KANSAS CITY AND ST. LOUIS MISSOURI

SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

Missouri is one of eight states that does not have a statewide building code. Rather, the codes are adopted and enforced at a jurisdictional level. Below are the current residential energy code requirements for Kansas City and St. Louis, Missouri.

CODE CHANGE HIGHLIGHTS

- Kansas City has adopted the unamended 2021 IECC effective July 1, 2023.
- Ceiling and wall insulation levels increased.
- Duct and blower door testing are no longer optional.
- St. Louis has adopted the 2018 IECC effective July 6, 2018.

BUILDING ENVELOPE AND DUCT REQUIREMENTS

CODE PATH	2018/2021 IECC CODE SECTION	JURISDICTION	
		KANSAS CITY	ST. LOUIS
Prescriptive	**R402.1.2 – Wood Frame Wall**	R-30 or R-20+5 ci or R-13+10 ci or R-20 ci / U-0.045	R-20 or R-13+5 ci / U-0.057
	R402.1.2 – Ceilings	R-60 / U-0.024	R-49 / U-0.026
	R402.1.2 – Basements	R-13 or R-10 ci / U-0.059	R-13 or R-10 ci / U-0.059
	R402.1.2 – Crawl Space Walls	R-13 or R-10 ci / U-0.065	R-13 or R-10 ci / U-0.065
	R402.1.2 – Fenestration	U-0.30 / SHGC-0.40	U-0.32 / SHGC-0.40

DUCT LEAKAGE (BOTH JURISDICTIONS)

MEASUREMENT	CFM25 / 100 SQ. FT.
Rough-in (installed air handler)	4
Rough-in (air handler not installed)	3
Post-construction	4

DUCT R-VALUE

R-VALUE
R-8[a]

AIR LEAKAGE

CLIMATE ZONE	MEASUREMENT
Kansas City	3 ACH50
St. Louis	3 ACH50

a. R-6 is allowed for ducts <3 inches.

TABLE R406.4 MAXIMUM ENERGY RATING INDEX (ERI)

JURISDICTION	MAXIMUM ERI
Kansas City	54
St. Louis	62

MORE INFORMATION ON THE KANSAS CITY ENERGY CODE CAN BE FOUND HERE:

https://www.kcmo.gov/city-hall/departments/city-planning-development/building-and-rehabilitation-code

MORE INFORMATION ON THE ST. LOUIS ENERGY CODE CAN BE FOUND HERE:

https://www.stlouis-mo.gov/government/city-laws/upload/legislative//Ordinances/BOAPdf/70799.pdf

Insulation Institute™

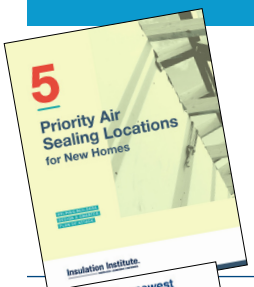
KNOWLEDGE. LEADERSHIP. CONFIDENCE.

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.

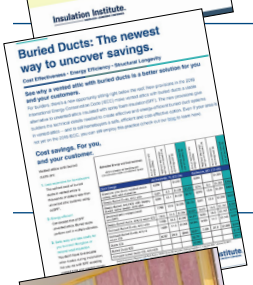
INSULATION INSTITUTE RESOURCES



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

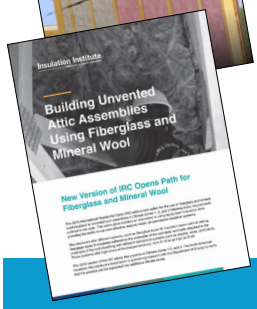
Deeply buried ducts in attics is an easy way to lower energy code compliance costs for builders using the simulated energy performance path. Homeowners can benefit from energy savings realized from lower-capacity, lower-cost HVAC systems.

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 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

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