

Do the slab insulation requirements in the 2005 Indiana Residential Code, Section N1102.2.8 apply to homes built in compliance with Section N1106? Is an engineer's stamp required to demonstrate compliance with Section N1106?

Proposed Non-Rule Policy: IRC Section N1106 Performance Based Alternative and Section R106

Compliance with Section N1106 of the 2005 Indiana Residential Code, which includes compliance with the requirements in Chapter 4 of the 2009 International Energy Conservation Code (IECC), negate the prescriptive requirement for slab edge insulation provided the energy simulations comply with Section R405 of the 2009 IECC. An engineer's stamp is not required to demonstrate compliance with Section N1106.

Supporting Information

The 2005 Indiana Residential code as well as the 2009 International Energy Conservation Code (IECC) provide separate requirements for the prescriptive path and the performance path. Each path is a standalone entity and the builder chooses the path of compliance. The performance path exists to allow design flexibility while maintaining equal energy performance.

Section N1102.2.8 Slab-on-grade floors is a prescriptive path requirement and requires slab insulation.

Section N1106 Performance based calculations establishes the performance path and reads as follows:

(1) Chapter 4 of that certain document being titled International Energy Conservation Code, 2009 Edition, first printing, as published by the International Code Council, 4051 Flossmoor Road, Country Club Hills, Illinois 60478, is hereby adopted by reference as if fully set out in this rule save and except those revisions made in this rule.

(2) The purpose of adopting Section N1106 is to provide a performance based alternative in lieu of compliance with the prescriptive requirements of Chapter 11 of the 2005 Indiana Residential Code.

(3) Amend Chapter 4 as follows:

(i) Amend Section 401.1, delete "residential buildings" and insert "Class 2 structures".

(ii) In Section 401.2, delete text and insert as follows: Projects may comply with Section 405 Simulated Performance Alternative (performance).

(iii) Delete Section 401.3 in its entirety without substitution.

...
Since *Section N1106 (2)* provides "a performance based alternative in lieu of compliance with the prescriptive requirements of Chapter 11 of the 2005 Indiana Residential Code" and (1) adds Chapter 4 of the 2009 IECC, the code explicitly allows for compliance with the performance path in lieu of complying with Chapter 11 (including N1102.2.8). Additionally Section R402.2 is deleted in its entirety, which includes the prescriptive requirement for slab edge insulation.

For individuals using the performance path, there are no requirements for the slab edge detail being enforced; however, the home is required by Section N1106 to have an energy model completed demonstrating that the cost compliance referenced in Section R405 of the 2009 IECC has been met. This ensures the energy loss by not having slab edge insulation is properly accounted for in the energy model. Energy loss of the slab edge would be made up by improving other components in the building thermal envelope or design.

Requiring an engineer's stamp (Section R106) is unnecessary and burdensome since the code allows for compliance through the performance path (N1106).

**675 IAC - FIRE PREVENTION AND BUILDING SAFETY COMMISSION
NONRULE POLICY DOCUMENT
INTERPRETATION BY
THE FIRE PREVENTION AND BUILDING SAFETY COMMISSION**

Title: Interpretation of 675 IAC 14-4.3, 2005 Indiana Residential Code, Section N1106 – Performance Path, with regards to Section R106.

Date: January 4, 2017

Purpose and Background: The purpose of this non-rule policy is to clarify whether an engineer's stamp under Section R106 is required for particular elements of a Section N1106 evaluation that do not meet the prescriptive requirement, even though the Section N1106 evaluation takes the deficiency into account when showing a passing score.

Interpretation: The Commission hereby interprets Section N1106 as follows: An engineer's stamp under Section R106 is not required for particular elements of a Section N1106 evaluation that do not meet the prescriptive requirement (e.g., slab insulation, etc.). The Section N1106 evaluation takes the deficiency into account when showing a passing score.