2024 VERMONT RESIDENTIAL BUILDING ENERGY STANDARD

SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

The 2024 Vermont Residential Building Energy Standard (RBES) went into effect on July 1, 2024; however, on September 17, 2025, Executive Order 06-25 gave the option of complying with the 2020 RBES. This document summarizes the 2024 RBES.

CODE CHANGE HIGHLIGHTS

- Four package options have been consolidated into two: Standard Package and Log Homes.
- All ducts must be within the thermal boundary and do not have to be insulated or tested.
- Air leakage was reduced from 3 ACH50 to 0.15 CFM50/Sq. Ft. (~2 ACH50).
- Hot water pipe insulation was increased to R-4.
- Ceiling U-factor was reduced to 0.020.

BUILDING ENVELOPE AND DUCT REQUIREMENTS

PRESCRIPTIVE	PACKAGE 1 (STANDARD)	PACKAGE 2 (LOG HOMES[a])
Above Grade Wall	R-21+5ci or R-13+10ci or R-20, 6.5" SIP / U-0.044	≥ 5 inch log
Ceiling	With attic: R-49 / U-0.020 or without attic: R-44 / U-0.025	
Floor	R-38 / U-0.029	
Crawl Space Wall	R-20ci or R-13+10ci / U-0.39	
Slab R-value/Depth	R-20, 4 ft. or R-15, 4 ft. + R-7.5 under entire slab	
Fenestration	U-0.30	
Basement Wall	R-20ci or R-13+10ci / U-0.39	

AIR LEAKAGE (IF TESTED)

CLIMATE ZONE	MEASUREMENT
ALL	0.15 CFM50/Sq. Ft.

MAXIMUM ENERGY RATING INDEX (ERI)

CLIMATE ZONE	MEASUREMENT
ALL	60

a. Or may be constructed to ICC 400-2022.

MORE INFORMATION ON THE VERMONT RBES CAN BE FOUND HERE:

https://publicservice.vermont.gov/efficiency/building-energy-standards/residential-building-energy-standards

Insulation Institute™

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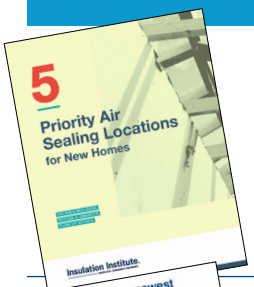
ENERGY-EFFICIENT, COST-EFFECTIVE CONSTRUCTION WITH FIBERGLASS AND MINERAL WOOL INSULATION

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.

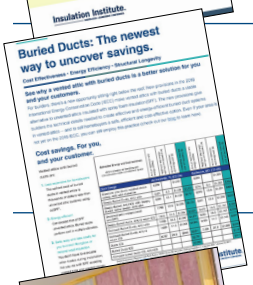
INSULATION INSTITUTE RESOURCES



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

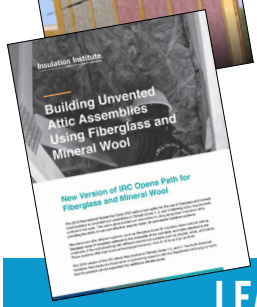
Deeply buried ducts in attics is an easy way to lower energy code compliance costs for builders using the simulated energy performance path. Homeowners can benefit from energy savings realized from lower-capacity, lower-cost HVAC systems.

https://insulationinstitute.org/wp-content/uploads/2019/03/N087-Buried-Ducts-The-newest-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

Learn more about fiberglass and mineral wool insulation at InsulationInstitute.org

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