

## Washington State Energy Code Development Standard Energy Code Proposal Form

Code being amended:     Commercial Provisions         Residential Provisions

Code Section #   C403.4.11.1 & C406  

Brief Description:

*Amend proposal 206 as follows:*

**Friendly amendment – include an Enhanced reduced air infiltration credit based on Phius+ standard 0.08 CFM<sub>75</sub>/ft<sup>2</sup> maximum of gross envelope area.**

**TABLE C406.4.2  
EFFICIENCY PACKAGE MEASURE CREDITS**

*Insert new row in Table 406.2 with the following (not underlined for clarity):*

Measure Title	Applicable Section	Group R-1	Group R-2	Group B	Group E	Group M	All Other
20. <u>Base</u> Reduced air infiltration <sup>f</sup>	C406.2.10.2	29	24	6	3	9	11
<u>20a. Enhanced reduced air infiltration</u> <sup>f</sup>	<u>C406.2.10.3</u>	<u>53</u>	<u>44</u>	<u>11</u>	<u>5</u>	<u>16</u>	<u>20</u>

- a. Projects using ~~this option~~ Item 2 shall not use Items 3 through 5.
- b. For C406.2.2.4 occupancy Group A achieves 40 credits while other occupancy groups within the “all other” category achieve 21 credits.
- c. Projects using C406.2.3.2 shall not use C406.2.3.1.
- d. Service water heat recovery and heat pump water heating are available in Group M only for grocery stores larger than 10,000 square feet. Large mixed retail with full grocery and butcher sections shall achieve half the credits.
- e. Heat pump water heating and kitchen equipment efficiency credits are available in the “all other” category only for Group A-2.
- f. Buildings or building areas that are exempt from thermal envelope requirements in accordance with Sections C402.1.1 and C402.1.2 do not qualify for ~~this~~ these package measures.

**C406.2.10.4.1 Reduced air infiltration.** Energy credits shall be achieved where M  
measured air infiltration of the total conditioned floor area of the whole building, fully  
isolated building addition or tenant space is determined in accordance with  
Section C406.104.1 and complies with the maximum leakage in either C406.2.10.2 or  
C406.2.10.3.

**C406.104.1 Air leakage testing and verification.** Air infiltration shall be verified by whole building pressurization testing conducted in accordance with ASTM E779 or ASTM E1827 by an independent third party. The measured air leakage rate of the *building envelope* shall not exceed ~~0.17~~ the specified maximum air leakage in cfm/ft<sup>2</sup> (L/(s · m<sup>2</sup>))

under a pressure differential of 0.3 in. water (75 Pa), with the calculated surface area being the sum of the above and below grade building envelope. A report that includes the tested surface area, floor area, air by volume, stories above grade, and leakage rates shall be submitted to the *code official* and the building owner.

**Exception:** Where the *conditioned floor area* of the building is not less than 250,000 ft<sup>2</sup> (25,000 m<sup>2</sup>), air leakage testing shall be permitted to be conducted on representative above grade sections of the building provided the *conditioned floor area* of tested areas is no less than 25 percent of the *conditioned floor area* of the building and are tested in accordance with this section.

C406.2.10.2 Base reduced air infiltration. Measured air infiltration determined in accordance with Section C406.10.1 shall not exceed 0.17 cfm/ft<sup>2</sup> (0.86 L/(s · m<sup>2</sup>)).

C406.2.10.43 Enhanced reduced air infiltration. Measured air infiltration determined in accordance with Section C406.10.1 shall not exceed 0.08 cfm/ft<sup>2</sup> (0.41 L/(s · m<sup>2</sup>)).

~~reduced air infiltration. Measured air infiltration of the total conditioned floor area of the whole building, fully isolated building addition or tenant space shall be verified by whole building pressurization testing conducted in accordance with ASTM E779 or ASTM E1827 by an independent third party. The measured air leakage rate of the building envelope shall not exceed 0.08 cfm/ft<sup>2</sup> under a pressure differential of 0.3 in. water (75 Pa), with the calculated surface area being the sum of the above and below grade building envelope. A report that includes the tested surface area, floor area, air by volume, stories above grade, and leakage rates shall be submitted to the code official and the building owner.~~

**All questions must be answered to be considered complete. Incomplete proposals will not be accepted.**