

**BSR/RESNET/ICC Standard 301-2014 Addendum C-201x PDS-01**  
**June 13, 2016**

*Modify Table 4.2.2(1) as follows:*

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

| <b>Building Component</b>                             | <b>Energy Rating Reference Home</b>   | <b>Rated Home</b>   |
|---|---|---|
| Air exchange rate                                     | Specific Leakage Area (SLA) <sup>(d)</sup> = 0.00036 <sup>(f)</sup> <u>as supplemented by mechanical ventilation added in quadrature<sup>(g)</sup> where necessary to bring the total air exchange rate to 0.30 ach and assuming no energy recovery and with energy loads calculated in quadrature<sup>(f), (g)</sup></u> | <p>Tested in accordance with requirements such as or equivalent to <u>ANSI/RESNET/ICC Standard 380-2016 Section 802 of the Mortgage Industry National Home energy Rating Systems Standards</u></p> <p>For residences, without Whole-House Mechanical Ventilation Systems, the measured infiltration rate<sup>(e)</sup> but not less than 0.30 ach</p> <p>For residences with Whole-House Mechanical Ventilation Systems, the measured infiltration rate<sup>(e),(f)</sup> combined <u>in quadrature<sup>(g)</sup></u> with the time-averaged Whole-House Mechanical Ventilation System rate,<sup>(f)</sup> <u>which The time-averaged Whole-House Mechanical Ventilation System rate shall not be less than 0.030.01 x CFA + 7.5 x (Nbr+1) cfm<sup>(h),(i)</sup> and with energy loads calculated in quadrature<sup>(g)</sup></u></p> |
| Whole-House Mechanical ventilation <u>fan energy:</u> | None, except where a mechanical ventilation system is specified by the Rated Home, in which case:<br>Where Rated Home has supply-only or exhaust-only Whole-House Ventilation System:   | Same as Rated Home  |

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

| Building Component | Energy Rating Reference Home   | Rated Home |
|--------------------|--|------------|
|                    | <p>0.35*fanCFM*8.76 kWh/y<br/>Where Rated Home has balanced Whole-House Ventilation System without energy recovery:<br/>0.70* fanCFM*8.76 kWh/y<br/>Where Rated Home has balanced Whole-House Ventilation System with energy recovery:<br/>1.00*fanCFM*8.76 kWh/y<br/>And where fanCFM is calculated <del>in accordance with Section 4.1.2 ASHRAE Standard 62.2-2013 as</del><br/><u><math>0.01 \times CFA + 7.5 \times (Nbr+1) \text{ cfm}^{(h)}</math></u><br/><del>for a continuous Whole House Ventilation System.</del></p> |            |

(d) Where Effective Leakage Area (ELA) is defined in accordance with Equation 4.4 of ASHRAE Standard 62.2-2013, and where  $SLA = ELA / CFA$  (where ELA and CFA are in the same units).

(e) Tested envelope leakage shall be determined and documented by an Approved Tester using the on-site inspection protocol as specified by requirements such as or equivalent to ANSI/RESNET/ICC Standard 380-2016 Section 802 of the Mortgage Industry National Home Energy Rating Systems Standards by an Approved Tester.

(f) ~~The combined air exchange rate for~~ Effective Annual Average Infiltration Rate (cfm) and Whole-House Mechanical Ventilation Systems shall be determined in accordance with Equation 4.6 Section 4.1.2 of ASHRAE Standard 62.2-2013.

(g) Either hourly calculations using the procedures given in the 2013 ASHRAE Handbook of Fundamentals (IP version), Chapter 16, page 16.25, Equation 51 using Shelter Class 4 or calculations yielding equivalent results shall be used to determine the energy loads resulting from infiltration in combination with Whole-House Mechanical Ventilation systems.

(h) Where the measured Effective Annual Average Infiltration Rate determined in accordance with Section 4.1.2 of ASHRAE Standard 62.2-2013 exceeds  $0.02 \times CFA$  cfm, the minimum time-averaged Whole-House Mechanical Ventilation System rate shall be reduced by 50% of the difference between  $0.02 \times CFA$  cfm and the measured Effective Annual Average Infiltration Rate (cfm).

(i) Where Whole-House Mechanical Ventilation is provided by a Central Fan-Integrated System (CFIS), the measured outdoor air flow rate of the CFIS, as determined in accordance with ANSI/RESNET/ICC Standard 380-2016, shall be used to compute the necessary run-time fraction of the CFIS required to achieve the time-averaged Whole-House Mechanical Ventilation system rate.

*Renumber all following Table 4.2.2(1) notes.*

***Modify Section 4.3.3.2.5 as follows:***

**4.3.3.2.5.** Combined infiltration and ventilation may not be ~~less than the ventilation rates required by ASHRAE Standard 62.2-2013,~~ nor greater than  $nL * wsf * 1.2$  in summer and  $nL * wsf * 1.6$  in winter.

***Add the following definitions:***

**Effective Annual Average Infiltration Rate** – the constant air infiltration rate in cubic feet per minute (cfm) that would result in the same average indoor pollutant concentration over the annual period as occurs under varying infiltration conditions.

**Central Fan-Integrated System** – an outdoor air ventilation system that uses the blower of the Heating, Ventilating and Cooling (HVAC) system to draw outdoor air into the home through a dedicated duct from the outdoors to the return side of the HVAC system's air handler unit (AHU) for distribution to the conditioned space.