RESIDENTIAL CODE OF OHIO

SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

The 2019 Residential Code of Ohio (RCO), based on the 2018 IRC, was adopted and went into effect on **July 1, 2019**. This document summarizes the building envelope-related requirements in the updated code for Ohio.

CODE CHANGE HIGHLIGHTS

- Section 1103.3.6 contains buried ducts provisions.
- Section 1112 allows an Ohio Home Builders Association alternative energy code option where a builder may choose between two compliance paths (CP):
  - » CP#1: Wall R-13 / Ceiling R-49 / Duct leakage is less stringent.
  - » CP#2: Wall R-15 or 13+3 / Ceiling R-49 / Duct leakage meets code with a 6cfm post-construction total leakage allowance.

BUILDING ENVELOPE AND DUCT REQUIREMENTS

CODE PATH	2018 IRC CODE SECTION	CHANGE SUMMARY	
		CLIMATE ZONE 4	CLIMATE ZONE 5
Prescriptive	**1102.1.2 – Wood Frame Wall**	R-20 or R-13 + 5 ci / U-0.060	R-20 or R-13 + 5 ci / U-0.060
	1102.1.2 – Ceilings	R-49 / U-0.026	R-49 / U-0.026
	1102.1.2 – Basement Walls	R-13 or R-10 ci / U-0.059	R-13 or R-10 ci / U-0.059
	1102.1.2 – Crawl Space Walls	R-13 or R-10 ci / U-0.065	R-13 or R-10 ci / U-0.065
	1102.1.2 – Fenestration	U-0.32	U-0.30

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

ALL CLIMATE ZONES
5 ACH50

TABLE 1106.4 MAXIMUM ENERGY RATING INDEX (ERI)

CLIMATE ZONE	MAXIMUM ERI
4	61
5	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 THE RESIDENTIAL CODE OF OHIO ENERGY PROVISIONS CAN BE FOUND HERE:
https://codes.iccsafe.org/content/OHRC2019

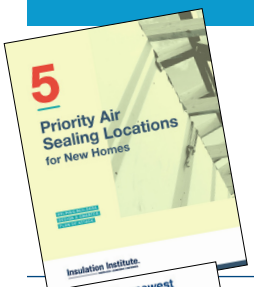
Insulation Institute™
KNOWLEDGE. LEADERSHIP. CONFIDENCE.

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.

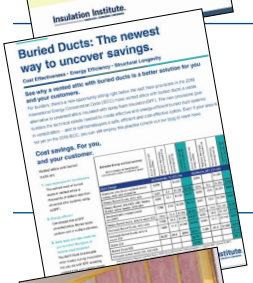
INSULATION INSTITUTE RESOURCES



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

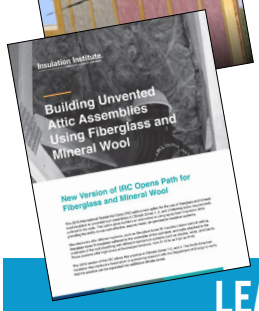
Deeply buried ducts in attics is an easy way to lower energy code compliance costs for builders using the simulated energy performance path. Homeowners can benefit from energy savings realized from lower-capacity, lower-cost HVAC systems.

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 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

NAIMA
North American Insulation Manufacturers Association
2013 Olde Regent Way • Suite 150, Box 120 • Leland, NC 28451
InsulationInstitute.org • 703.684.0084

PUB.NO. N125 04/25