

Loudon County Planning & Codes

2012 IRC –Energy Conservation



Inspectors will verify energy conservation code requirements based upon 2012 IRC regulations. The owner/contractor will sign the certificate verifying the type of insulation and the equivalent R-values of the house's different insulation requirements as shown below.

| AREA | INSULATION VALUE (OLD) | INSULATION VALUE (NEW) |
|-----------------------------|------------------------|---------------------------------------|
| Attic* | R-30 | R-38* |
| Wood Frame Wall | R-13 | R-13 |
| Mass Wall | R-5 | R-5 (R-10 if more than ½ on interior) |
| Floor | R-13 | R-19 |
| Basement Wall | R-10 / R-13 | R-10 / R-13** |
| Slab | R-10 (2 ft deep) | R-10 (2 ft deep) |
| Crawl Space Wall (Unvented) | R-10 / R-13 | R-10 / R-13** |
| HVAC Duct | R-6 | R-8 in Attic(All other R-6)*** |
| HVAC Refrigerant Line | R-2 | R-2 |
| Plumbing | R-2 | R-2 |

***Exception:** When R-38 is required in the ceiling, R-30 shall be deemed to satisfy the requirement for R-38 wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves (Energy Truss). Vaulted ceilings may be insulated with R-30 for a maximum of 500sq.ft. Insulation markers required every 300 sq.ft.

**** Exception:** R-10 applies to continuous insulation, R-13 to framing cavity insulation; either insulation meets the requirement.

***** Exception:** Ducts or portions thereof located completely inside the building thermal envelope.

Fenestration Products: Maximum U-Factor of 0.35, Skylights 0.55.

Note: See the 2012 IRC for all exceptions, regulations, and exact text.

A permanent certificate shall be posted on or in the electrical distribution panel per Section N1101.16 of the 2012 IRC.

The building thermal envelope shall be durably sealed to limit infiltration in accordance with Section N1102.4 of the 2012 IRC.