

R-7: Correct Ventilation Energy in Performance Path (R405.1)

Summary: Correct an ambiguity in the code that includes ventilation energy in the performance path tradeoffs in one part of the code text but excludes it in another part. This will clarify that energy expended for ventilation is to be included in the overall energy budget for performance-based compliance.

New DOE proposal R-7 was added on December 18, 2015.

Stakeholder Feedback: This proposal stems from a comment on proposal R-3 that noted a potential ambiguity in the Simulated Performance Alternative compliance path. The Scope section (R405.1) states that energy analysis shall include only heating, cooling, and water heating, but Table R405.5.2(1) clearly includes specifications for mechanical ventilation that may differ between the proposed design and the standard reference design.

In response to this comment, DOE has added the following proposal.

== IECC PROPOSAL:

Modify section R405.1 as follows:

R405.1 Scope. This section establishes criteria for compliance using simulated energy performance analysis. Such analysis shall include heating, cooling, mechanical ventilation, and service water heating energy only.

Reason: This proposed change corrects a contradiction in the current code. Section R405.1 states that energy analysis for the Simulated Performance Alternative compliance path is to include only heating, cooling, and water heating energy (i.e., mechanical ventilation is not included). However, Table R405.5.2(1) clearly includes specifications for mechanical ventilation that may differ between the proposed design and the standard reference design. This proposal modifies the Scope section to match the clear direction given in the table.

Energy Savings: The proposal is not expected to produce energy cost savings.

The U.S. Department of Energy (DOE) develops its proposals through a public process to ensure transparency, objectivity and consistency in DOE-proposed code changes. Energy savings and cost impacts are assessed based on established methods and reported for each proposal, as applicable. More information on the process utilized to develop the DOE proposals for the 2018 IECC can be found at: <https://www.energycodes.gov/development/2018IECC>.

Cost impact: This change has no cost impact.

Cost-effectiveness: This change is cost-effective in that it is expected to provide neutral energy impact and has no direct cost impact.