

# OKLAHOMA RESIDENTIAL BUILDING CODE



# SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

The 2015 IECC was adopted with amendments in Oklahoma and went into effect on **September 17, 2018**. This document summarizes changes to the building envelope-related requirements in the updated code for Oklahoma.



## CODE CHANGE HIGHLIGHTS

- Although Oklahoma adopted the 2015 IRC it has replaced the insulation and fenestration criteria with the values of the 2009 IECC, except for fenestration in Climate Zone 3, which was reduced to U-0.40.
- Footnote m of Table N1101.1.2 Insulation and Fenestration Requirements by Component lists additional improvements that must be met unless duct testing is performed and passed. Those additional requirements are:
  - o Fenestration: U-0.35
  - o Wood Frame Walls: R-15
  - o Ceiling: R-38
  - o Slab R-value and Depth to be R-5, 2ft.
- Duct leakage testing is not required when all ducts and air handlers are located inside the conditioned space.
- Oklahoma does not allow the Simulated Performance or Energy Rating Index compliance paths.

## BUILDING ENVELOPE REQUIREMENTS

CODE PATH	2015 IRC CODE SECTION	CHANGE SUMMARY	
		CLIMATE ZONE 3	CLIMATE ZONE 4
Prescriptive	N1102.1.2 – Wood Frame Wall	R-13 / U-0.082	R-13 / U-0.082
	N1102.1.2 – Ceilings	R-30 / U-0.035	R-38 / U-0.030
	N1102.1.2 – Basement Walls	R-13 or R-5 ci / U-0.091	R-13 or R-10 ci / U-0.059
	N1102.1.2 – Crawl Space Walls	R-13 or R-5 ci / U-0.136	R-13 or R-10 ci / U-0.065
	N1102.1.2 – Fenestration	U-0.40	U-0.35
<b>DUCT LEAKAGE</b>		<b>AIR LEAKAGE</b>	
<b>MEASUREMENT</b>	<b>CFM25 / 100 SQ. FT.</b>	<b>CLIMATE ZONE</b>	<b>MEASUREMENT</b>
Rough-in (installed air handler)	6	3	7 ACH50
Rough-in (air handler not installed)	4	4	7 ACH50
Post-construction	8		

Note: All R-values are minimums and U-factors maximums.

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

<https://www.ok.gov/oubcc/documents/2018%2009%2017%20IRC%202015%20Amended.pdf>



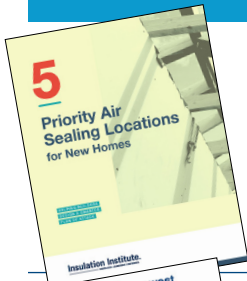
# ENERGY-EFFICIENT, COST-EFFECTIVE CONSTRUCTION WITH FIBERGLASS AND MINERAL WOOL INSULATION



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.

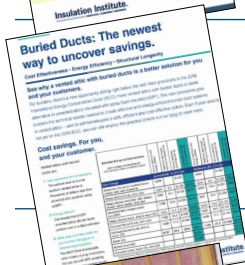
## INSULATION INSTITUTE RESOURCES



### 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.

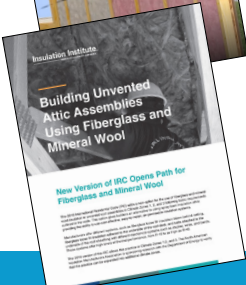
<https://insulationinstitute.org/wp-content/uploads/2019/03/N087-Buried-Ducts-The-newest-way-to-uncover-savings.pdf>



### 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](http://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:

[www.energycodes.gov/resource-center/training-courses/2015-iecc-%E2%80%93-energy-rating-index-eri-compliance-alternative](http://www.energycodes.gov/resource-center/training-courses/2015-iecc-%E2%80%93-energy-rating-index-eri-compliance-alternative)

## Get the Facts for a Stronger Business

Learn more about fiberglass and mineral wool insulation at [InsulationInstitute.org](http://InsulationInstitute.org)



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