

MAJOR 2015 MN RESIDENTIAL CODE CHANGES

Effective Date: January 24th, 2015

****Disclaimer:** This document is to serve as informational purposes only. This is not a code book or a final interpretation of the code by the building official. This is to serve as a guide for some of the major code changes that will go into effect on January 24th, 2015.

Restrictions on Existing Building minimum ceiling heights

R305.2 Minimum ceiling heights, existing buildings. Alterations to existing basements or portions thereof shall have a ceiling height of not less than 6 feet 4 inches including obstructions.

Minimum headroom in all parts of the stairway shall not be less than 6 feet 4 inches

Summary: existing basement finishes will have to follow this code. Anything shorter than the minimum will not qualify as a finished floor, and will be treated as a crawl space.

Emergency Escape and Rescue Openings

R310.1.5 Replacement Windows.

Replacement windows installed in buildings regulated by International Residential Code shall be exempt from the maximum sill height requirements of Sections R310.1, including subsections R310.1.1, R310.1.2, and R310.1.3 if the replacement window is the manufacturer's largest standard size window that will fit within the existing frame or existing rough opening. The replacement window shall be the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

R310.1.5.1 Licensed facilities. Windows in rooms used for foster care or day care licensed or registered by the State of Minnesota shall comply with the provisions of section R310.1.5, or all of the following conditions, whichever is more restrictive:

1. Minimum of 20 inches in clear opening width;
2. Minimum of 20 inches in clear opening height;
3. Minimum of 648 square inches (4.5 square feet) clear opening; and
4. Maximum of 48 inches from the floor to the sill height.

The replacement window shall be the same operating style as the existing window or a style that provides for an equal or greater window opening area than the existing window.

Summary: This is similar to the existing 2007 codes, however licensed facilities are addressed specifically in this section. Any windows installed in any of the listed facilities above must meet the requirements of R310.1.5.1. The “operating style” mentioned in the amendment language refers to the type of window (i.e. casement, double-hung...) as well as the operating style of the hardware.

Guards and Window Fall Protection

R312.1.1 Where required. Guards shall be located along the open sides of floors, stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below. Insect screening shall not be considered as a guard.

R312.2 Window fall protection. Window fall protection shall be provided in accordance with Section R312.2.1 and R312.2.2.

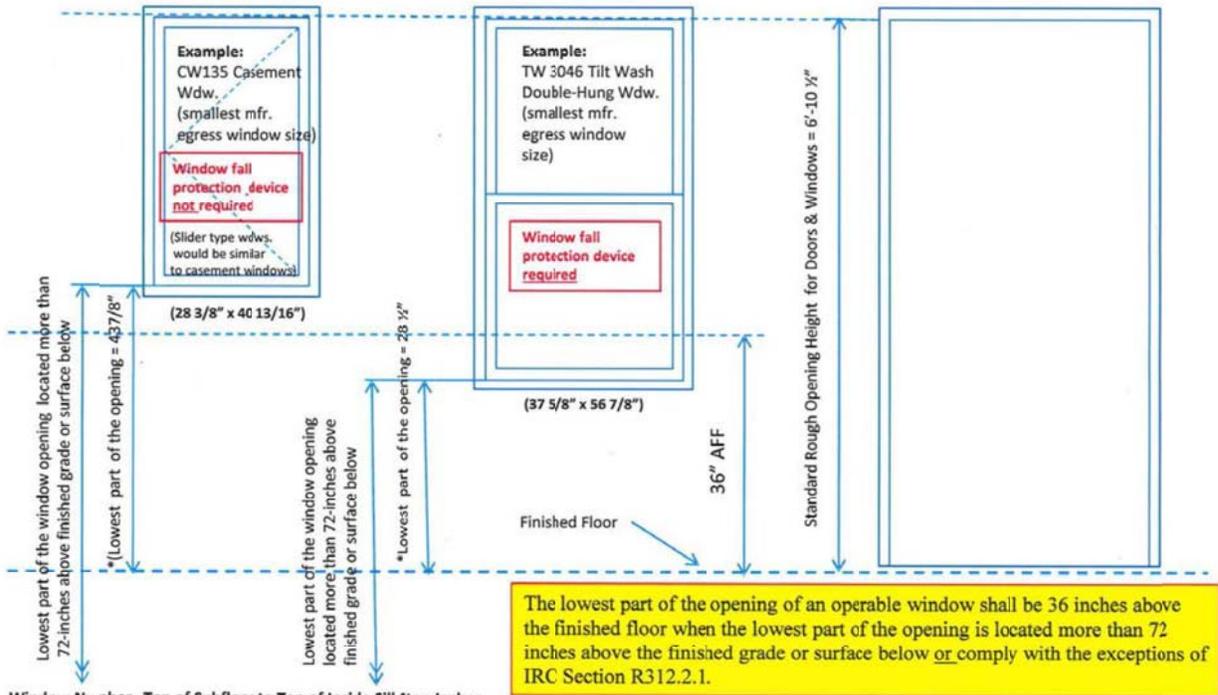
R312.2.1 Window sills. In dwelling units, where the lowest part of the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the window opening shall be a minimum 36 inches (914 mm) above the finished floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 36 inches (914 mm) of the finished floor.

Exceptions:

1. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.
2. Openings that are provided with window fall prevention devices that comply with ASTM F 2090.
3. Windows that are provided with window opening control devices that comply with Section R312.2.2.
4. Replacement windows.

Window Fall Protection

This drawing is not drawn to scale



Window Number	Top of Subfloor to Top of Inside Sill Stop Inches
*TW3042	32 1/2"
*CW 135	43 7/8"

* From window manufactures product guide

6/11/14 RAL

Summary: When there is a window that is installed more than 72 inches above the exterior grade or floor, it must be a minimum of 36" from the floor. If it is lower than the minimum, it can't allow passage of a 4" sphere unless it meets the requirements of the exceptions listed.

Residential Fire Sprinklers

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in townhouses.

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.1.1 Design and installation. Automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904 or NFPA 13D.

R313.2 One- and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system shall be installed in one- and two-family dwellings.

Exceptions:

1. Detached one-family dwelling, less than 4500 square feet of floor area. Floor area shall include all floors and basements, excluding garages.
2. An automatic residential fire sprinkler system shall not be required if additions, or alterations, or repairs are made to existing buildings that do not have an automatic residential sprinkler system installed.

R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with IRC section P2904 or NFPA 13D.

R313.4 State-licensed facilities. One- and two-family dwellings and townhouse buildings containing facilities required to be licensed or registered by the state of Minnesota shall be provided with an automatic fire sprinkler system required by the applicable licensing provisions of that agency or according to this part, whichever is more restrictive.

Summary: All New 2 family dwellings, such as duplexes and townhouses, must be sprinklered. All single family homes that have a square footage of 4500 sf or more must be sprinklered. Each system must be designed to meet the requirements of the IRC P2904 or NFPA 13D. See the attached chart to determine if the potential structure meets the requirements.

Fire Protection of Floors

R501.3 Fire protection of floors. Floor assemblies, not required elsewhere in this code to be fire-resistance rated, shall be provided with a **1/2-inch** (12.7 mm) **gypsum wallboard membrane**, 5/8-inch (16 mm) wood structural panel membrane, or equivalent on the underside of the floor framing member.

Exceptions:

1. Floor assemblies located directly **over a space protected** by an **automatic sprinkler** system in accordance with Section P2904, NFPA 13D, or other approved equivalent sprinkler system.
2. Floor assemblies located directly over a **crawl space not intended for storage or fuel-fired appliances**.
3. Portions of floor assemblies can be unprotected when complying with the following:

3.1. The aggregate area of the unprotected portions shall not exceed 80 square feet per story

3.2. Fire blocking in accordance with Section R302.11.1 shall be installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.

4. Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than 2-inch by 10-inch (50.8 mm by 254 mm) nominal dimension, or other approved floor assemblies demonstrating equivalent fire performance.

Summary: Any dimensional or structural lumber that is smaller than a 2x10 or that is an engineered product must be protected by a minimum of ½ inch drywall or as noted above. See attached sheets for alternative products and installation methods that have been approved for this use.

Smoke Alarms

R314.3.1 Alterations, repairs and additions. An individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings when:

1. alterations, repairs (including installation or replacement of windows or doors), or additions requiring a permit occur; or
2. one or more sleeping rooms are added or created in existing dwellings

Exceptions:

1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition of an open porch or deck, or chimney repairs.
2. Installation, alteration or repairs of plumbing or electrical, mechanical systems are exempt from the requirements of this section.

Summary: Any time there is alterations or repairs done to a dwelling unit, including the replacement of windows or doors, the new requirements for smoke detectors must be followed, other than the exceptions listed above.

Specified Compressive Strength of Concrete Footings

Concrete in footings must meet the following requirements:

5,000 psi compressive strength concrete footing or; 3,000 psi compressive strength concrete footing with an approved admixture that provides a water and vapor resistance at least equivalent to 5,000 psi concrete.

Summary: This will need to be verified at the jobsite for the strength and admixture.