

**From:** Robby Oylear <robbyoylear@gmail.com>

**Sent:** Thursday, June 20, 2019 7:47 AM

**To:** DES SBCC <sbcc@des.wa.gov>

**Subject:** 1 of 2,361 Testimony on the adoption of the 2018 WSEC-Commercial - Limits on non-mandatory measures

Hello,

I would like to see the various sections that reference proposed building envelope UA and allowed total envelope UA to be revised to use the exact terms defined in C402.1.5 to make it explicitly clear what is being required. For the most part this just means capitalizing each word in reference to Total UA and eliminating the added word "envelope" which only shows up in a few sections. Alternatively, add the word envelope to all of these locations (just be consistent).

Proposed changes underlined for new and ~~strikethrough~~ for delete.

**C402.1.5 Component performance alternative.** Building envelope values and fenestration areas determined in accordance with Equation 4-2 shall be permitted in lieu of compliance with the U-factors and F-factors in Table C402.1.4 and C402.4 and the maximum allowable fenestration areas in Section C402.4.1.

For buildings with more than one space conditioning category, component performance compliance shall be demonstrated separately for each space conditioning category. Interior partition ceilings, walls, fenestration and floors that separate space conditioning areas shall be applied to the component performance calculations for the space conditioning category with the highest level of space conditioning.

#### **Proposed Total UA ≤ Allowable Total UA**

...

Proposed Ttotal UA = UA-glaz-prop + UA sky-prop + UA-opaque-prop + FL-slab-prop

Allowable Ttotal UA = UA-glaz-allow + UA-glaz-excess + UA sky-allow + UA-sky-excess + UA-opaque-allow + FL-slab-allow

...

**C401.2 Application.** Commercial buildings shall comply with one of the following:

1. The requirements of Sections C402, C403, C404, C405, C406, C408, C409 and C410.
2. The requirements of Section C407.
3. When adopted by the local jurisdiction, the requirements of Appendix F, Outcome-Based Energy Budget, Sections C408, C409 and any specific section in Table C407.2 as determined by the local jurisdiction. The Proposed Ttotal UA of the proposed building shall be no more than 20 percent higher than the Allowed Ttotal UA as defined in Section C402.1.5.

...

**C406.10 Enhanced envelope performance.** The Proposed Total ~~Envelope~~ UA of the thermal envelope of the whole building or building addition shall be 15 percent lower than the Allowable Total ~~Envelope~~ UA for an area of identical configuration and fenestration area in accordance with Section C402.1.5 and Equation 4-2.

...

**C407.3.1 Limits on non-mandatory measures.** The Proposed Total envelope UA of the proposed building shall be no more than 20 percent higher than the Allowed Total envelope UA as defined in Section C402.1.5.

...

**C503.2 Change in space conditioning. ...**

3. Buildings or spaces that were permitted prior to the 2009 WSEC, or were originally permitted as unconditioned, may

comply with this section as follows:

3.1. Where the component performance alternative in Section C402.1.5 is used, the Proposed Total UA is allowed to be up to 110 percent of the Allowable Total UA.

...

**C505.1 General. ...**

Exceptions:

1. Where the component performance alternative in Section C402.1.5 is used to demonstrate compliance with this section, the Proposed Total UA is allowed to be up to 110 percent of the Allowable Total UA. This exception may be applied to the project area alone, or to the existing building and project area combined as a whole building.

...

3. Buildings or spaces that were permitted prior to the 2009 WSEC, or were originally permitted as unconditioned, may comply with this section as follows:

3.1. Where the component performance alternative in Section C402.1.5 is used, the Proposed Total UA is allowed to be up to 110 percent of the Allowable Total UA.