**16 DEPARTMENT OF PUBLIC SAFETY**

**642 BUREAU OF BUILDING CODES AND STANDARDS**

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

**SUMMARY:** This chapter establishes the Residential Building Code for One and Two-Family Dwellings ~~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~~ the State of Maine 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~~ The MUBEC is adopted by the Technical Building Codes and Standards Board pursuant to Title 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.

EFFECTIVE DATE: The effective date of this Chapter is 90 days after approval by the Commissioner of the Department of Public Safety**.**

**SECTION 2. AUTHORITY**

The authority for this Chapter is Title 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 20~~15~~21 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 Title 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~~4. **Technical Building Codes and Standards Board**. “Technical Building Codes and Standards Board” means the board established pursuant to Title 5 M.R.S. §12004-G, subsection 5-A and Title 10 M.R.S. §9722.

**SECTION 4: INCORPORATION BY REFERENCE**

1. The following Chapters of the 20~~15~~21 International Residential Code, published by the International Code Council, Inc., are hereby adopted and incorporated by reference:

A. Chapters 1 - ~~10~~11

B. Chapter~~s 12 – 19~~ 15

C. Chapter ~~23~~44

~~C. Chapter 23~~

~~D. Chapter 41~~

~~E. Chapter 42~~

~~F. Chapter 44~~

~~G. Appendix G~~

~~H~~D. Appendi~~x~~ces ~~V-As Attached~~AJ, AQ, AR, AS, AU, and AW

2. The following Chapters~~,~~ and ~~all~~ appendices~~,~~ of the IRC are specifically excluded from adoption:

A. Chapters ~~11 Energy Efficiency~~ 12 - 14

B. Chapters ~~20 Boilers and Water Heaters~~16 – 43

C. ~~Chapter 21 Hydronic Piping~~ Appendices AA - AI, AK - AP, AT, AV, and AX

~~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 20~~15~~21 International Residential Code:

 1. Generally all sections

 ***~~Delete~~*** ~~“International Mechanical Code”~~

 ***~~Insert~~*** ~~“applicable state codes and statues”~~

Reference to “P2904” or “NFPA 13D” means; “A Sprinkler System in compliance with Fire Codes and Standards adopted pursuant to Title 25, sections 2452 and 2465”

2. Generally all sections

 ***Delete*** “International Fire Code”; *and*

***Insert***“Fire codes and standards adopted pursuant to Title 25, M.R.S §§ 2452 and 2465 as applicable” in its place.

 3. Generally all sections

***Delete*** “International Fuel Gas Code”; *and*

***Insert*** “NFPA 54 National Fuel Gas Code; Fire codes and standards adopted pursuant to Title 25 M.R.S §§ 2452 and 2465; and the Maine Fuel Board Rules and codes and standards adopted pursuant to Title 32 Chapter 139” in its place.

 4. Generally all sections

***Delete*** “International Plumbing Code”; *and*

***Insert***“State of Maine Plumbing Code adopted pursuant to Title 32, M.R.S § 3403-B as applicable” in its place.

 5. Generally all sections

***Delete*** “International Property Maintenance Code” without substitution.

 6. Generally all sections

***Delete*** “International Private Sewerage Disposal Code”; *and*

***Insert***“State of Maine Subsurface Wastewater Disposal Rules adopted pursuant to Title 42, M.R.S § 42 (3, 3-A, 3-B) as applicable” in its place.

 ~~2~~7. Section R101.1

***Delete*** [NAME OF JURISDICTION]; *and*

***Insert*** “State of Maine” in its place.

 ~~3~~8. 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.”~~

***Delete*** entire Exception and Subcategories; *and*

***Insert*** “**Exception:** The following shall be permitted to be constructed in accordance with this code:

 1. Live/Work unit provided the portion used exclusively for nonresidential use shall be limited to less than 10 percent of the area of the dwelling unit.

 2. Detached one- and two-family dwellings or townhouses accommodating no more than 3 outsiders in rented rooms provided the rooms do not contain separate cooking facilities.

 3. A “Day-Care Home” as defined by “Fire Codes and Standards adopted pursuant to Title 25, M.R.S §§ 2452 and 2465” in its place.

~~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~~9. Section R103

***Delete*** Section R103 “Department of Building Safety” in its entirety, without substitution.

 ~~7~~10. Section R104.8

***Delete*** all language in Section R104.8 Liability.; and

***Insert*** “~~See~~ Title 14 M.R.S. ~~§8101~~ Chapter 741” in its place.

 ~~8~~11. Section R105.1

***Insert*** “where required by municipal ordinance.” at the end of the paragraph.

 12. Section R105.2

***Insert*** “or as further exempted by municipal ordinance.” at the end of the paragraph.

***Delete*** language in“Building” category item #3;*and*

***Insert*** “Retaining walls that are not over 4 feet (1219 mm) in height measured from finish grade to the top of the wall, unless supporting a surcharge.” in its place.

***Delete*** categories and associated subcategories “Electrical”, “Gas”, “Mechanical”, and “Plumbing” in their entirety.

 ~~9~~13. Section R105.3

***Delete*** “department of building safety” in the first paragraph; *and*

***Insert*** “municipality” in its place.

 ~~10~~14. Section R105.3.1

***Delete*** “within a reasonable time after filing”; *and*

***Insert*** “in accordance with Title 30A M.R.S. §4103” in its place.

~~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~~15. Section R108

***Delete*** Section R108 “Fees” in its entirety, without substitution.

 ~~13~~16. Section~~s~~ R112 ~~and R113~~

***Delete*** Section R112 “Board of Appeals” ~~and Section R113 “Violations”~~ in ~~their~~ its entirety, without substitution.

 17. Section R113

***Delete*** Section R113 “Violations” in its entirety, without substitution.

~~14. 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.~~

 18. Section R301.2

***Insert*** new Section “R301.2.5 “Radon Control”: A Radon Control system constructed in compliance with ASTM E1465-08 Standard Practice for Radon Control Options for the Design and Construction of New Low-Rise Residential Buildings, shall be installed in new one- and two-family dwellings and townhouses.”

~~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.~~

1. ~~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.~~

19. Table R302.6

 ***Delete*** all reference to “½-inch gypsum board or equivalent”; and

 ***Insert*** “5/8-inch Type-X gypsum board or equivalent” in its place.

~~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 combustible 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:~~

1. ~~Ceiling is suspended under the floor framing~~

~~B. Floor framing is constructed of truss-type open-web or perforated members~~

**~~Exceptions:~~**

1. ~~Where corridor walls provide a sleeping unit or dwelling unit separation, draftstopping shall only be required above one of the corridor walls.~~
2. ~~Draftstopping is not required in buildings equipped throughout with an automatic sprinkler system in accordance with IBC Section 903.3.1.1.~~
3. ~~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~~20. Section R310.2.1

***Delete*** ~~“Exception: Grade floor openings shall have a minimum net clear opening of 5 square feet (0.465 m2).”~~ “Exception: The minimum net clear opening for grade-floor emergency escape and rescue openings shall be 5 square feet (0.465 m2).”

~~19. Section 310.2.3~~

***~~Insert~~*** ~~“window wells shall be maintained free and clear at all times”~~

 21. Section 310.4

***Insert*** at end of sentence: “Area wells shall be maintained free and clear at all times.”

 22. Section R313.1.1

***Delete*** all language after heading in R313.1.1; *and*

***Insert*** “Automatic sprinkler systems for *townhouses* shall be designed and installed in compliance with Fire Codes and Standards adopted pursuant to Title 25, M.R.S §§ 2452 and 2465” in its place.

 2~~0~~3. Section R313.2

***Delete*** ~~Section 313.2 in its entirety.~~ all language after heading in R313.2; *and*

***Insert*** “An automatic sprinkler system is not required in one- and two-family *dwellings*, including *additions* or *alterations* to existing buildings that are not already provided with a sprinkler system.” in its place.

24. Section R313.2.1

***Delete*** all language after heading in R313.2.1; *and*

***Insert*** “Automatic sprinkler systems shall be designed and installed in compliance with Fire Codes and Standards adopted pursuant to Title 25, M.R.S §§ 2452 and 2465” in its place.

25. Section R502.1.1

***Insert*** after section:

“**Exceptions:**

1. Sawn lumber used in buildings and structures exempt from permit by R105.2

2. Sawn lumber used in free-standing non-habitable accessory structures with an area of 600 square feet (56 m2) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less.”

26. Section R602.1.1

***Insert*** after section:

“**Exceptions:**

1. Sawn lumber used in buildings and structures exempt from permit by R105.2

2. Sawn lumber used in free-standing non-habitable accessory structures with an area of 600 square feet (56 m2) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less.”

27. Section R802.1.1

***Insert*** after section:

“**Exceptions:**

1. Sawn lumber used in buildings and structures exempt from permit by R105.2

2. Sawn lumber used in free-standing non-habitable accessory structures with an area of 600 square feet (56 m2) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less.”

28. Section M1505.1

***Insert*** (at the end of the sentence) “, the International Mechanical Code as applicable, ASHRAE 62.2-2019, or other *approved* means of ventilation.”

~~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~~

29. Chapter 44

***Insert*** (after “NFPA”) “Where the edition of a listed standard conflicts with the edition of a standard adopted by the Maine Office of State Fire Marshal, the version adopted by the Maine Office of State Fire Marshal is applicable to the extent referenced by this code.”

STATUTORY AUTHORITY: Title 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 m ) 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 m ).~~

~~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.~~

~~2~~

~~2~~

~~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.~~