

ANSI/RESNET/ICC 301—2025
Standard for the Calculation and Labeling of the Energy Performance
of Dwelling and Sleeping Units Using an Energy Rating Index

First Printing: August 2026

ISBN: 978-1-971077-86-4 (soft-cover edition)
ISBN: 978-1-971077-87-1 (PDF download)

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RESNET obtains consensus through participation of its national members, associated societies and public review.

This is the fourth edition of the standard, which is under continuous maintenance in accordance with the *RESNET Standard Development Policy and Procedures Manual*. Continuous maintenance proposals should be submitted to the Manager of Standards via the online form on the RESNET website. The procedures manual and online forms for submitting continuous maintenance proposals and requests for interpretation can be accessed from the website at <https://www.resnet.us/about/standards/resnet-ansi/> on the page titled "RESNET®-ANSI AMERICAN NATIONAL STANDARDS."

The Manager of Standards should be contacted for:

1. Interpretation of the contents of this standard.
2. Participation in the next review of this standard.
3. Offering constructive criticism for improving this standard.
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FOREWORD (INFORMATIVE)

This standard provides a consistent, uniform methodology for evaluating and labeling the energy performance of *dwelling units* and *sleeping units*, including all detached and attached housing types. The terms “*dwelling unit*” and “*sleeping unit*” are interchangeable with the term “home,” except where specifically noted. The methodology compares the energy performance of an actual home with the energy performance of a reference home of the same geometry, resulting in a relative *energy rating* called the *Energy Rating Index (ERI)*. Where the energy performance of the actual home and the reference home are equal, the *Energy Rating Index* is 100, and where the actual home requires no net *purchased energy* annually, the *Energy Rating Index* is 0 (zero).

The *energy rating reference home* used for this comparative analysis has the energy attributes of the 2006 *International Energy Conservation Code® (IECC®)* standard reference design. Thus, the *Energy Rating Index* is relative to the minimum building energy efficiency requirements of the 2006 IECC. As a result, the *energy rating reference home* performance will not comport with state or local building codes that differ in stringency from the 2006 IECC. Where local building energy codes are less stringent than the 2006 IECC, the *Energy Rating Index* for the local standard will be greater than 100, and where local building energy codes are more stringent than the 2006 IECC, the *Energy Rating Index* for the local standard will be less than 100. Because the *Energy Rating Index* accounts for all lighting, appliances and miscellaneous energy loads, there is never a one-to-one correspondence between code compliance (even under the 2006 IECC) and an *Energy Rating Index* of 100.

This standard does not provide a methodology for the calculation of an *Energy Rating Index* for a whole building that contains more than one *dwelling unit* or *sleeping unit*. Section 701.2.5 provides a method to calculate a composite *Energy Rating Index* substitute that is allowed to represent the residential portions of a single building that contains more than one *dwelling* or *sleeping unit* or a group of multiple detached *dwelling units*.

This standard contains both normative and informative material. The body of this standard is normative and must be complied with to conform to the standard. Informative materials are not mandatory and are limited to this foreword, footnotes, references and annexes, all of which are clearly marked as informative.

The designation and title of the first edition of this standard were revised effective November 17, 2015. The original designation, “ANSI/RESNET 301—2014,” was revised to “ANSI/RESNET/ICC 301—2014.” The title, *Standard for the Calculation and Labeling of Low-Rise Residential Buildings using the HERS Index*, was revised to *Standard for the Calculation and Labeling of Low-Rise Residential Buildings using the Energy Rating Index*. All references to “HERS” within the standard were revised to “energy rating.” The change in designation adds recognition of the International Code Council® (ICC®) as a sponsor of the standard. Non-substantive editorial changes to ANSI/RESNET 301—2014 noted in the amendment proceeding for ANSI/RESNET/ICC 301—2014 Addendum B-2015 and in the Special Note above were published in that edition.

The first major update of the standard was “ANSI/RESNET/ICC 301—2019,” the second major edition, which changed the title and scope and added requirements to cover *dwelling units* and *sleeping units* in buildings of any height. The terminology of the title and scope were revised for consistency with the International Code Council model building codes.

The second major update of the standard was “ANSI/RESNET/ICC 301—2022,” the third major edition, which added new criteria including those for the operational carbon emission CO_2e rating and reference to new standard “ANSI/RESNET/ICC 310—2020” that provides credit of properly installed HVAC equipment. This is the third major update, “ANSI/RESNET/ICC 301—2025,” the fourth edition of the standard.

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