

IRC Ordinance Submittal and Synopsis

Ordinance Title: 2015 International Residential Code

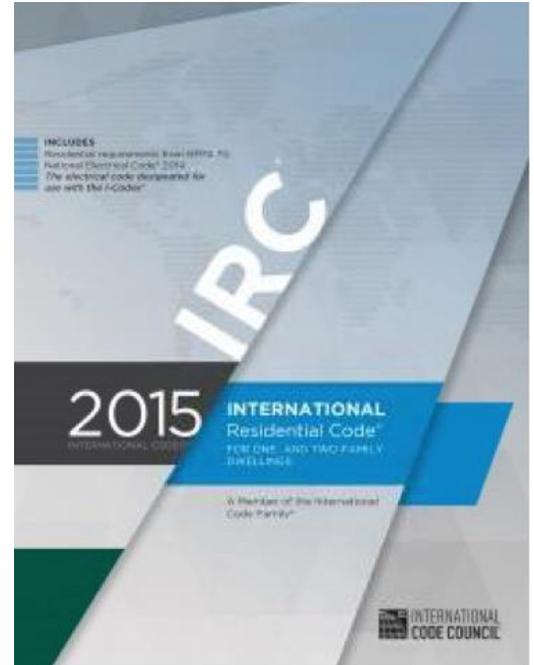
Date: November 20, 2015

Section Numbers/Titles: Title XV Land Usage; Chapter 150 Building; Section 150.001 Adopted And Section 150.002 Amendments, additions, Deletions to the 2015 International Residential Code.

First Reading: December 1, 2015

Requested Date of Hearing: December 15, 2015

Proposed By: Ron Bell
Chief Building Official
Planning and Building Services



Reason: The attached ordinance proposes to adopt the 2015 International Residential Code (IRC), which is promulgated and published by the International Code Council (ICC). The IRC is revised and published in a three-year code cycle. This comprehensive, stand-alone residential building code establishes minimum prescriptive standards and regulations for one- and two-family dwellings and townhouses, including their accessory structures. This code is founded on principles intended to adequately protect public health, safety, and welfare; to not necessarily increase construction costs; and does not restrict the use of new materials, products, or methods of construction. The significant changes found in the 2015 IRC have been reviewed by the Building Codes Committee of the Sioux Empire Homebuilders Association to incorporate local modifications and amendments to assure that minimum level of life safety and affordability is maintained for the homebuilding industry.

Significant changes to the 2015 IRC are as follows:

This comprehensive code covers one and two family dwellings and townhouses up to three stories and their accessory structures. Now in its sixth edition, the IRC contains many important changes including:

R301.2 Wind Design. IRC. The wind design speed has been changed from 90 mph to 115 mph and the ultimate design wind speed replaces the basic wind speed values for a 3 second gust to be consistent with the IBC and the most up to date version of ASCE 7 for engineered wind design analysis.

R304.1 Minimum Habitable Room Areas. IRC. The requirement for one habitable room with a minimum floor area of 120 square feet has been removed from the code to accommodate proponents of minimalist living.

R308.4.2 Safety Glazing. IRC. Where glazing is installed perpendicular to a door, safety glazing is required only on the hinge side of an in-swinging door to accommodate a person being pushed into the glass from the in-swinging door. A 180 degree arc measured from the bottom of a stair landing will now be defined as a hazardous location for safety glazing instead of the landing only. The provision to require safety glazing within 60 inches of a wet surface has been expanded to showers, saunas and steam rooms.

R310.6 Egress Windows. IRC. A clarification now says that a remodeling of an existing basement does not require the installation of an egress window unless a bedroom is created.

R312.1.2 Guard Height. IRC. The provision to require a 36 inch guard height measured from the surface of a fixed seat has been removed from the code.

R315 Carbon Monoxide Detectors. IRC. Along with smoke detectors that have been required for years, carbon monoxide detectors will additionally be required where alterations, repairs, or additions occur in existing dwellings that have an attached garage, with fuel-fired appliances or where sleeping rooms are added.

R316.4 Thermal Barriers. IRC. Instead of only allowing a ½ inch gypsum board as a thermal barrier to protect a foam plastic insulation from an interior fire exposure, a change now allow a 25/32 plywood or oriented strand board as an acceptable alternative.

Tables R502.3.1(1) and R502.3.1(2) Floor Joist Spans. IRC. Based on two years of testing by the American Lumber Standards Committee of the current lumber available on the market, span lengths of Southern Pine have decreased and span lengths for Hem Fir and Douglas Fir Larch have increased. New span tables are provided for the changed design values.

R507 Exterior Decks. IRC. New span tables are provided for the allowable spacing for deck joists supporting various types of common decking material; deck joist spans whether cantilevered or not; deck beam span lengths; and prescriptive methods of deck post to beam connections.

R602.10 Simplified Wind Bracing. IRC. Simplified wind bracing is now allowed in a Wind Exposure Category C, which now matches the local amendment that Sioux Falls has in place.

The majority of local modifications to the 2015 IRC carry over the same provisions from the 2012 IRC. Notable local ordinances or modifications to the 2015 IRC with a commentary are as follows:

R106.2 Site Plan or Plot Plan. IRC. Site plan submittals for new houses will be required to include the minimum grade elevation (MGE) which designates the elevation of the top of the black dirt under the grass, the top of the landscape rock, or other landscape material at the lowest exposed part of the house. The minimum grade elevation is critical to assure that a structure is set above a level to prevent surface water from entering a home, especially if the home is adjacent to a drainage way.

Table R302.1(1) Eave and Soffit Fire Protection. IRC. Previous IRC editions have required fire protection installed on any projections located less than 5 feet from a property line. A new provision allows the substitution of fire blocking between the double top plate and the roof sheathing which would eliminate the attic ventilation at the soffit. A local amendment continues to not require fire protection unless the soffit is located less than 3 feet to the property line.

R302.2 Townhouse Separations. IRC. This reduces the required fire resistivity of a common wall between townhouse units from two hours to one hour, but is based upon the national model code that mandates sprinklers for all townhouses. The local amendment recognizes a reduced fire resistivity and eliminates the requirement for structural independence per the national modification if there is a sprinkler system installed, which is not a local code mandate but an option of the owner. The 2015 provision eliminated the penetration of the common wall by plumbing and mechanical systems. Because mechanical systems rarely penetrate common walls said requirement will remain. Although the section has been modified locally to specify that any membrane or through penetrations are required to be fire stopped to maintain the integrity of the common wall.

R302.13 Fire Protection of Floors. IRC. Not adopted by the city. This provision was relocated from Section 501.5 in the 2012 IRC to Section 302.13 in the 2015 IRC and was changed nationally to clarify that unprotected openings are allowed to penetrate the sheetrock ceiling. This provision that requires all floor assemblies consisting of light-frame construction to be protected on the underside with sheetrock has been eliminated locally. This would require a homeowner who chooses to finish a basement at a later date to remove the covering to accommodate ductwork and electrical and plumbing systems.

R312.2 Window Opening Fall Protection. IRC The previous local amendment that decreased the sill height threshold at 18 inches to determine when fall protection devices are required has been eliminated. The threshold height per the national standard will be at 24 inches.

R317.1 Sill Plate Protection. IRC. This legacy standard for sill plates to be pressure treated for a 6-inch instead of an 8-inch wood to earth separation that has been in prior editions of the IRC has been eliminated.

N1102.4.4 (R402.4.4) Insulating Mechanical Rooms. IRC. The new requirement to insulate mechanical rooms that are provided with an outdoor source of combustion air will not be required.