

Residential Energy Inspection Guideline

This guideline is not to be considered an all-inclusive list of required items

Based on the 2018 International Residential Code

Verify Climate Zone per Table N1101.7 4A, 5A or 6A

Energy efficiency shall be attained using one of the following methods:

2018 IRC Chapter 11 (based on the 2018 IECC)

The Energy Rating Index Compliance Alternative (ERI). The ERI analysis (commonly called ResCheck) shall be provided to the code official (2015 IRC N1106.3)

The 2018 PA Alternative Residential Energy Provisions. This is available at the PA Housing Research Center at Penn State University (phrc.psu.edu) The design showing compliance shall be provided to the code official

Generally, insulation shall be R49 attic, R21 walls, R30 basement ceiling or R15 continuous/R19 cavity at basement walls, R10/2 ft at slab-on-grade. Floors with radiant heat require more insulation. Depth markers to be placed in attics with blown-in insulation (Table N1102.1.2)

Sunroom insulation shall comply with N1102.2.13

Vapor barrier shall be installed at the interior side of frame walls (R702.7 N1102.1.1)

Air barriers shall be installed at exterior walls, crawl spaces, garage/residence walls, at exterior walls between tubs/showers and walls and other locations per Table N1102.4.1.1

Window U Factor not to exceed 0.30 (Table N1102.1.2)

Ducts outside the thermal envelope to be insulated to R8 in attics and R6 elsewhere
Mechanical system piping to be insulated R3 minimum. This includes PEX tubing
Duct air leakage testing to be performed; test documentation to be provided to the code official (This is not the whole house air leakage rate test) (N1103.3)

Energy certificate to be posted near the heating equipment or on the front cover of the electrical panel (N1101.14)

Not less than 90% of the permanently installed lighting shall contain only high efficacy lamps (N1104)

A whole house leakage rate test (blower door test) is to be performed; test documentation to be provided to the code official (N1102.4.1.2)