MAINE UNIFORM BUILDING AND ENERGY CODE



SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

The 2021 IECC was adopted with amendments in Maine on **April 7, 2025**. This document summarizes changes to the building envelope-related requirements in the updated code for Maine.

CODE CHANGE HIGHLIGHTS

- Wall, ceiling and fenestration are all more stringent.
- Walls with <R-10ci must have a dew point calculation by a RDP, except cavity only and >5 perm assemblies.
- R402 Wall requirements are mandatory in R405.



► BUILDING ENVELOPE AND DUCT REQUIREMENTS <</p>

| PRESCRIPTIVE | CLIMATE ZONE 6 | CLIMATE ZONE 7 |
|-------------------|--|-------------------|
| Wood Frame Wall | R-30 or R-20+10ci or R-13+15ci or R-20ci / U-0.045 | |
| Ceilings | R-60 / U-0.024 | |
| Crawl Space Walls | R-19 or R-13+5ci or R-15ci / U-0.055 | |
| Fenestration | U-0.30 | |
| Floor | R-30 / U-0.033 | R-38 / U-0.028 |
| Mass Walla | R-15/20 / U-0.060 | R-19/21 / U-0.057 |
| Slab R-value | R-10 / 4 ft. | |
| Basement Walls | R-19 or R-13+5ci or R-15ci / 0.050 | |

DUCT LEAKAGE DUCT R-VALUE AIR LEAKAGE CFM25 / 100 SQ. FT. **R-VALUE MEASUREMENT CLIMATE ZONE MEASUREMENT** Rough-in (installed air handler) **ALL CLIMATE ZONES** Rough-in (air handler not installed) 3 R-8^b 3 ACH50 Post-construction **MAXIMUM ENERGY RATING INDEX (ERI)** a. The second R-value applies when more than half

| CLIMATE ZONE | MAXIMUM ERI |
|--------------|-------------|
| 6 | 54 |
| 7 | 53 |

MORE INFORMATION ON THE MAINE ENERGY CODE CAN BE FOUND HERE:

https://www.maine.gov/dps/fmo/building-codes/mubec-rules



The second R-value applies when more than half is installed on the interior side.

b. In attics. R-6 in other portions of the building. R-6 and R-4.2 respectively for ducts < 3 inches.



ENERGY-EFFICIENT, COST-EFFECTIVE CONSTRUCTION WITH FIBERGLASS AND MINERAL WOOL INSULATION



As code levels advance, keep informed about innovative practices to meet or exceed code requirements using cost-effective fiberglass and mineral wool insulation.

The following resources in the table below are just a subset of the many guides available from the Insulation Institute to help you achieve new performance requirements with proven approaches.

INSULATION INSTITUTE RESOURCES

Priority Ai

GRADE

Air Leakage

As states adopt more stringent energy codes, some builders may experience challenges meeting new mandatory air leakage requirements. Fiberglass and mineral wool insulation is the low-cost solution for homebuilders to meet or surpass code air leakage rate requirements of 3 or 5 air changes per hour depending on climate zone. For homeowners, an airtight building envelope results in energy savings and increased thermal comfort.

https://insulationinstitute.org/wp-content/uploads/2018/05/N090-5-Air-Sealing-Locations-for-New-Homes.pdf

Ducts Buried Within Ceiling Insulation

Deeply buried ducts in attics is an easy way to lower energy code compliance costs for builders using the simulated energy performance path. Homeowners can benefit from energy savings realized from lower-capacity, lower-cost HVAC systems.

https://insulationinstitute.org/wp-content/uploads/2019/03/N087-Buried-Ducts-Thenewest-way-to-uncover-savings.pdf

Proper Installation of Insulation

Grade I installation delivers superior energy efficiency and is increasingly required by state energy codes. Insulation installation jobs that fail to meet Grade I criteria can mean construction delays due to callbacks, HERS rating penalties, and failed code inspections. Grade I installation is readily achievable by following basic guidelines as recommended by manufacturers. NAIMA offers free online training for installers.

www.grade1insulation.org

Unvented Attics Using Fiberglass and Mineral **Wool Insulation**

Unvented attics can be constructed by installing fiberglass or mineral wool insulation below the roof deck instead of using more costly materials like spray foam. In addition, fiberglass and mineral wool insulation products are green certified and do not carry recommended occupancy restrictions due to product off-gassing after installation. Starting with the 2018 IRC, this practice is outlined in detail within the code. Homeowners benefit from lower construction costs and the use of a safe product.

https://insulationinstitute.org/wp-content/uploads/2018/05/ BuildingUnventedAtticAssemblies-N089.pdf

LEARN MORE TO SEE HOW THE ENERGY CODE SAVES YOU MONEY:

https://insulationinstitute.org/wp-content/uploads/2024/10/ Modern-Energy-Codes-Save-Money-Infographic.pdf

Get the Facts for a Stronger Business

insulation at InsulationInstitute.org

Learn more about fiberglass and mineral wool