

WYOMING BUILDING ENERGY CODE

SUMMARY OF KEY RESIDENTIAL ENERGY CODE REQUIREMENTS

Wyoming does not have a statewide code. Rather, codes are adopted and enforced on a jurisdictional level. The 2018 IECC was adopted with amendments in both Casper and Cheyenne, WY.



CODE CHANGE HIGHLIGHTS

- Casper, WY has amended the testing section. Air leakage testing is not required in Casper.
- The 2018 IECC Energy Rating Index path has implemented a backstop. If on-site renewable energy is being used for the ERI calculation, then the envelope must meet or exceed the levels of efficiency found in the 2015 IECC.
- The 2018 IECC allows for ducts to be considered inside conditioned space if properly buried under attic insulation.

BUILDING ENVELOPE REQUIREMENTS

CODE PATH	2018 IECC CODE SECTION	CHANGE SUMMARY	
		CASPER	CHEYENNE
Prescriptive	R402.1.2 – Wood Frame Wall	R-20 + 5 ci or R-13 + 10 ci / U-0.045	R-20 or R-15 + 5 ci / U-0.057
	R402.1.2 – Ceilings	R-49 / U-0.026	R-49 / U-0.026
	R402.1.2 – Basement Walls	R-19 or R-15 ci / U-0.050	R-19 or R-15 ci / U-0.050
	R402.1.2 – Crawl Space Walls	R-19 or R-15 ci / U-0.055	R-13 or R-10 ci / U-0.065
	R402.1.2 – Fenestration	U-0.30	U-0.35

DUCT LEAKAGE		AIR LEAKAGE	
MEASUREMENT	CFM25 / 100 SQ. FT.	JURISDICTION	MEASUREMENT
Rough-in (installed air handler)	4	Casper	N/A
Rough-in (air handler not installed)	3	Cheyenne	4 ACH50
Post-construction	4		

TABLE R406.4 MAXIMUM ENERGY RATING INDEX (ERI)

JURISDICTION	MAXIMUM ERI
Casper	61
Cheyenne	65

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

MORE INFORMATION ON THE WYOMING BUILDING ENERGY CODE CAN BE FOUND HERE:

https://library.municode.com/wy/casper/codes/code_of_ordinances?nodeld=TIT15BUCO

AND

https://library.municode.com/wy/cheyenne/codes/code_of_ordinances?nodeld=TIT15BUCO_CH15.26INENCOCOAD

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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.

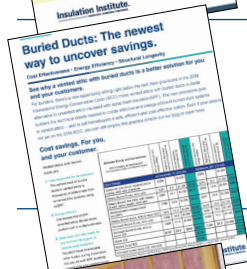
INSULATION INSTITUTE RESOURCES



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:

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

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