading values used shall be those associated with the design flood. Wind loading values shall be those required by this code.~~~~

R322.3.5 Enclosed areas below design flood elevation. ~~Enclosed areas below the design flood elevation shall be used solely for parking of vehicles, building access or storage.~~

R322.3.6 Construction documents. ~~The *construction documents* shall include documentation that is prepared and sealed by a registered *design professional* that the design and methods of construction to be used meet the applicable criteria of this section.~~
[See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

SECTION R401 GENERAL

15.13.400 IRC Chapter 4, Section R401.1, APPLICATION – AMENDED

IRC Chapter 4, Section R401.1, **APPLICATION**, is hereby amended to read as follows:

R401.1 Application. ~~The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table R301.2(1) shall meet the provisions of Section R322. Wood foundations shall be designed and installed in accordance with AF&PA PWF.~~

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 ~~constructed~~ provided at intervals not exceeding 50 feet (15 240 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.

SECTION R403 FOOTINGS

15.13.410 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 as follows:

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 ~~600 square feet (56 m²)~~ 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 (37m²) 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.

SECTION R405 FOUNDATION DRAINAGE

15.13.420 IRC Chapter 4, Section R405.1, CONCRETE OR MASONRY FOUNDATIONS. - AMENDED

IRC Chapter 4, Section R405.01, **CONCRETE OR MASONRY FOUNDATIONS**, is hereby amended to read as follows:

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.

~~**Exception:** A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1.~~

15.13.430 IRC Chapter 4, Section R408.07, FLOOD RESISTANCE. - AMENDED

IRC Chapter 4, Section R408.07, **FLOOD RESISTANCE**, is hereby amended to read as follows:

R408.07 Flood Resistance required. ~~For buildings located in areas prone to flooding as established in Table R301.2(1):~~

- ~~1. Walls enclosing the under floor space shall be provided with flood openings in accordance with Section R322.2.2.~~
- ~~2. The finished ground level of the under floor space shall be equal to or higher than the outside finished ground level on at least one side.~~

Exception: ~~Under floor spaces that meet the requirements of FEMA/FIA TB 11-1.~~

[See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

SECTION R502 WOOD FLOOR FRAMING

15.13.440 IRC Chapter 5, Section 502.2.2.1, TABLE - AMENDED

IRC Chapter 5, Section 502.2.2.1, **TABLE**, is hereby amended in its entirety.

TABLE R502.2.2.1 – [ALTERNATE – see attached table.](#)
FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER
AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST^{c, f, g}
(Deck live load = 40 psf, deck dead load = 10 psf)

SECTION R506 CONCRETE FLOORS (ON GROUND)

15.13.450 IRC Chapter 5, Section 506.2.3, VAPOR RETARDER - DELETED

IRC Chapter 5, Section 506.2.3, **VAPOR RETARDER**, is hereby deleted in its entirety.

R506.2.3 Vapor retarder. ~~A 6 mil (0.006 inch; 152 μm) polyethylene or approved vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where no base course exists.~~

Exception: ~~The vapor retarder may be omitted:~~

- ~~1. From detached garages, utility buildings and other unheated accessory structures.~~
- ~~2. For unheated storage rooms having an area of less than 70 square feet (6.5 m²) and carports.~~
- ~~3. From driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.~~

~~4. Where approved by the building official, based on local site conditions.~~

SECTION R601 MEANS OF EGRESS

15.13.460 IRC Chapter 6, Section R601.3, VAPOR RETARDERS – DELETED

IRC Chapter 6, Section R601.3, **VAPOR RETARDERS**, is hereby deleted in its entirety.

R601.3 Vapor retarders. ~~Class I or II vapor retarders are required on the interior side of frame walls in Zones 5, 6, 7, 8 and Marine 4.~~

Exceptions:

- ~~1. Basement walls.~~
- ~~2. Below grade portion of any wall.~~
- ~~3. Construction where moisture or its freezing will not damage the materials.~~

R601.3.1 Class III vapor retarders. ~~Class III vapor retarders shall be permitted where any one of the conditions in Table R601.3.1 is met.~~

R601.3.2 Material vapor retarder class. ~~The vapor retarder class shall be based on the manufacturer's certified testing or a tested assembly. The following shall be deemed to meet the class specified:~~

- ~~Class I: Sheet polyethylene, unperforated aluminum foil.~~
- ~~Class II: Kraft faced fiberglass batts.~~
- ~~Class III: Latex or enamel paint.~~

R601.3.3 Minimum clear air spaces and vented openings for vented cladding. ~~For the purposes of this section, vented cladding shall include the following minimum clear air spaces. Other openings with the equivalent vent area shall be permitted:~~

- ~~1. Vinyl lap or horizontal aluminum siding applied over a weather resistive barrier as specified in Table R703.4.~~
- ~~2. Brick veneer with a clear airspace as specified in Section R703.7.4.2.~~
- ~~3. Other approved vented claddings.~~

CHAPTER 9 REQUIREMENTS FOR ROOF COVERINGS

15.13.470 IRC Chapter 9, Section 903.4.1, OVERFLOW DRAINS AND SCUPPERS – AMENDED

IRC Chapter 9, Section 903.4.1, **OVERFLOW DRAINS AND SCUPPERS**, is hereby amended to read as follows:

R903.4.1 Overflow drains and scuppers. Where roof drains are required, 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 *International Plumbing Code* [current codes adopted by the City of Rapid City for Plumbing.](#)

15.13.480 IRC Chapter 9, Section 905.2.7.1, ICE BARRIER – AMENDED

IRC Chapter 9, Section 905.2.7.1, **ICE BARRIER**, is hereby amended to read 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 is not inspected, the contractor shall provide an affidavit that the ice dam was installed properly.](#)

CHAPTER 11 ENERGY EFFICIENCY

15.13.490 IRC Chapter 11, – AMENDED (See attached for Deleted Sections)

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

[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.](#)

**APPENDIX E
MANUFACTURED HOUSING USED AS DWELLINGS**

SECTION AE101 SCOPE

15.13.500 IRC Appendix E, Section AE101.1, GENERAL – AMENDED

IRC Appendix E, Section AE101.1, **GENERAL**, is hereby amended to read as follows:

AE101.1 General. These provisions shall be applicable ~~only~~ to all manufactured homes used as a single dwelling unit ~~installed on privately owned (non-rental) lots~~ 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 ~~as established in Table R301.2(1) of the International Residential Code~~ shall meet the applicable requirements of ~~Section R322 of the International Residential Code~~ Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

**APPENDIX J
EXISTING BUILDINGS AND STRUCTURES**

SECTION AE101 SCOPE

15.13.510 IRC Appendix J, Section AJ102.5, FLOOD HAZARD AREAS – AMENDED

IRC Appendix J, Section AJ102.5, **FLOOD HAZARD AREAS**, is amended to read as follows:

AJ102.5 Flood hazard areas. Work performed in existing buildings located in a flood hazard area ~~as established by Table R301.2(1)~~ shall be subject to the provisions of [Section R105.3.1.1 Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.](#)

APPENDIX H PATIO COVERS

SECTION AH106 FOOTINGS

15.13.520 IRC Appendix H, Section AH106.1, GENERAL – AMENDED

IRC Appendix H, Section AH106.1, **GENERAL**, is hereby amended to read as follows:

AH106.1 General. ~~In areas with a frost line depth of zero as specified in Table R301.2(1), 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.~~

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.

SECTION AH107 SPECIAL PROVISIONS FOR ALUMINUM SCREEN ENCLOSURES IN HURRICANE-PRONE REGIONS

15.13.530 IRC Appendix H, Section AH107, SPECIAL PROVISIONS FOR ALUMINUM SCREEN ENCLOSURES IN HURRICANE-PRONE REGIONS. – DELETED

IRC Appendix H, Section AH107, is hereby deleted in its entirety.

AH107.1 General. ~~Screen enclosures in *hurricane-prone regions* shall be in accordance with the provisions of this Section.~~

AH107.1.1 Habitable spaces. ~~Screen enclosures shall not be considered *habitable spaces*.~~

AH107.1.2 Minimum ceiling height. ~~Screen enclosures shall have a ceiling height of not less than 7 feet (2134 mm).~~

AH107.2 Definitions.

~~**SCREENENCLOSURE.** A building or part thereof, in whole or in part self-supporting, and having walls of insect screening and a roof of insect screening, plastic, aluminum, or similar lightweight material.~~

AH107.3 Screen enclosures.

~~**AH107.3.1 Thickness.** Actual wall thickness of extruded aluminum members shall be not less than 0.040 inches (1.02 mm).~~

~~**AH107.3.2 Density.** Screen density shall be a maximum of 20 threads per inch by 20 threads per inch mesh.~~

AH107.4 Design.

~~**AH107.4.1 Wind load.** Structural members supporting screen enclosures shall be designed to support minimum wind loads given in Table AH107.4(1) and AH107.4(2). Where any value is less than 10 psf (0.479 kN/m²) use 10 psf (0.479 kN/m²).~~

~~**AH107.4.2 Deflection limit.** For members supporting screen surfaces only, the total load deflection shall not exceed 1/60. Screen surfaces shall be permitted to include a maximum of 25 percent solid flexible finishes.~~

~~**AH107.4.3 Importance factor.** The wind factor for screen enclosures shall be 0.77 in accordance with Section 6.5.5 of ASCE 7.~~

~~**AH107.4.4 Roof live load.** The minimum roof live load shall be 10 psf (0.479 kN/m²).~~

~~**AH107.5 Footings.** In areas with a frost line is zero, a screen enclosure shall be permitted to be supported on a concrete slab on grade without footings, provided the slab conforms to the provisions of Section R506, is not less than 3 1/2 inches (89 mm) thick, and the columns do not support loads in excess of 750 pounds (3.36 kN) per column.~~

~~**TABLES AH107.4(1), AH107.4(2)**–(See attached for Deleted Tables)~~

TABLE 100-B CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GRO UND	WI ND	SEISMI C	SUBJECT TO DAMAGE FROM	WIN TER	ICE BARRIER	FLOO	AIR FREE	MEA N
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SNO W LOAD	SPE ED (mp h)	DESIG N CATEG ORY	Weath ering	Frost line depth	Termite	DESI GN TEM P	UNDERLA YMENT REQUIRE D	D HAZA RDS	ZING INDEX	ANN UAL TEM P
42 psf ¹	90	NA	Moderate	42"	None to slight	-7	Yes	2-18-98	1548	48° F

¹The ground snow load for Rapid City shall be 42 psf and as per ASCE 705.

CITY OF RAPID CITY

Mayor

ATTEST:

Finance Officer

(SEAL)

First Reading:
Second Reading:
Published:
Effective: