



Setting the Standards for
Home Energy Efficiency

Interpretation: Use of Total Duct Leakage Results as Duct Leakage to Outside Results

Designation IR 301-2019-003

Approved: October 2, 2019 by RESNET SDC300

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Reference: This request for interpretation refers to the requirements presented in
Standard:
ANSI 301-2019

Page Number(s): page 24
Section(s): _____
Table(s): 4.2.2(1)
Relating to: Thermal distribution systems

Background: ANSI/RESNET/ICC 301-2019, as well as Addendum L to ANSI/RESNET/ICC 301-2014, state in Table 4.2.2(1) that “Forced air distribution systems duct leakage to outside tests^(w) shall be conducted and documented by an Approved Tester in accordance with requirements of Standard ANSI/RESNET/ICC 380...”. Note (w) describes the alternatives and exemptions to this test, when certain criteria are met.

Section 5.5.2 of Standard ANSI/RESNET/ICC 380-2019 states the following: “If the results of the duct system leakage test are to be used for assessing compliance with a limit on duct system leakage to the outside³⁵, then the duct system leakage to outside determined in Section 5.4.2.7 or 5.4.2.10 shall be used. Alternatively, the total duct leakage determined in Section 5.4.1.2 or 5.4.1.5 is permitted to be used as if it were the leakage to outside.³⁶”

The footnotes 35 & 36 state the following:

35 (Informative Note) For example, defined by code, by an energy efficiency program, or for a home energy rating.

36 (Informative Note) For example, the total leakage value is permitted to be used in software as if it were leakage to the outside.

Give these statements from both Standards, this Interpretation Request seeks to confirm that the underlined statements in Standard ANSI/RESNET/ICC 380-2019 are applicable to Standard ANSI/RESNET/ICC 301-2019.

(This statement should identify what is unclear or contradictory in the standard and why clarification is necessary.)

Interpretation: Since Standard ANSI/RESNET/ICC 301-2019 states that “duct leakage to outside tests shall be conducted...in accordance with requirements of Standard ANSI/RESNET/ICC 380”, while the text from ANSI/RESNET/ICC 380-2019 is not explicitly repeated in note (w) to Table 4.2.2(1), it is understood that “the total leakage value is permitted to be used in software as if it were leakage to the outside” for the purpose of calculating an ERI.

*(State what you consider the clarification should be. **Your interpretation must be stated such that the SDC can answer “Yes” or “No”.** Note: Interpretations are solely the opinion of the SDC. There is no public review or comment incorporated in their development. Interpretations should not create new requirements for national consensus standards.)*

Question: Is this Interpretation correct?



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SDC Answer: Yes.

SDC
Comments: In accordance with ANSI/RESNET/ICC 380, the total duct leakage value is permitted to be used in energy rating software as if it were duct leakage to the outside for the purpose of calculating an ERI.