16 DEPARTMENT OF PUBLIC SAFETY

642 BUREAU OF BUILDING CODES AND STANDARDS

Chapter 6: MAINE UNIFORM BUILDING AND ENERGY CODE - ENERGY CODE

**SUMMARY**: This chapter establishes the Energy Conservation code component of the Maine Uniform Building and Energy Code ("MUBEC"). 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 through incorporation by reference.

### SECTION 1. PURPOSE AND SCOPE

All building construction within the State of Maine shall be governed by the MUBEC. The MUBEC is adopted by the Technical Building Codes and Standards Board pursuant to Title 10 M.R.S. §9722. The primary objective of the Board is to adopt, amend, and maintain the *Maine Uniform Building and Energy Code*.

This chapter sets forth the regulation of the design and construction of buildings for the effective use of energy and is applicable to both residential and commercial buildings.

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.

### **SECTION 3. DEFINITIONS**

- 1. **IECC.** "IECC" means the 2021 International Energy Conservation Code, published by the International Code Council, Inc.
- 2. **MUBEC**. "MUBEC" means the Maine Uniform Building and Energy Code adopted pursuant to Title 10 M.R.S. §9721, et seq.
- 3. **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.
- 4. **MUBEC Stretch Code**. An alternative building energy code adopted and maintained by the board as an appendix to the MUBEC, that is more stringent from the perspective of energy efficiency, carbon reductions, and resilience than the currently adopted edition of

the Energy Code. The provisions of the MUBEC Stretch Code are contained in Appendix NA of this rule.

### SECTION 4: INCORPORATION BY REFERENCE

- 1. The 2021 International Energy Conservation Code, published by the International Code Council, Inc., is hereby adopted and incorporated by reference.
- 2. **MUBEC Stretch Code.** A municipality may, pursuant to Title 10 M.R.S §9722, elect to adopt the MUBEC Stretch Code. If a municipality adopts the MUBEC Stretch Code, the provisions of the Stretch Code are mandatory in that municipality. The provisions of the MUBEC Stretch Code are contained in Appendix NA of this rule.

### SECTION 5. REVISIONS TO THE COMMERCIAL PROVISIONS OF THE 2021 IECC

The following additions, insertions, deletions, and other changes are hereby made to the 2021 International Energy Conservation Code, Commercial Provisions:

1. Section *C101.1* 

**Delete** [NAME OF JURISDICTION]; and **Insert** "State of Maine" in its place.

2. Section C102.1.1

**Delete** all language from section; and

*Insert* "Buildings certified in compliance with PassiveHouse or PHIUS programs or buildings that meet the requirements identified in Table C407.2 shall be considered in compliance with the Energy Code." in its place.

3. Section C102.1.2

*Insert* a new section "C102.1.2 Optional Appendices.

Appendices CB and CC of the 2021 IECC are intended to provide flexibility to permit the use of more than one approach or technique to achieve compliance with the code."

4. Section C102.1.2.1

*Insert* a new section "C102.1.2.1 Appendix CB. Where new construction satisfies the provisions of Appendix CB of the 2021 IECC and Section C401.2 it shall be considered in compliance with the Energy Code."

5. Section C102.1.2.2

*Insert* a new section "C102.1.2.2 Appendix CC. Where new construction satisfies the provisions of Appendix CC of the 2021 IECC and the requirements identified in Table C407.2 it shall be considered in compliance with the Energy Code."

6. Section C104

**Delete** Section C104 "Fees" in its entirety, without substitution. Fees are a local permitting issue.

### 7. Section C110

**Delete** Section C110 "Board of Appeals" in its entirety, without substitution. Appeals are handled at a local level.

## SECTION 6. REVISIONS TO THE RESIDENTIAL PROVISIONS OF THE 2021 IECC

The following additions, insertions, deletions, and other changes are hereby made to the 2021 International Energy Conservation Code, Residential Provisions:

### 1. Section R101.1

**Delete** [NAME OF JURISDICTION]; and **Insert** "State of Maine" in its place.

### 2. Section R102.1.1

**Delete** from language "The code official or other authority having jurisdiction shall be permitted to deem a national, state or local energy-efficiency program to exceed the energy efficiency required by this code. Buildings approved in writing by such an energy-efficiency program shall be considered to be in compliance with this code"; and **Insert** "Buildings certified in compliance with PassiveHouse, Phius, or the US Department of Energy's Zero Energy Ready Home programs shall be considered in compliance with the Energy Code" in its place.

## 3. Section R102.1.2

## *Insert* new section "R102.1.2 Optional Appendices.

Appendices RB, and RC of the 2021 IECC are intended to provide flexibility to permit the use of more than one approach or technique to achieve compliance with the code."

### 4. Section R.102.1.2.1

## *Insert* new section "R102.1.2.1 Appendix RB.

Where new construction satisfies the provisions of Appendix RB of the 2021 IECC and Section R401.2 it shall be considered in compliance with the Energy Code."

### 5. Section R.102.1.2.2

### *Insert* new section "R102.1.2.2 Appendix RC.

Where new construction satisfies the provisions of Appendix RC of the 2021 IECC and the requirements identified in Table R405.2 it shall be considered in compliance with the Energy Code."

### 6. Section R104

**Delete** Section R104 "Fees" in its entirety, without substitution. Fees are a local permitting issue.

## 7. Section R110

**Delete** Section R110 "Means of Appeals" in its entirety, without substitution. Appeals are handled at a local level.

### 8. *Table R402.1.3*

**Delete** values from column "Wood Frame Wall R-Value" in "Climate Zone" rows "6" and "7 and 8"; and

*Insert* "30 or 20 + 10ci or 13 + 15ci or 0 + 20ci" in its place.

#### As shown below:

CLIMATE ZONE	WOOD FRAME WALL <i>R</i> -VALUE <sup>g</sup>
6	30 or 20 +10ci or 13 + 15ci or 0 + 20ci
7 and 8	30 or 20 +10ci or 13 + 15ci or 0 + 20ci

Informational Note: Remainder of table remains unchanged.

## 9. Section R402.2.13

*Insert* a new section "R402.2.13 Above grade walls. Above grade walls shall comply with this section."

### 10. Section R402.2.13.1

## *Insert* a new section "R402.2.13.1 IRC Compliance.

Insulation for above grade walls must also show compliance with IRC Section R702.7."

## 11. Section R402.2.13.2

### Insert a new section "R402.2.13.2 Exterior insulation.

Where insulation for above grade walls uses less than R-10ci for exterior insulation, a dew point calculation showing that the temperature of the condensing surface is greater than 41 degrees F at 35% humidity shall be completed by a registered design professional or approved agency and provided to the code official for review.

### **Exceptions:**

- 1. Where the wall assembly uses cavity only insulation.
- 2. Where the wall assembly has a permeability of greater than 5 perms."

### 12. Section R402.4.1.2

**Delete** (from the second sentence) "5.0"; and **Insert** "3.0" in its place.

**Delete** (from the second sentence) "0.28"; and **Insert** "0.20" in its place.

### 13. Section R402.4.1.3

*Delete* Section R402.4.1.3 in its entirety.

#### 14. Section R402.4.7

### Insert a new section "R402.4.7 Bulkhead enclosures.

Where a bulkhead enclosure is installed for basement access, a wall and vertical door must be installed at the base of the stairs or where the bulkhead enclosure meets the basement wall and must be air sealed in accordance with Table R402.4.1.1."

#### 15. Table R405.2

*Insert* new row in table (after "R402.2.10.1| Crawl space wall insulation installation") with the text "R402.2.13" in the first column and "Above grade walls" in the second column.

#### As shown below:

Building Thermal Envelope	
R402.1.1	Vapor retarder
R402.2.3	Eave baffle
R402.2.4.1	Access hatches and doors
R402.2.10.1	Crawl space wall insulation installation
R402.2.13	Above grade walls

Informational Note: Remainder of table remains unchanged.

## APPENDIX NA. MUBEC STRETCH CODE

The 2021 Stretch Code is created to lower energy consumption in both commercial and residential projects compared to the 2021 IECC.

Commercial Projects: The Total Building UA for the project, calculated as outlined in C402.1.5, shall exceed the UA requirements by at least 15% over a code compliant project. *This means that the Envelope PASSES design by 15% better (or more) than code per the COMCheck compliance calculation.* 

Residential Projects: The Total Building UA for the project, calculated as outlined in R402.1.5, shall exceed the UA requirements by at least 15% over a code compliant project. *This means that the Envelope PASSES design by 15% better (or more) than code per the RESCheck compliance calculation.* For residential projects that do not include fossil fuels for any use (heating, cooling, hot water, backup heat, cooking, etc.) the Total Building UA shall exceed the UA requirements by at least 10% over a code compliant project. This electrification incentive allows the use of fossil fuels for backup power generation.

# STATUTORY AUTHORITY:

Title 10 M.R.S. §9722

## EFFECTIVE DATE:

October 11, 2010 - filing 2010-471

# AMENDED:

January 23, 2018 – filing 2018-011 May 10, 2021 – filing 2021-095 (EMERGENCY) August 26, 2021 – filing 2021-169 March 4, 2025 – filing 2025-047