RE2D-37-23 Modification 1a

note: legislative edits are shown against PCD#2

Revise as follows:

TABLE R408.2 CREDITS FOR ADDITIONAL ENERGY EFFICIENCY
Portions of table not shown remain unchanged.

Measure Number	Measure Description
~~R408.2.3.1~~[e] R408.2.3(8)[c]	Compact hot water distribution
R408.2.4(1)[c]	~~More efficient distribution system~~ Ductless or hydronic thermal distribution
R408.2.4(2)[c]	100% of *duct systems* in *conditioned space*
R408.2.4(3)[c]	≥80% of *ductwork* inside *conditioned space*
R408.2.4(4)[c]	Reduced total *duct system* leakage

a. Where the measure is selected, each dwelling unit, sleeping unit, and common area ~~areas~~ must have the measure installed.

~~SEER2: Seasonal Energy Efficiency Ratio, HSPF2: Heating Season Performance Factor, EER2: Energy Efficiency Ratio, COP: Coefficient of Performance~~

R408.2.1 Enhanced building thermal envelope options.
~~For the enhanced envelope credits, the~~ The *building thermal envelope* shall comply with one or more of the following:

R408.2.1.1 Enhanced building thermal envelope performance.
The total *building thermal envelope* thermal conductance TC shall be calculated for the proposed *building* in accordance with Section R402.1.5 and ~~it~~ shall be reduced by not less than the percentage indicated in Table R408.2 in comparison to the reference *building*.

R408.2.1.4 Reduced air leakage.
~~For the reduced air leakage credit, the~~ The building shall have a measured air leakage rate no less than 2.0 ACH50 and no greater than 2.5 ACH50 or the dwelling units in the building shall have an average measured air leakage rate no greater than 0.24 cfm50/ft2.

R408.2.2 More efficient HVAC equipment performance options.
Heating and cooling equipment shall meet one of the following ~~efficiencies~~ measures as applicable for the *climate zone*~~.~~, where heating and cooling efficiencies are represented by Annual Fuel Utilization Efficiency (AFUE), Coefficient of Performance (COP), Energy Efficiency Ratio (EER and EER2),

Heating Season Performance Factor (HSPF2), and Seasonal Energy Efficiency Ratio (SEER2). Where multiple heating or cooling systems are installed serving different zones, credits shall be earned based on the weighted average of square footage of the *zone* served by the system.

R408.2.3 Reduced energy use in service water-heating options.
For measure numbers R408.2.3(1) through R408.2.3(7), the installed hot water system shall meet one of the Uniform Energy Factors (UEF) or Solar Uniform Energy Factors (SUEF) in Table R408.2.3. For measure number R408.2.3(8), the ~~*dwelling unit*~~ hot water distribution system shall comply with R408.2.3.1.

R408.2.4 More efficient duct thermal distribution system options.

R408.2.5 Improved air sealing and efficient ventilation system options.
The measured air leakage rate and *ventilation* system shall meet one of the following:

1. Either an Energy Recovery Ventilator (ERV) or Heat Recovery Ventilator (HRV) installed.
2. Less than or equal to 2.0 ACH50, with either an ERV or HRV installed.
3. Less than or equal to 2.0 ACH50, with a *balanced ventilation system*.
4. Less than or equal to 1.5 ACH50, with either an ERV or HRV installed.
5. Less than or equal to 1.0 ACH50, with either an ERV or HRV installed.

Reason Statement

1. Section R408.2.2: Replaces the abbreviations proposed to be stricken under Table R408.2 and locates them in the appropriate section.

2. R408.2.4(1) description: Section R408.2.4 is titled "More efficient thermal distribution system option" and contains four "more efficient distribution system" options. The proposed description more specifically describes the first option.

3. R408.2.4(4) description: The addition of "system" and italicization of "duct system" is consistent with changes made to Section R408.2.4(4) by RED1-285 in the last round.

4. The rest are obvious editorial changes that provide consistency between the R408 sections.

Cost Impact

The code change proposal will neither increase nor decrease the cost of construction.