

093-2018 Proponent Revision 8/10/18

# 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

| Code being amended: Commercial Provisions Residential Provisions   |
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| (A MS Word version of the code is linked to the name)  |
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| Code Section # C403.8.1  |
| Brief Description:   |
| Incorporate State Building Code interpretation No. 14-02 into Code language. Clarify application of C403.8.1 fan power allowance to existing building alterations.                       |
| Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use <u>underline</u> for new text and <del>strikeout</del> for text to be deleted.) |
|  |
| CECTION CEO2   |

SECTION C503 ALTERATIONS

**C503.4 Mechanical systems.** Those parts of systems which are altered or replaced shall comply with Section C403. Additions or alterations shall not be made to an existing mechanical system that will cause the existing mechanical system to become out of compliance.

### **Exception**:

- L. Existing mechanical systems which are altered or where parts of the system are replaced are not required to be modified to comply with Section C403.7.4 as long as mechanical cooling is not added to the system.
- 1.2. Only those components of existing HVAC systems that are altered or replaced shall meet the requirements of section C403.8.1 Allowable fan motor horsepower. Components replaced or altered shall not exceed the Fan Power Limitation Pressure Drop Adjustment values in Table C403.2.11.1(2) at design conditions. C403.8.1 does not require the removal and replacement of existing system ductwork.

All new systems in existing buildings, including packaged unitary equipment and packaged split systems, shall comply with Section C403.

Where mechanical cooling is added to a space that was not previously cooled, the mechanical system shall comply with either Section C403.7.4 or C403.5.

#### **Exceptions**:

- 1. Alternate designs that are not in full compliance with this code may be approved when the code official determines that existing building constraints including, but not limited to, available mechanical space, limitations of the existing structure, or proximity to adjacent air intakes/exhausts make full compliance impractical. Alternate designs shall provide alternate energy savings strategies including, but not limited to, Demand Control Ventilation or increased mechanical cooling or heating efficiency above that required by Tables C403.3.2(1) through C403.3.2(10).
- 2. Qualifying small equipment: This exception shall not be used for unitary cooling equipment installed outdoors or in a mechanical room adjacent to the outdoors. This exception is allowed to be used for other cooling units and split systems serving one zone with a total cooling capacity rated in accordance with Section C403.3.2 of less than 33,000 Btu/h (hereafter referred to as qualifying small systems) provided that these are high-efficiency cooling equipment with SEER and EER

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values more than 15 percent higher than minimum efficiencies listed in Tables C403.3.2 (1) through (3), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify for this exception. The total capacity of all qualifying small equipment without economizers shall not exceed 72,000 Btu/h per building, or 5 percent of its air economizer capacity, whichever is greater. That portion of the equipment serving Group R occupancies is not included in determining the total capacity of all units without economizers in a building. Redundant units are not counted in the capacity limitations. This exception shall not be used for the shell-and-core permit or for the initial tenant improvement or for Total Building Performance.

3. Chilled water terminal units connected to systems with chilled water generation equipment with IPLV values more than 25 percent higher than minimum part load efficiencies listed in Table C403.3.2(7), in the appropriate size category, using the same test procedures. Equipment shall be listed in the appropriate certification program to qualify for this exception. The total capacity of all systems without economizers shall not exceed 480,000 Btu/h per building, or 20 percent of its air economizer capacity, whichever is greater. That portion of the equipment serving Group R occupancy is not included in determining the total capacity of all units without economizers in a building. This exception shall not be used for the initial permit (this includes any initial permit for the space including, but not limited to, the shell-and-core permit, built-to-suit permit, and tenant improvement permit) or for Total Building Performance Method.

Alterations to existing mechanical cooling systems shall not decrease economizer capacity unless the system complies with either Section C403.3.5 or C403.5. In addition, for existing mechanical cooling systems that do not comply with either Section C403.3.5 or C403.5, including both the individual unit size limits and the total building capacity limits on units without economizer; other alterations shall comply with Table C503.4.

When space cooling equipment is replaced, controls shall comply with all requirements under Section C403.7.4 and related subsections or provide for integrated operation with economizer in accordance with Section C403.5.1.

Existing equipment currently in use may be relocated within the same floor or same tenant space if removed and reinstalled within the same permit.

#### Purpose of code change:

Implement the intent of the State Building Code's interpretation into Code language.

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Your organization Affiliated Engineers, Inc. Phone number (206) 256-0800

Other contact name Click here to enter text.

<u>Instructions</u>: For use with <u>Coordination, Clarifications & Corrections ONLY</u>. Send this form as an email attachment, along with any other documentation available, to: <a href="mailto:sbcc@ga.wa.gov">sbcc@ga.wa.gov</a>. For further information, call the State Building Code Council at 360-407-9280.

Deadline for all 2015 code change proposals is March 1, 2015 at 11:59 PM.