OKLAHOMA RESIDENTIAL BUILDING CODE

SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

The 2018 IECC was adopted with amendments in Oklahoma and went into effect on **September 14, 2022**. This document summarizes changes to the building envelope-related requirements in the updated code for Oklahoma.

CODE CHANGE HIGHLIGHTS

- N1101.3 Compliance materials, N1101.5 Information on construction documents and N1101.5.1 Building thermal envelope depiction are new requirements.
- The additional efficiency required when duct testing is not performed has been removed.
- N1105 Performance and N1106 ERI paths are now allowed.
- All insulation levels increased for Climate Zone 4.

BUILDING ENVELOPE AND DUCT REQUIREMENTS

CODE PATH	2018 IRC CODE SECTION	CHANGE SUMMARY	
		CLIMATE ZONE 3	CLIMATE ZONE 4
Prescriptive	**N1102.1.2 – Wood Frame Wall**	R-13 / U-0.082	R-20 or R-13+5 ci / U-0.060
	N1102.1.2 – Ceilings	R-30 / U-0.035	R-49 / U-0.026
	N1102.1.2 – Basement Walls	R-13 or R-5 ci / U-0.091	R-13 or R-10 ci / U-0.091
	N1102.1.2 – Crawl Space Walls	R-13 or R-5 ci / U-0.136	R-13 or R-10 ci / U-0.136
	N1102.1.2 – Fenestration	U-0.40 / SHGC-0.30	U-0.32 / SHGC-0.40

DUCT LEAKAGE

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
3	5 ACH50
4	3 ACH50

TABLE R406.4 MAXIMUM ENERGY RATING INDEX (ERI)

CLIMATE ZONE	MAXIMUM ERI
3	64
4	62

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

MORE INFORMATION ON OKLAHOMA'S ENERGY PROVISIONS CAN BE FOUND HERE:

https://www.ok.gov/oubcc/documents/2022%2009%2014%20IRC%202018%20Permanent%20Rule.pdf

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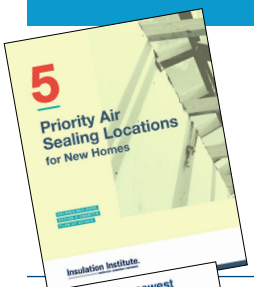
ENERGY-EFFICIENT, COST-EFFECTIVE CONSTRUCTION WITH FIBERGLASS AND MINERAL WOOL INSULATION

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.

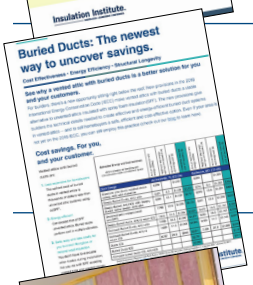
INSULATION INSTITUTE RESOURCES



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

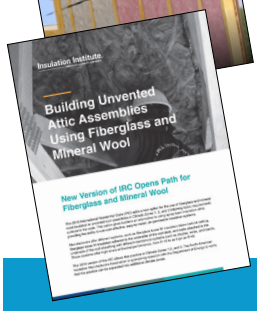
Deeply buried ducts in attics is an easy way to lower energy code compliance costs for builders using the simulated energy performance path. Homeowners can benefit from energy savings realized from lower-capacity, lower-cost HVAC systems.

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 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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