

RESNET® HERS® Standards

Interim Addendum 109i

Amend ANSI/RESNET/ICC 380 Editions 2019, 2022 and 2025 for consistency with ANSI/RESNET/ICC 301-2025 Appendix C and HERS Addendum 53f

Date Approved:	October 7, 2026
Voluntary Compliance Date:	October 7, 2026
Mandatory Compliance Date:	October 7, 2026
Transition Period:	NA
Proponent:	SDC 300
Organization:	RESNET

Purpose:

The proposed amendment is to ensure consistency of requirements of standards ANSI/RESNET/ICC 301 and ANSI/RESNET/ICC 380 as they apply to the RESNET HERS.

Amendment:

Amend sections of Standards 380-2019 and 380-2022 as follows:

4.4.1.10. The Effective Leakage Area (ELA) shall be calculated using Equation 4.4-2a or 4.4-2b:

$$ELA(in^2) = \frac{\text{Corrected CFM50}}{18.2\textcolor{red}{27}} \quad \{\text{Note: red text "27" is added.}\} \quad (\text{Equation 4.4-2a})$$

$$ELA(m^2) = \frac{\text{Corrected CMS50}}{\textcolor{red}{13.6} \textcolor{red}{13.334}} \quad \{\text{Note: red text "13.334" replaces "13.6"}\} \quad (\text{Equation 4.4-2b})$$

4.5.2. If the results of the building or Dwelling Unit enclosure leakage test are to be converted to Air Changes Per Hour at 50 Pa (0.2 in. H₂O) (ACH50), Specific Leakage Area (SLA), Normalized Leakage ~~Area~~ (NLA), or compartmentalization leakage ratio at 50 Pa (CFM50/ft²), then the following equations shall be used. Where adjusted or corrected CFM50, CMS50 or ELA values have been calculated in previous sections, they shall be used in the following equations.

$$ACH50 = CFM50 \times 60 / \text{Infiltration Volume in cubic feet} \quad (\text{Equation 4.5-3a})$$

$$ACH50 = CMS50 \times 3600 / \text{Infiltration Volume in cubic meters} \quad (\text{Equation 4.5-3b})$$

$$SLA = \del{0.00694 \times} ELA \text{ in in}^2 / (\text{Conditioned Floor Area in } \del{\text{square feet}} \times 144 \text{ in}^2/\text{ft}^2) \quad (\text{Equation 4.5-4a})$$

$$SLA = \del{10.764 \times} ELA \text{ in m}^2 / \text{Conditioned Floor Area in square meters} \quad (\text{Equation 4.5-4b})$$

$$NLA = \underline{1000 \times} SLA \times (\underline{SH/Hr})^{0.4 \del{0.4}}, \del{\text{where } S \text{ is the number of stories above grade}} \quad (\text{Equation 4.5-5})$$

Where

H = vertical distance between the lowest and highest above grade points within the pressure envelope (ft or m, which ever is consistent with Hr) ¹

Hr = reference height = 8.202 feet (2.5 m)

$$CFM50/\text{ft}^2 = CFM50 / \text{Compartmentalization Boundary area in square feet} \quad (\text{Equation 4.5-6})$$

Amend sections of Standards 380-2025 as follows:

404.1.10 The Effective Leakage Area (ELA) shall be calculated using Equation 4-3 or 4-4:

$$ELA(\text{in}^2) = \frac{\text{Corrected CFM50}}{18.2\del{27}} \quad \{\text{Note: red text "27" is added.}\} \quad \text{Equation 4-3}$$

$$ELA(\text{m}^2) = \frac{\text{Corrected CMS50}}{\del{13.6} 13.334} \quad \{\text{Note: red text "13.334" replaces "13.6"}\} \quad \text{Equation 4-4}$$

405.2. If the results of the *dwelling unit* enclosure leakage test are to be converted to air changes per hour at 50 Pa (0.2 in. H₂O) (ACH50), Specific Leakage Area (SLA), Normalized Leakage ~~Area~~ (NLA) or compartmentalization leakage ratio at 50 Pa (CFM50/ft²), then the following equations shall be used. Where adjusted or corrected CFM50, CMS50 or ELA values have been calculated in previous sections, they shall be used in the following equations.

¹ 'H' shall be based on the Infiltration Volume as determined in accordance with this standard and shall include the above-grade height of attics, crawlspaces and basements when they are included in the Infiltration Volume.

Equation 4-12 $ACH50 = CFM50 \times 60 / \text{Infiltration Volume (in cubic feet)}$

Equation 4-13 $ACH50 = CMS50 \times 3600 / \text{Infiltration Volume (in cubic meters)}$

Equation 4-14 $SLA = \cancel{0.00694} \times ELA \text{ (in square in)} / \underline{144 \text{ in}^2/\text{ft}^2} \times \text{Conditioned Floor Area (in square feet)}$

Equation 4-15 $SLA = \cancel{10.764} \times ELA \text{ (in square meters)} / \text{Conditioned Floor Area (in square meters)}$

Equation 4-16 $NLA = \underline{1000} \times SLA \times (\cancel{S} \times 0.4) H/Hr)^{0.4}$

Where ~~S is the number of stories above grade.~~

H = vertical distance between the lowest and highest above grade points within the pressure envelope (ft or m, whichever is consistent with Hr) ²

Hr = reference height = 8.202 feet (2.5 m)

Equation 4-17 $CFM50/\text{ft}^2 = CFM50 / \text{Compartmentalization Boundary area (in square feet)}$

² 'H' shall be based on the Infiltration Volume as determined in accordance with this standard and shall include the above-grade height of attics, crawlspaces and basements when they are included in the Infiltration Volume.