MEMBERS ONLY

TOP 20 CHANGES TO THE 2015 MINNESOTA RESIDENTIAL CODE

V.3.0

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Top 20 Changes to the 2015 Minnesota Residential Code V.3.0

Contact info@bamn.org for more information.

This document is meant to be used in conjunction with the 2012 International Residential Code® (IRC) published by the International Code Council (ICC).

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LETTER FROM THE PRESIDENT

Dear Members of the Builders Association of Minnesota,

On behalf of the 2,300 members of the Builders Association of Minnesota (BAM), I am pleased to present the *BAM Members Only Top 20 Changes to the 2015 Minnesota Residential Code*. BAM's mission is to help our members excel in the residential construction and remodeling industry. This guide is a tool to help members reach that goal.

This document would not have been possible without the hard work of several dedicated members. These individuals served on code committees and councils and technical advisory committees, and generously gave of their time and talent to advocate for the industry and the best possible code for Minnesota.

I'd also like to thank you for your membership with the Association. These guides exist because of your membership, and they are a big part of the value of membership.

Sincerely,
KC Chermak , 2016 President
Builders Association of Minnesota

FORWARD

Several resources were used to develop this guide and BAM wishes to extend sincere gratitude for the production of these guides for BAM's membership:

Illustrations were generously donated by BAM Member George Cundy, Terrace Development and Design.

Production work was provided by
Ed Von Thoma, Building Knowledge Inc.

BUILDING KNOWLEDGE

Code guide review was provided by a group of dedicated BAM members. A big thank you to each member for their time, expertise, and dedication to excellence and the industry.

INTRODUCTION

The BAM *Members Only Top 20 Changes to the 2015 Minnesota Residential Code* was developed to help residential contractors, subcontractors, suppliers, local code officials, and others in the residential construction industry understand importunity code changes. On January 24, 2015 Minnesota started enforcing the 2012 International Residential Code (IRC) with Minnesota-specific amendments. Minnesota's version of the code is the 2015 Minnesota Residential Code.

The commentary provided in this document is for reference only. Please refer to a copy of the 2012 IRC published by the International Code Council (ICC) and the 2015 Minnesota Residential Code published by the Minnesota Department of Labor and Industry for specific code language. Only specific sections of code language are included in their entirety in this guide.

This guide is intended as a training and reference tool for the residential construction industry. The Builders Association of Minnesota specifically disclaims any responsibility to any party for the content of this guide or any errors or omissions that it may contain. Check actual code sections for precise intent of a specific code section. Summaries of code changes or specific code sections are provided for information only.

This guide is a reference to some of the more significant Minnesota Residential Code changes. This guide will be most useful to you if you download a copy of the original code language.

The link to a PDF version of this guide can be downloaded directly from www.bamn.org/regulation.

Note: the Minnesota Department of Labor and Industry and the International Code Council have the 2015 Minnesota Residential Code available for free online access at: 2015 Minnesota Residential Code

MEMBERS ONLY

TOP 20 CHANGES TO THE 2015 MINNESOTA RESIDENTIAL CODE

1. FIRE RESISTANT CONSTRUCTION (EXTERIOR WALLS)

The minimum clearance to lot lines are reduced from 5 feet to 3 feet for unrated exterior walls when the dwelling unit is protected with a fire sprinkler.

2. VENTILATION INTAKE OPENINGS

The minimum vertical clearance between a contaminant source and an outdoor air intake below has increased from 2 feet to 3 feet.

3. CEILING HEIGHTS

The definition for "crawl space" is modified to coordinate with other code changes that reduce the minimum ceiling height for basements to 6 feet 4 inches.

For rooms with sloped ceilings, at least 50 percent of the required floor area of the room must have a ceiling height of at least 7 feet and no portion of the required floor area may have a ceiling height of less than 5 feet.

Bathrooms are required to have a minimum ceiling height of 6 feet 8 inches at the center of the front clearance area for water closets, bidets, or sinks.

4. WINDOW FALL PROTECTION

For windows where the lowest part of the opening is more than 72 inches above the finished grade or surface below, the lowest part of the opening must be 36 inches or higher from the interior finished floor. Window openings lower than 36 inches will be required to provide window fall prevention.

Pay particular attention in applications where you are meeting egress and sill height requirements.

5. AUTOMATIC FIRE SPRINKLER SYSTEMS

The Minnesota Court of Appeals issued an opinion Oct. 13, 2015, that the adopted Minnesota Residential Code rule that requires the installation of automatic sprinkler systems is ***invalid*** for the construction of all new: two-family dwellings; and one-family dwellings over 4,500 square feet.

Based on this court decision, municipalities that administer and enforce the Minnesota State Building Code may not enforce Minnesota Rules Part 1309.0313, Section R313.2.

Fire sprinkler systems are still required in townhouses.
NOTE: See BAM's Member Field Guide to the 2015 Residential Building Code Fire Sprinkler System Requirements.

6. WIRELESS SMOKE ALARMS

Wireless smoke alarms will meet the requirements of being interconnected.

7. CONCRETE FOOTINGS

Footings will require the use of 5000 psi concrete, this will have the effect of creating a water separation plane between the soil and the building foundation. A footing with 2500 psi concrete with an approved admixture is also permitted.

8. FOUNDATION WATERPROOFING

All concrete and masonry basement foundation walls are to be waterproofed. Damp-proofing is no longer permitted.

9. FIRE PROTECTION OF FLOORS

Installation of ½-inch gypsum board or 5/8-inch wood structural panel or approved equivalent is required on the underside of floor assemblies. If fire sprinklers are installed to protect the space below the floor assembly, this protection may not be required (nonmetallic fire sprinkler piping, not rated for exposure will need a thermal barrier). *NOTE: See BAM's Member Field Guide to the 2015 Residential Building Code Fire Sprinkler System Requirements.*

An area not to exceed 80 sq. ft. can be left unprotected providing there is fireblocking installed along the perimeter of the unprotected area. The area around the furnace can be designated as the unprotected area.

10. SINGLE MEMBER HEADERS

Single headers are allowed under limited loading conditions to increase energy efficiency and reduce the cost of construction.

11. WALL BRACING

This section has been extensively reorganized for clarity with each subsection covering a single topic in an effort to bring a user-friendly flow to the information.

The subsections are as follows:

- Braced wall lines. A straight line through the building plan to determine the amount and location of bracing required in each story level of a building.
- Braced wall panels are full-height sections of wall with no vertical or horizontal offsets.
- Required length of bracing.
- Construction methods for braced wall panels. Determines the construction methods and the bracing method mixing.
- Minimum length of a braced wall panel.
- Construction of alternate braced wall panel methods.
- Ends of braced wall lines with continuous sheathing.
- Braced wall panel connections.
- Braced wall panel support.

12. SIMPLIFIED WALL BRACING

This new section provides a simplified prescriptive approach for bracing wall lines that applies to many houses. Wall bracing is based on a rectangle drawn around the exterior of the building. The length of each side of the rectangle is limited to 60 feet while the ratio of the length to the width must be 3:1 or less. The exterior walls must be sheathed in either wood structural panels or structural fiberboard sheathing.

13. VAPOR RETARDERS

Vapor retarders are now classified by the ability of a material or assembly to limit the amount of moisture that passes through that material or assembly:

Class I: Permeance level of 0.1 perm or less (e.g. Sheet polyethylene)
Class II: Permeance level between 0.1 perm and 1.0 perm (e.g. Kraft-faced fiberglass batts or a "smart vapor retarder" [SVR])
Class III: Permeance level between 1.0 perm and 10 perms (e.g. Latex or enamel paint)

A Class I or II vapor retarder is required on the interior side of frame walls in Climate Zones 6 and 7. Class II vapor retarders are permitted only when specified on the construction documents.

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

Class III vapor retarders are permitted where any one of the conditions in Table 1309.0702.7.1 is met.

CLIMATE ZONE	CLASS III VAPOR RETARDERS PERMITTED FOR:[a]
6	Vented cladding over fiberboard.
	Vented cladding over gypsum.
	Insulated sheathing with *R*-value ≥ 7.5 over 2 × 4 wall.
	Insulated sheathing with *R*-value ≥ 11.25 over 2 × 6 wall.
7	Insulated sheathing with *R*-value ≥ 10 over 2 × 4 wall.
	Insulated sheathing with *R*-value ≥ 15 over 2 × 6 wall.

a. Spray foam with a minimum density of 2 lb/ft^3 applied to the interior cavity side of wood structural panels, fiberboard, insulating sheathing or gypsum is deemed to meet the insulating sheathing requirement where the spray foam R-value meets or exceeds the specified insulating sheathing R-value.

14. WATER-RESISTIVE BARRIER

The water-resistive barrier needs to overlap required flashings not less than 2 inches. This would require that the flashing have a minimum 2-inch vertical leg to be over-lapped. The 2-inch vertical flashing leg and water-resistive barrier overlap protects or limits wind driven water intrusion.

Also, the water resistive barrier will be installed continuous up to the underside of the rafter or truss top chord.

Flashing is required at the intersection of the foundation and rim joist framing when the exterior wall covering does not lap the foundation insulation.

15. PLASTER CURING

For three-coat stucco each coat will be kept in a moist condition for at least 48 hours prior to application of the next coat.

Exception: Applications installed in accordance with ASTM C 926: The second coat is permitted to be applied as soon as the first coat has attained sufficient rigidity to receive the second coat.

This installation method, sometimes called the "double-back" method, ensures an effective bond between the successive applications of the plaster and provides for a more uniform basecoat and better curing of the coats (the combined application of the first and second coat). The requirement that the second coat be applied no sooner than 48 hours after the application of the first coat would contradict current industry practice. While it is acceptable to install the second coat 48 hours after the first coat, the plastering industry recognizes that the first coat attains sufficient rigidity often within hours of its initial installation.

16. KICK-OUT FLASHING

Kick-out flashing on the roof needs to be a minimum of 2-1/2 inches long.

REMODELING-SPECIFIC CODE CHANGES

17. CEILING HEIGHTS

Alterations to existing basements needs to have a ceiling height of not less than 6 feet 4 inches, including beams, girders, ducts, or other obstructions.

Bathrooms will have a minimum ceiling height of 6 feet 4 inches at the center of the front clearance area for water closets, bidets, or sinks.

Alterations to existing basement stairways will have a minimum headroom in all parts of the stairway not less than 6 feet 4 inches.

18. REPLACEMENT WINDOWS

Replacement windows are exempt from the maximum sill height, minimum opening area, minimum opening width, and minimum opening height requirements 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 needs to 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.

19. KICK-OUT FLASHING

Kick-out flashing is required to be installed when simultaneously re-siding and re-roofing an existing building or structure. The kick-out flashing on the roof needs to be a minimum of 2-1/2 inches long.

20. REROOFING

New roofing cannot be installed without first removing all existing layers of roof coverings where the existing roof or roof covering is water-soaked or has deteriorated, or the existing roof has two or more applications of roof covering.

STILL HAVE QUESTIONS?

Send your detailed energy code questions to BAM at info@bamn.org.

BAM will post the most commonly asked questions on BAM's Code Q & A website page.

See www.bamn.org/regulation for more information.

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