



Putnam County
Building & Planning Department

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Residential Energy Code Submittal Requirements

The Indiana Department of Homeland Security has adopted the Indiana 2012 Energy Code effective April 5th, 2012. Please refer to the original document for specific details:

<http://www.in.gov/legislative/iac/20120201-IR-675110084FRA.xml.pdf>

The 2012 Indiana Energy Code contains specific design energy requirements for all residential projects. There are three (3) design paths:

- Option #1: Prescriptive path as outlined in IRC Chapter 11
- Option #2: Total UA Alternative path (trade-off) as outlined in IRC section N1102.1.3 & IECC 402.1.4
- Option #3: Simulated Performance Alternative (Performance) path as outlined in IECC section 405

Note: All three options have similar requirements for submittal documents to meet the code requirements including:

- Building envelope information
- A manual D duct design in accordance with the IRC section M16101.1.

Option #1: Prescriptive Path

The Prescriptive Path requirements for the building envelope are found in Chapter 11 of the 2009 IRC. Putnam County is located in Climate Zone 5, as shown in Figure & Table N1102.1. All prescriptive information shall be taken from the various tables using Zone 5 requirements.

The Prescriptive Building Envelope submittal shall include, at the minimum, the following information on the submitted plans.

- Address of the building (this is a site-specific submittal)
- Define/ delineate your Building Thermal Envelope
- Insulation materials; R values denoted for each individual area (wall, ceiling, floor over garage, etc.)
- Crawl space insulation for structural floors and other crawl space areas. (Specify whether the foundation wall or the structural floor system is to be insulated. See requirements of section N1102.2.9)
- Fenestration U factors 402.3
- Duct sealing and insulation. 403.2
- Manual D duct design, specific to the building
- Lighting equipment 404.1
- Specific insulation 402.2

Option #2: Total UA Alternative Path

The total UA alternative path option of showing compliance is found in section N1102.1.3 of the IRC and section 402.1.4 of the IECC. This method is commonly known by users of RESCHECK. The 2009 current version of RESCHECK is available from the Department of Energy. (Older versions cannot be used to show compliance with the 2009 IRC and IECC.)

<http://www.energycodes.gov/rescheck/>

Note: The Building Plans must clearly define and delineate the building thermal envelope.

RESCHECK submittal must include the following information:

- Site specific address (including City):
- Conditioned floor area
- Insulation Type
- R-value for all areas
- Specify location where the insulation is being used (attic, floor over unconditioned space, walls, floors over air space, etc.) This information must be specific. Merely listing “Wall 1, Wall 2, etc.”, will not provide sufficient information to the Building Department.
- Specify whether continuous or cavity insulation.
- Using Orientation: “unspecified” is not an acceptable description of a wall, window, or door location. Please specify one of the following orientations: “Front, Back, Left, or Right” and include the square footage of the wall, window, or door on each orientation.
- Fenestration U -Factors
- Accurate square footage measurements are critical.

The 2012 Indiana Energy Code requires a site-specific submittal.

Additional required details are listed below:

- Duct sealing and insulation.

Option #3: Simulated Performance Alternative (Performance) Path

The Simulated Performance Alternative Path is described in Section 405 of the 2009 IECC.

This path still requires mandatory compliance with the following:

- Air leakage (402.4)
- Maximum fenestration U factor (402.5)
- SHGC (402.5)
- Systems (403) requirements.

The Performance Path method of compliance requires the submittal of energy compliance documents but has the additional task of onsite inspections to be performed by a 'RESNET Certified Rater' and an Energy Compliance Certificate submitted prior to the Final Building Inspection.

The Building Envelope compliance document (provided by RESNET Certified Rater) shall provide, at the minimum, the following information on the submitted plans:

- Site specific address
- The Energy Code Inspection Checklist (generated by REMRATE) documenting the building component characteristics of the proposed design. (Insulation type and values and location, U value and SHGC of fenestrations)
- Square footage shall use the following: "Square footage-method for calculating, ANSI Z765-2003"
- Mechanical systems
- Name of the individual completing the compliance report
- Name and version of the compliance software tool

Note: It is especially important that the insulation values be detailed as to the specific area and the required R-value for that area. Listing as R-19/30 for floors, walls or similar is not acceptable.

Other details are required as listed below:

- Duct sealing and insulation.
- Manual D duct design specific to the building

General Information

To ensure inspectors, have all required data, all Product Informational Stickers, Tags and Labeling will be left in place until inspection has been completed. (Examples: window stickers, water heaters, exterior doors, insulation, etc.)

It is the responsibility of the homeowner/ builder to be compliant to current code requirements.