

	<b>BUILDING DEVELOPMENT POLICIES AND PROCEDURES RESIDENTIAL INSPECTIONS ENERGY EFFICIENCY</b>	<b>Effective Date: May 1, 2023</b>
		<b>Supersedes Policy Dated: N/A</b>
	<b>4.6.1 Air Leakage Test (Blower Door Test)</b>	<b>Issued by: Eric M. Mays, P.E. Building Official</b>

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

**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, ASTM E779, 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 County [Residential Air Leakage Certification \(Blower Door\)](#) shall be uploaded to the Building Permit Case before the Residential Combination Final Inspection (199) is scheduled.

**[Residential Air Leakage Certification \(Blower Door\)](#)**