

RESNET® HERS® Addendum 98f

Wall Orientation

Date Approved:	May 15, 2026
Voluntary Compliance Date:	TBD
Mandatory Compliance Date:	TBD
Transition Period:	TBD
Proponent:	SDC 300
Organization:	RESNET

Purpose:

Addendum 98f amends ANSI/RESNET/ICC 301-2022 Addendum C-2025 requirements for the RESNET HERS. It clarifies how software providing HERS Index ratings must model above-grade walls separating *Conditioned Space Volume* from outdoor environment or *Unconditioned Space Volume*. The amendment is essential to ensuring consistency in software simulations for RESNET’s HERS Index ratings.

Amendment:

Modify Section 3 Definitions of ANSI/RESNET/ICC 301 as follows:

3.1. General.

3.2. Definitions.

Gross Area – The area of a building enclosure component that includes ~~the areas of~~ the Fenestration areas that are not normally included in the ~~net-Net area-Area~~ of the enclosure component. Normally, the simple area calculated as the overall length times the overall width of the enclosure component.¹

Net Area – The area of a building enclosure component that excludes the Fenestration areas.

Modify ANSI/RESNET/ICC 301 Table 4.2.2(1) as follows:

Table 4.2.2(1) Specifications for the Energy Rating Reference and Rated Homes

Building Component	Energy Rating Reference Home	Rated Home
Above-grade walls separating Conditioned Space Volume from outdoor environment or Unconditioned Space Volume	Type: wood frame Gross Area: same as Rated Home U-Factor: from Table 4.2.2(2) Solar Absorptance = 0.75	Same as Rated Home Same as Rated Home Same as Rated Home Values from Table 4.2.2(43) shall be used to determine Solar Absorptance, except where test data are provided for wall surface in accordance with

¹. (Informative Note) Example: a wall

Table 4.2.2(1) Specifications for the Energy Rating Reference and Rated Homes

Building Component	Energy Rating Reference Home	Rated Home
	<p>Emittance = 0.90</p> <p><u>Exterior Wall Orientation: Net Area of the Energy Rating Reference Home walls equally distributed to four (4) cardinal compass orientations (N, E, S, & W)</u></p>	<p>ASTM C1549 or ASTM E903 using the ASTM G197 air-mass 1.5 sun-facing global vertical solar spectral irradiance for the measurement of Solar Reflectance.² The Solar Absorptance value is obtained by subtracting the measured Solar Reflectance value from the number one (Solar Absorptance = 1 – Solar Reflectance)</p> <p>Same as Rated Home</p> <p><u>Same as Rated Home, or Net Area of the Rated Home walls equally distributed to four (4) orientations offset by 90 degrees.</u></p>
Conditioned basement walls	<p>Type: same as Rated Home</p> <p>Gross Area: same as Rated Home</p> <p>R-Value: from Table 4.2.2(2) with the insulation layer on the interior side of walls</p> <p><u>Above-Grade Exterior Wall Orientation: Net Area of the Energy Rating Reference Home walls equally distributed to four (4) cardinal compass orientations (N, E, S, & W)</u></p>	<p>Same as Rated Home</p> <p>Same as Rated Home</p> <p>Same as Rated Home</p> <p><u>Same as Rated Home, or Net Area of the Rated Home walls equally distributed to four (4) orientations offset by 90 degrees.</u></p>

Modify ANSI/RESNET/ICC 301 Table 4.5.2(1) as follows:

Table 4.5.2(1) Minimum Rated Features	
Building Element	Minimum Rated Feature
General Project Info	Total number of buildings, Dwelling Units, and total number of Bedrooms in the project.
1. Floor/Foundation Assembly	Construction type (slab-on-grade, crawl space, basement), boundary condition (adiabatic, above unconditioned space, above Non-Freezing Space), dimensions, insulation type, value, and location (edge, under slab, cavity, sheathing), framing material and on-center spacing, insulation installation (Grade I, II, or III), vented or unvented (crawl space), capacitance (if slab or basement receives appreciable solar gain).
2. Walls Assembly	Construction type, orientation (<u>same as rated home or equally distributed to four cardinal compass orientations</u> for <u>above-grade</u> exterior walls), boundary condition (adiabatic, ambient, Multifamily Buffer Boundary), insulation value (cavity, sheathing), framing material and on-center spacing, insulation installation (Grade I, II, or III), capacitance, exterior color (according to Table 4.2.2(4)).

² (Normative Note) Solar Reflectance is permitted to be measured in accordance with the CRRC-1 Product Rating Program Manual Appendix 8 “Standard Test Method for Determining the Directional-Hemispherical Solar Reflectance of Materials Using a Directional-Hemispherical Portable Reflectometer” with the ASTM G197 air-mass 1.5 sun-facing global vertical solar spectral irradiance.

Modify ANSI/RESNET/ICC 301 Appendix B as follows:

BUILDING ELEMENT: WALL ASSEMBLY—continued		
RATED FEATURE	TASK	ON-SITE INSPECTION PROTOCOL
Orientation	Determine and record orientation of above-grade exterior walls.	<p>When wall orientation is recorded to be the same as the Rated Home (rather than allowing the net wall area to be distributed to four (4) orientations), Ddetermine orientation of at least one exterior wall and record orientations of all exterior walls to the nearest cardinal/ordinal points.</p> <p>When using a compass, Ffirst make sure the compass is not noticeably affected by steel members or electric current in the place you are standing. Then Wwhile standing in front of an exterior wall inside the Dwelling Unit, record orientation while facing the exterior. When using a compass while standing outside the Dwelling Unit, record orientation while standing with back to the exterior wall.</p>