



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

2015 Washington State Energy Code Development Energy Code Proposal Short Form

For editorial **Coordination, Clarifications & Corrections** only,
without substantive energy or cost impacts

May 2018

Log No. _____

Code being amended: [Commercial](#) Provisions [Residential](#) Provisions
(A MS Word version of the code is linked to the name)

Code Section # **R402.4.1.2**

Brief Description:

UPDATE - In the 2018 WSEC-R, a code official may require that air leakage testing be conducted by a third party testing agency. This proposal improves consistency by specifying the minimum credentials that testing agencies shall comply with.

To improve accuracy and accountability, this proposal also requires that the testing report include location verification and a time stamp of the date of the test.

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

R402.4.1.2 Testing. The building or dwelling unit shall be tested for air leakage. The maximum air leakage rate for any building or dwelling unit under any compliance path shall not exceed 5.0 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). For this test only, the volume of the home shall be the conditioned floor area in ft² (m²) multiplied by 8.5 feet (2.6 m). Where required by the *code official*, air leakage testing shall be conducted by an *approved* third party. A written report of the test results, including verified location and time stamp of the date of the test shall be signed by the party testing agency conducting the test and provided to the building owner and code official. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*. Once visual inspection has confirmed air sealing (~~see has been conducted in accordance with~~ Table R402.4.1.1), operable windows and doors manufactured by *small business* ~~shall be~~ are permitted to be sealed off at the frame prior to the test.

Testing of single-family dwellings and townhouses shall be conducted in accordance with RESNET/ICC 380, ASTM E779 or E1827. Test pressure and leakage rate shall comply with Section R402.4.1.3.

For all other Group R-2 occupancies, testing shall be conducted in accordance with ASTM E779, ASTM E1827 or ASTM E3158. The individual performing the air leakage test shall be trained and certified by an ISO 17024 accredited certification body, such as Air Barrier Association of America, or deemed equivalent by the code official.

Exception: For dwelling units that are accessed directly from the outdoors, other than detached one family dwellings and townhouses, an air leakage rate not exceeding 0.4 cfm per square foot of the dwelling unit enclosure area shall be an allowable alternative. ~~Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals) in accordance with RESNET/ICC 380, ASTM E779 or ASTM E1827.~~ For the purpose of this test only, the enclosure area is to be calculated as the perimeter of

