Technical Bulletin

2019 Standards: Multifamily Dwelling Unit Compartmentalization - Dwelling Unit Enclosure Leakage

Alternative to balanced ventilation systems

With the adoption of the 2019 Standards, a significant change was made that requires a blower door test to be performed for multifamily dwelling units when continuously operating supply or exhaust only ventilation systems are used to satisfy the IAQ requirement.

Multifamily: Section 150.0(o)1Eii: Applicable to Multifamily only!

Multifamily attached dwelling units shall have mechanical ventilation airflow provided at rates in accordance with Equation 150.0-B [ASHRAE 62.2: 4.1.1], and comply with one of the following subsections i or ii below.

I. A balanced ventilation system shall provide the required dwelling-unit ventilation airflow, or

II. Continuously operating supply ventilation systems, or continuously operating exhaust ventilation systems shall be allowed to be used to provide the required dwelling unit ventilation airflow if the dwelling-unit envelope leakage is less than or equal to 0.3 cubic feet per minute at 50 Pa (0.2 iwc) per ft2 of dwelling unit envelope surface area as confirmed by field verification and diagnostic testing in accordance with the procedures specified in Reference Residential Appendix RA3.8.

Note: *When subsection II is utilized for compliance, all dwelling units in the multifamily building shall use the same ventilation system type.*

Single Family: Section 150.0(o)1cii2: Applicable to single family detached dwelling units, and attached dwelling units not sharing ceilings or floors with other dwelling units, occupiable spaces, public garages, or commercial spaces. The blower door test (ENV-20) is only required for single family dwelling units that utilize the performance approach when the IAQ calculation, in the calculation software, specifies less than 2 ACH_{50}.

Determination of Test Results

When required for compliance, the leakage results determined by RESNET 380 Section 3.5.1, equation (5a) shall be converted to CFM50/ft2 of dwelling unit enclosure area by dividing CFM50 by the dwelling unit's interior surface area in ft2 (i.e. the sum of the area of walls between dwelling units, exterior walls, ceiling, and floor).

Equation (5a) *- Adjusted CFM50 = 1.1 x Corrected CFM50*

Further details can be found in the RESNET Standard 380 and our online Compliance Support Website

Additional questions about HERS verifications may be directed to CalCERTS support: support@calcerts.com or (916) 985-3400, ext. *