# UTAH ENERGY CODE



# SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

The 2021 IEC was adopted with amendments in Utah and went into effect on **July 1, 2024**. This document summarizes changes to the building envelope-related requirements in the updated code for Utah.

## CODE CHANGE HIGHLIGHTS

- 5% above the 2012 Utah Energy Conservation Code as demonstrated through REScheck is an allowable compliance option.
- HB532 amended the Utah code to allow reductions in R-value requirements in unvented attic assemblies if certain conditions are met. https://le.utah.gov/~2023/bills/static/HB0532.html
- The Utah Governor's Office of Energy Development funds a Residential Energy Code Compliance Guide for Utah. <a href="https://utahenergycode.com/wp-content/uploads/Quick-guide-2024.pdf">https://utahenergycode.com/wp-content/uploads/Quick-guide-2024.pdf</a>



#### BUILDING ENVELOPE AND DUCT REQUIREMENTS

PRESCRIPTIVE	CLIMATE ZONE 3	CLIMATE ZONE 5	CLIMATE ZONE 6
Wood Frame Wall	R-20 or R-13 + 5 ci / U-0.060		R-20 + 5 ci or R-13 + 10 ci / U-0.045
Ceilings	R-38 / U-0.030	R-49 / U-0.026	
Crawl Space Walls	R-13 or R-5 ci / U-0.0136	R-19 or R-15 ci / U-0.055	
Fenestration	U-0.035 / SHGC-0.025	U-0.32	
Floors <sup>a</sup>	R-19 / U-0.047	R-30 / U-0.033	
Mass Wall <sup>b</sup>	R-8/13 / U-0.098	R-13/17 / U-0.082	R-15/20 / U-0.06
Slab R-value and Depth	N/A	R-10 / 2 feet	R-10 / 4 feet
Basement Walls	R-13 or R-5 ci / U-0.091	R-19 or R-15 ci / U-0.050	

# DUCT LEAKAGE MEASUREMENT Rough-in (installed air handler) Rough-in (air handler not installed) Rough-in (air handler) CFM25 / 100 SQ. FT. R-VALUE CLIMATE ZONE MEASUREMENT ALL CLIMATE ZONES 3.5 ACH 50

- a. Or insulation sufficient to fill the cavity. R-19 minimum.
- b. The second R-value applies when more than half is installed on the interior side.
- c. In attics. R-6 in other portions of the building. R-6 and R-4.2 respectively for ducts <3 inches.

### MORE INFORMATION ON THE UTAH ENERGY CODE CAN BE FOUND HERE:

https://codes.iccsafe.org/content/UTECC2021P1

# Insulation Institute.

- KNOWLEDGE. LEADERSHIP. CONFIDENCE.

This summary is offered for informational purposes only. It does not purport to be an exhaustive analysis of code changes or provide advice that will ensure guaranteed compliance with any energy code provision. Please consult with local authorities before finalizing your installation plans.



# 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 Air Sealing Locations for New Homes

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 ABOUT THE ERI COMPLIANCE PATH HERE:**

https://www.energycodes.gov/technical-assistance/training/courses/ 2015-iecc-energy-rating-index-eri-compliance-alternative

### **Get the Facts for a Stronger Business**

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

