

MEMBERS ONLY

# TOP 15 CHANGES TO THE 2020 MINNESOTA RESIDENTIAL CODE

V.1.0



SPONSORED BY



Members Only

Top 15 Changes to the 2020 Minnesota Residential Code V.1.0

Builders Association of Minnesota

© Copyright 2020

All rights reserved. Published 2020

Contact [info@bamn.org](mailto:info@bamn.org) for more information.

This document is meant to be used in conjunction with the 2018 International Residential Code® (IRC) published by the International Code Council (ICC).

The IRC and sections from the IRC in this guide were reproduced with permission from the International Code Council. This *Members Only Top 15 Changes to the 2020 Minnesota Residential Code V.1.0* contains copyrighted material from the 2018 International Residential Code, which is a copyrighted work owned by the International Code Council, Inc. Without advance written permission from the copyright owner, no part of the International Residential Code may be reproduced, distributed or transmitted in any form or by any means, including, without limitation, electronic, optical or mechanical means (by way of example and not limitation, photocopying, or recording by or in an information storage revival system).

For more information on permission to copy material exceeding fair use, please contact: Publications, 4051 West Flossmoor Road, Country Club Hills, IL 60478. Phone 1-888-ICC-SAFE (422-7233).

BAM is solely responsible for the content of this guide, not our project partners. 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. Summaries of code changes or specific code sections are provided for information only. Consult [www.bamn.org](http://www.bamn.org) recently to check for any errata or new information about Minnesota's 2020 Residential Building Code or this or other resources published by BAM.

# TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b>	<b>3</b>
LETTER FROM THE PRESIDENT	1
FORWARD	1
INTRODUCTION	2
<b>MEMBERS ONLY TOP 15 CHANGES TO THE 2020 MINNESOTA RESIDENTIAL CODE</b>	<b>3</b>
1. WIND DESIGN CRITERIA	3
2. GLAZING ADJACENT TO DOORS	4
3. GLAZING ADJACENT TO THE BOTTOM STAIR LANDING	4
4. EMERGENCY ESCAPE AND RESCUE OPENINGS	4
5. AREA WELLS FOR EMERGENCY ESCAPE AND RESCUE DOORS	5
6. WIRELESS SMOKE ALARMS AND CARBON MONOXIDE DETECTORS	5
7. SOLAR ENERGY SYSTEMS	5
8. COMPRESSIVE STRENGTH OF CONCRETE FOOTINGS	6
9. FOUNDATION AND RETAINING WALLS	6
10. EXTERIOR DECKS	6
11. MINIMUM FOOTING SIZE FOR DECKS	6
12. WEATHER PROTECTION FOR EXISTING BUILDINGS AND STRUCTURES	6
13. MECHANICAL VENTILATION	7
14. MINNESOTA RESIDENTIAL ENERGY CODE	7
15. TINY HOUSES	7
STILL HAVE QUESTIONS?	7

## LETTER FROM THE PRESIDENT

Dear Members of the Builders Association of Minnesota,

On behalf of the thousands of members of the Builders Association of Minnesota (BAM), I am pleased to present the *BAM Members Only Top 15 Changes to the 2020 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,  
Howie Zetah, 2020 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:

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



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 15 Changes to the 2020 Minnesota Residential Code* was developed to help residential contractors, subcontractors, suppliers, local code officials, and others in the residential construction industry understand important code changes. On March 31, 2020 Minnesota started enforcing the 2018 International Residential Code (IRC) with Minnesota-specific amendments. Minnesota's version of the code is the 2020 Minnesota Residential Code.

The commentary provided in this document is for reference only. Please refer to a copy of the 2018 IRC published by the International Code Council (ICC) and the 2020 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/members](http://www.bamn.org/members).

The code is available for free to reference here: <https://codes.iccsafe.org/content/document/1581>

**Note: the Minnesota Department of Labor and Industry and the International Code Council have the 2020 Minnesota Residential Code available for free online access at: [2020 Minnesota Residential Code](#)**

# MEMBERS ONLY

# TOP 15 CHANGES TO THE 2020 MINNESOTA RESIDENTIAL CODE

## **1. WIND DESIGN CRITERIA**

The Climatic and Geographic Design Criteria table is modified to change the wind speed from the basic speed wind design of 90 mph to an ultimate wind speed of 115 mph.

Basic wind design speed is calculated differently than ultimate wind speed so a basic wind design speed of 90 mph is similar to an ultimate wind speed of 115 mph. This change in wind design methodology does not affect construction methods as homes will be built to withstand similar wind gusts.

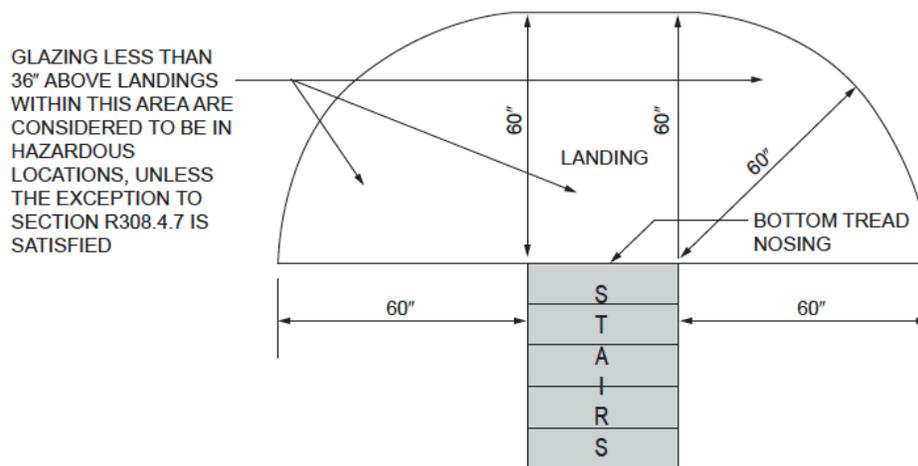
[R301.2.1]

## 2. GLAZING ADJACENT TO DOORS

The minimum vertical clearance between a contaminant source and an outdoor air Glazing within 24 inches of the hinge side of an in-swinging door now also requires safety glazing where the glazing is at an angle less than 180 degrees from the plane of the door. [R308.4.2]

## 3. GLAZING ADJACENT TO THE BOTTOM STAIR LANDING

Figure R308.4.7 has been added to more accurately reflect when safety glazing is required near the bottom landing. [R308.4.7]



For SI: 1 inch = 25.4 mm.

**FIGURE R308.4.7**  
**HAZARDOUS GLAZING LOCATIONS AT BOTTOM STAIR LANDINGS**

## 4. EMERGENCY ESCAPE AND RESCUE OPENINGS

Emergency escape and rescue openings are required in new basements and bedrooms created in existing basements unless the entire basement area, all portions of the means of egress to the level of exit discharge, and all areas on the level of exit discharge are protected with an automatic sprinkler system.

This change offers an alternate method of life safety by permitting the installation of fire sprinklers instead of the construction and installation of emergency escape and rescue openings.

[R 310.1 and R310.6]

## **5. AREA WELLS FOR EMERGENCY ESCAPE AND RESCUE DOORS**

For emergency escape and rescue doors in basements, a change in terminology replaces “bulkhead enclosures” with “area wells” and includes provisions for ladders and steps for area wells.

[R310.3]

## **6. WIRELESS SMOKE ALARMS AND CARBON MONOXIDE DETECTORS**

New homes continue to be required to have hardwired, interconnected smoke alarms and carbon monoxide detectors.

Existing homes undergoing alterations, repairs and additions requiring a building permit or adding/creating sleeping rooms can be equipped with battery-powered smoke alarms and carbon monoxide detectors that are not interconnected unless alterations or repairs result in the removal of interior wall or ceiling finishes.

Combination smoke and carbon monoxide detectors are permitted to be used in both new construction and existing homes.

[R314 and R315]

## **7. SOLAR ENERGY SYSTEMS**

Rooftop mounted photovoltaic solar energy panels and modules are not permitted to be installed below emergency escape and rescue openings. Roof mounted systems must also provide roof access and pathways for firefighters from the lowest roof edge to the ridge and setbacks at the ridge.

[R324]

## **8. COMPRESSIVE STRENGTH OF CONCRETE FOOTINGS**

Clarifies that 5,000 psi concrete is not required for post footings decks or porches, wood foundations, slab-on-grade foundation walls and footings for floating slabs.

The purpose of the 5,000 psi concrete requirement is to prevent moisture from passing through the porous concrete material of the footing and then into the concrete or masonry foundation walls that enclose a basement or crawl space.

[Table R402.2]

## **9. FOUNDATION AND RETAINING WALLS**

Table R404.1(1) includes prescriptive requirements for foundation walls up to 10 feet in height.

Foundations with wall heights of ten feet are increasingly common and this change eliminates the need to hire an engineer to design the foundation.

[Table R404.1(1)]

## **10. EXTERIOR DECKS**

This section is reorganized for ease of use and additional provisions are added to simplify prescriptive construction of a deck.

[R507]

## **11. MINIMUM FOOTING SIZE FOR DECKS**

A new table simplifies the determination of the footing size based on live load, deck area, soil quality, and footing shape.

[Table R507.3.1]

## **12. WEATHER PROTECTION FOR EXISTING BUILDINGS AND STRUCTURES**

This section requires kick-out flashings to be installed when an existing home undergoes re-siding. [R903.2.1.1]

### **13. MECHANICAL VENTILATION**

An update to the Mechanical Code allows ASHRAE 62.2 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings as an alternative to residential ventilation requirements located in the Minnesota Residential Energy Code.

The Minnesota Residential Energy Code and ASHRAE 62.2 have similar requirements for ventilation air change rates, ventilation controls, and ventilation system installation. The Minnesota Residential Energy Code provides a more prescriptive option while ASHRAE 62.2 is more of a performance-based option.

### **14. MINNESOTA RESIDENTIAL ENERGY CODE**

The Department of Labor and Industry is currently reviewing the residential provisions of the 2018 International Energy Conservation Code. The 2015 Residential Energy Code remains in effect.

A public hearing about the appropriateness of adopting the residential provisions of the 2018 International Energy Conservation Code (IECC) is scheduled at 9 a.m. on Monday, May 18, 2020, at the Minnesota Department of Labor and Industry.

### **15. TINY HOUSES**

Appendix Q addresses tiny houses by providing allowances for homes less than 400 square feet in size. This appendix ensures that tiny houses are properly constructed and contain necessary life-safety features.

[Appendix Q]

### **STILL HAVE QUESTIONS?**

Send your detailed energy code questions to BAM at [info@bamn.org](mailto:info@bamn.org).

See [www.bamn.org/members](http://www.bamn.org/members) for more information.



# BUILDERS ASSOCIATION OF MINNESOTA

bamn.org



## KYLMAALA TRUSS

Serving northern Minnesota and Wisconsin with custom floor  
and roof trusses since 1988

1-888-785-5719

[kylmalatruss.com](http://kylmalatruss.com)