



Air Leakage Test

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Building Official

Effective: May 1, 2023

Purpose

This establishes the requirements for testing and reporting air leakage in new Residential Construction.

Program Criteria

1. Qualifications for Personnel Performing Test

Testing shall be conducted by a Virginia licensed general contractor, a Virginia licensed HVAC Contractor, a Virginia Licensed Home Inspector, a Virginia Registered Design Professional, a Certified BPI Envelope Professional, a certified HERS rater, or a Certified Duct and Envelope Tightness Rater.

2. Testing Requirements

The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five (5) air changes per hour (5ACH/50). Testing shall be conducted in accordance with RESNET/ICC 380, or ASTM E1827 and reported at a pressure of 0.2 inches w.g. (50 Pa).

3. During Testing

The following requirements must be maintained during the air leakage testing:

- a. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures.
- b. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
- c. Interior doors, if installed at the time of the test, shall be open.
- d. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
- e. Heating and cooling systems, if installed at the time of the test, shall be turned off.
- f. Supply and return registers, if installed at the time of the test, shall be fully open.

4. Reporting

A completed [Residential Air Leakage Certification](#) shall be uploaded to the Building Permit Case before the Residential Combination Final Inspection (199) is scheduled.

Attachment/Hyperlinks

- [Residential Air Leakage Certification](#)