

16 DEPARTMENT OF PUBLIC SAFETY

635 BUREAU OF BUILDING CODES AND STANDARDS

Chapter 5: MAINE UNIFORM BUILDING AND ENERGY CODE AND MAINE UNIFORM BUILDING CODE - RESIDENTIAL BUILDING CODE FOR ONE AND TWO-FAMILY DWELLINGS IN MAINE

SUMMARY: This chapter establishes the Residential Building code component of the Maine Uniform Building and Energy Code (“MUBEC”) and the Maine Uniform Building Code (“MUBC”). The provisions of this chapter are based on a nationally recognized model building code published by the International Code Council, Inc., and is made part of the MUBEC and MUBC through incorporation by reference. This chapter also contains requirements for the enforcement of the Residential Building code by local building officials in municipalities with a population of more than 4,000 residents.

SECTION 1. PURPOSE AND SCOPE

All building construction within a municipality of over 4,000 inhabitants shall be governed by the MUBEC. All other municipalities shall be governed by the MUBEC or the MUBC as adopted by the municipality. These codes are adopted by the Technical Building Codes and Standards Board pursuant to 10 M.R.S. Chapter 1103. The primary objective of the Board is to establish a uniform building code throughout the State of Maine.

This chapter sets forth the standards for residential construction for one and two-family dwellings that are part of the MUBEC and MUBC. It applies 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.

SECTION 2. AUTHORITY

The authority for this Chapter is 10 M.R.S. §9722, which provides that the Maine Technical Building Codes and Standards Board shall promulgate rules which adopt, amend, and maintain the Maine Uniform Building and Energy Code and the Maine Uniform Building Code. A municipality will have up to 90 days after the effective date of this rule to begin enforcement under the 2015 code.

SECTION 3. DEFINITIONS

1. **IRC.** “IRC” means the 2015 International Residential Code, published by the International Code Council, Inc.
2. **NFPA.** “NFPA” means The National Fire Protection Association.

3. **MUBEC.** “MUBEC” means the Maine Uniform Building and Energy Code adopted pursuant to 10 M.R.S. §9271, *et seq.*
4. **MUBC.** “MUBC” means Maine Uniform Building Code. "Maine Uniform Building Code" means that portion of the Maine Uniform Building and Energy Code that does not contain energy code requirements as determined by the board pursuant to section 9722, subsection 6, paragraph L.
5. **Technical Building Codes and Standards Board.** “Technical Building Codes and Standards Board” means the board established pursuant to 5 M.R.S. §12004-G, subsection 5-A and 10 M.R.S. §9722.

SECTION 4: INCORPORATION BY REFERENCE

1. The following Chapters of the 2015 International Residential Code, published by the International Code Council, Inc., are hereby adopted and incorporated by reference:
 - A. Chapters 1 - 10
 - B. Chapters 12 - 19
 - C. Chapter 23
 - D. Chapter 41
 - E. Chapter 42
 - F. Chapter 44
 - G. Appendix G
 - H. Appendix V-As Attached
2. The following Chapters, and all appendices, of the IRC are specifically excluded from adoption:
 - A. Chapter 11 Energy Efficiency
 - B. Chapter 20 Boilers and Water Heaters
 - C. Chapter 21 Hydronic Piping
 - D. Chapter 22 Special Piping and Storage Systems
 - E. Chapter 24 Fuel Gas
 - F. Chapter 25 Plumbing Administration
 - G. Chapter 26 General Plumbing Requirements
 - H. Chapter 27 Plumbing Fixtures
 - I. Chapter 28 Water Heaters
 - J. Chapter 29 Water Supply and Distribution
 - K. Chapter 30 Sanitary Drainage
 - L. Chapter 31 Vents
 - M. Chapter 32 Traps
 - N. Chapter 33 Storm Drainage
 - O. Chapter 34 General Requirements
 - P. Chapter 35 Electrical Definitions
 - Q. Chapter 36 Services
 - R. Chapter 37 Branch Circuit and Feeder Requirements
 - S. Chapter 38 Wiring Methods
 - T. Chapter 39 Power and Lighting Distribution

- U. Chapter 40 Devices and Luminaries
- V. Chapter 43 Class 2 Remote-Control, Signaling and Power Limited Circuits
- W. Appendix A – F and H – Q

SECTION 5. REVISIONS TO THE IRC

The following additions, insertions, deletions, and other changes are hereby made to the 2015 International Residential Code:

1. Generally all sections

Delete “International Mechanical Code”

Insert “applicable state codes and statues”

2. Section R101.1

Delete [NAME OF JURISDICTION]; *and*

Insert “State of Maine” in its place.

3. Section R101.2

Delete under Exception: “complying with the requirements of Section 419 of the International Building Code”

Delete under Exception: “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.”

Delete exception 1 in its entirety

Insert “Live work units as defined in the International Building Code shall be permitted and constructed in accordance with The International Residential Code for One and Two Family Dwellings.”

Delete Exception 2 in its entirety

Insert “One and two family dwellings that house more than 3 outsiders in rented rooms shall be considered an R-1 use group. One and two family dwellings housing 3 or less outsiders in rented rooms shall be permitted and constructed in accordance with The International Residential Code for One and Two Family Dwellings.”

4. Section R102.2.1

Insert “No provisions of the MUBEC or MUBC shall be construed to prohibit the adoption or enforcement of an ordinance of any political subdivision that sets forth provisions for local enforcement of building codes. Such ordinances may include items such as, permits, permit fees, boards of appeals and violations.”

5. Section R102.7

Delete “International Property Maintenance Code or the International Fire Code”; *and*

Insert “NFPA #1; Fire and Safety Codes and standards adopted pursuant to Title 25, M.R.S. §§2452 and 2465” in its place.

6. Section R103
Delete Section R103 ‘Department of Building Safety’ in its entirety, without substitution.
7. Section R104.8
Delete all language in Section R104.8; and
Insert “See 14 M.R.S. §8101” in its place.
8. Section R105.1
Insert “where required by municipal ordinance.” at the end of the paragraph.
9. Section R105.3
Delete “department of building safety” in the first paragraph; *and*
Insert “municipality” in its place.
10. Section R105.3.1
Delete “within a reasonable time after filing”
Insert “in accordance with 30A M.R.S. §4103”
11. Section R105.3.1.1
Delete “finding shall be provided to the board of appeals for a determination of substantial damage. Applications determined by the bar of appeals to constitute substantial improvement or substantial damage”; *and*
Insert “Building Official” in its place.
12. Section R108
Delete Section R108 “Fees” in its entirety, without substitution.
13. Sections R112 and R113
Delete Section R112 “Board of Appeals” and Section R113 “Violations” in their entirety, without substitution.
14. Section R202
Delete “Conditioned space: Fore energy purposes, space within a building that is provided with heating and/or cooling equipment of systems capable of maintaining, through design or heat loss/gain 50° F (10° C) during the heating season and 85° F (29° C) during the cooling season, or communicates directly with a conditioned space. For mechanical purposed, an area, room or space being heated or cooled by any equipment or appliance”
Insert “An area or room within a building being heated or cooled, containing un-insulated ducts, or with a fixed opening directly into an adjacent conditioned space.” in its place.

15. Section 302.2

Delete Section 302.2 in its entirety

Insert Section 302.2 as follows:

Townhouses. Common walls separating townhouses shall be assigned a fire resistance rating in accordance with section R302.2, item 1, 2 or 3. The common wall shared by two townhouses shall be constructed without 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.

- A. Where a fire sprinkler in accordance with NFPA 13D is provided the common wall shall be not less than a 2- hour fire resistance rated wall assembly tested in accordance with ASTM E 119 or UL 263.
- B. Where a fire sprinkler is not provided the common wall shall not be less than a 2-hour fire resistance rated wall assembly tested in accordance with ASTM E 119 or UL 263 and meeting the requirements of NFPA 221 as a fire wall.
- C. Where a fire sprinkler in accordance with section NFPA 13R is provided the common wall shall be not less than a 1- hour fire resistance rated wall assembly tested in accordance with ASTM E 119 or UL 263.

16. Section 302.12

Delete Section R 302.12 in its entirety

Insert Section R302.12 as follows:

Draftstopping shall be provided in one and two residential family combustibile lightweight assembly construction where there are concealed voids or interstitial spaces above or below a floor/ceiling assembly components; such as but not limited to attics, mansards, overhangs or other concealed spaces. Draftstops shall be installed so that the area of any concealed or void space does not exceed 500 sq. ft. Draftstops shall be installed so that the area of any concealed space is divided into approximately equal areas. Draftstopping shall be installed above, and in line with, sleeping unit and dwelling unit separation walls that do not extend to the underside of the roof sheathing above. Where the assembly is enclosed by a floor membrane above and a ceiling membrane below, draftstopping shall be provided in floor/ceiling assemblies under the following circumstances:

- A. Ceiling is suspended under the floor framing
- B. Floor framing is constructed of truss-type open-web or perforated members

Exceptions:

- A. Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.
- B. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with IBC Section 903.3.1.1.

- C. Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with IBC Section 903.3.1.2 provided that automatic sprinklers are also installed in the combustible concealed space, where the draftstopping is being omitted.
17. Section R310.1, Exception
Insert “if the dwelling unit is protected throughout by an approved automatic sprinkler system in accordance with R313.” at the end of the exception.
18. Section R310. 2.1
Delete “Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet (0.465 m²).”
19. Section 310.2.3
Insert “window wells shall be maintained free and clear at all times”
20. Section R313.2
Delete Section R313.2 in its entirety.
21. Section: Table M1507.3
Delete Table M1507.3.3(1) and M1507.3.3(2); *and*
Insert See ASHRAE 62.2 – 2007 edition; Table 5.1 and 5.2
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STATUTORY AUTHORITY: 10 M.R.S. §9722

EFFECTIVE DATE:

October 11, 2010 – filing 2010

AMENDED:

January 23, 2018 – filing 2018-010

2015 International Residential Code

APPENDIX V TINY HOUSES

CHAPTER PART AV101— GENERAL

AV101.1 Scope. This appendix shall be applicable to tiny houses used as single dwelling units. Tiny houses shall comply with this code except as otherwise stated in this appendix.

CHAPTER PART AV102— DEFINITIONS

AV102.1 General. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein. Refer to Chapter 2 of this code for general definitions.

EGRESS ROOF ACCESS WINDOW. A skylight or roof window designed and installed to satisfy the emergency escape and rescue opening requirements in Section R310.2.

LANDING PLATFORM. A landing provided as the top step of a stairway accessing a loft.

LOFT. A floor level located more than 30 inches (762 mm) above the main floor and open to it on at least one side with a ceiling height of less than 6 feet 8 inches (2032 mm), used as a living or sleeping space.

TINY HOUSE. A dwelling that is 400 square feet (37 m²) or less in floor area excluding lofts.

CHAPTER PART AV103— CEILING HEIGHT

AV103.1 Minimum ceiling height. Habitable space and hallways in tiny houses shall have a ceiling height of not less than 6 feet 8 inches (2032 mm). Bathrooms, toilet rooms, and kitchens shall have a ceiling height of not less than 6 feet 4 inches (1930 mm). Obstructions shall not extend below these minimum ceiling heights including beams, girders, ducts, lighting and other obstructions.

Exception: Ceiling heights in lofts are permitted to be less than 6 feet 8 inches (2032 mm).

CHAPTER PART AV104— LOFTS

AV104.1 Minimum loft area and dimensions. Lofts used as a sleeping or living space shall meet the minimum area and dimension requirements of Sections AV104.1.1 through AV104.1.3.

AV104.1.1 Minimum area. Lofts shall have a floor area of not less than 35 square feet (3.25 m²).

AV104.1.2 Minimum dimensions. Lofts shall be not less than 5 feet (1524 mm) in any horizontal dimension.

AV104.1.3 Height effect on loft area. Portions of a loft with a sloping ceiling measuring less than 3 feet (914 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.

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Exception: Under gable roofs with a minimum slope of 6:12, portions of a loft with a sloping ceiling measuring less than 16 inches (406 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required area for the loft.

AV104.2 Loft access. The access to and primary egress from lofts shall be any type described in Sections AV104.2.1 through AV104.2.4.

AV104.2.1 Stairways. Stairways accessing lofts shall comply with this code or with Sections AV104.2.1.1 through AV104.2.1.5.

AV104.2.1.1 Width. Stairways accessing a loft shall not be less than 17 inches (432 mm) in clear width at or above the handrail. The minimum width below the handrail shall be not less than 20 inches (508 mm).

AV104.2.1.2 Headroom. The headroom in stairways accessing a loft shall be not less than 6 feet 2 inches (1880 mm), as measured vertically, from a sloped line connecting the tread or landing platform nosings in the middle of their width.

AV104.2.1.3 Treads and risers. Risers for stairs accessing a loft shall be not less than 7 inches (178 mm) and not more than 12 inches (305 mm) in height. Tread depth and riser height shall be calculated in accordance with one of the following formulas:

1. The tread depth shall be 20 inches (508 mm) minus 4/3 of the riser height, or
2. The riser height shall be 15 inches (381 mm) minus 3/4 of the tread depth.

AV104.2.1.4 Landing platforms. The top tread and riser of stairways accessing lofts shall be constructed as a landing platform where the loft ceiling height is less than 6 feet 2 inches (1880 mm) where the stairway meets the loft. The landing platform shall be 18 inches to 22 inches (457 to 559 mm) in depth measured from the nosing of the landing platform to the edge of the loft, and 16 to 18 inches (406 to 457 mm) in height measured from the landing platform to the loft floor.

AV104.2.1.5 Handrails. Handrails shall comply with Section R311.7.8.

AV104.2.1.6 Stairway guards. Guards at open sides of stairways shall comply with Section R312.1.

AV104.2.2 Ladders. Ladders accessing lofts shall comply with Sections AV104.2.1 and AV104.2.2.

AV104.2.2.1 Size and capacity. Ladders accessing lofts shall have a rung width of not less than 12 inches (305 mm) and 10 inches (254 mm) to 14 inches (356 mm) spacing between rungs. Ladders shall be capable of supporting a 200 pound (75 kg) load on any rung. Rung spacing shall be uniform within 3/8-inch (9.5 mm).

AV104.2.2.2 Incline. Ladders shall be installed at 70 to 80 degrees from horizontal.

AV104.2.3 Alternating tread devices. Alternating tread devices accessing lofts shall comply with Sections R311.7.11.1 and R311.7.11.2. The clear width at and below the handrails shall be not less than 20 inches (508 mm).

AV104.2.4 Ships ladders. Ships ladders accessing lofts shall comply with Sections R311.7.12.1 and R311.7.12.2. The clear width at and below handrails shall be not less than 20 inches (508 mm).

AV104.2.5 Loft Guards. Loft guards shall be located along the open side of lofts. Loft guards shall not be less than 36 inches (914 mm) in height or one-half of the clear height to the ceiling, whichever is less.

CHAPTER PART AV105— EMERGENCY ESCAPE AND RESCUE OPENINGS

AV105.1 General. Tiny houses shall meet the requirements of Section R310 for emergency escape and rescue openings.

Exception: Egress roof access windows in lofts used as sleeping rooms shall be deemed to meet the requirements of Section R310 where installed such that the bottom of the opening is not more than 44 inches (1118 mm) above the loft floor, provided the egress roof access window complies with the minimum opening area requirements of Section R310.2.1.