



**NOTICE OF BLOWER DOOR TESTING REQUIREMENTS
FOR BUILDING THERMAL ENVELOPE,
APPLICABLE TO PERMITS ISSUED
UNDER THE 2018 VRC CODES**

On the July 1, 2022, the mandatory use of the 2018 Virginia Residential Code (VRC) became effective. As required under the 2018 codes, a blower door test must be performed for each residential structure to verify the structure meets the building thermal envelope requirements. Sections N1102.4.1.2 (R402.4.1.2) requires the building or dwelling unit to be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zone 4.

Blower Door Testing shall be conducted in accordance with the following:

- 1) Standards used to perform the test- RESNET/ICC 380, ASTM E 779, or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pa).
- 2) 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.
- 3) The party conducting the test shall have been trained on the equipment used to perform the test. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.
- 4) During testing: 1. Exterior windows and doors and fireplace and stove doors shall be closed, but not sealed beyond the intended weatherstripping or other infiltration control measures; 2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers shall be closed, but not sealed beyond intended infiltration control measures; 3. Interior doors, if installed at the time of the test, shall be open; 4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed; 5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and 6. Supply and return registers, if installed at the time of the test, shall be fully open.
- 5) A written report of the results of the test shall be signed by the party conducting the test and must be submitted by the general contractor as a document to the building permit.
- 6) The report must be submitted and approved prior to the issuance of a Certificate of Occupancy.
- 7) As per the requirements of Section R401.3 of the VRC, the results of the dust blaster test and the blower door tests shall be entered on the permanently placed Energy Efficiency Certificate.

For additional information please contact our office at 757-393-8531.

Department of Permits & Inspections

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