



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Department of Enterprise Services

1500 Jefferson • P.O. Box 41449 • Olympia, Washington 98504-1449
(360) 407-9280 • fax (360) 586-5366 • e-mail sbcc@ga.wa.gov • www.ga.wa.gov/sbcc

Energy Code Technical Advisory Group Meeting Review Notes for January 5, 2018

Agenda Items	TAG Actions
1. Welcome and Introductions	Meeting called to order at 10 a.m.
<p>TAG Members Present: Duane Jonlin, Chair; Dean Moody; Chuck Murray; Bill Krause*; Treasa Sweek; Robby Oylear; Lisa Rosenow; Dave Baylon; Patrick Hayes*; Bryan Russo; Gary Heikkinen; Luke Howard; Jonathan Jones; Al Audette*; Todd Blevins; Kim Barker; Jared Sheeks; Mike Fowler; CJ Brockway</p> <p>Visitors Present: Eric Vander Mey, Andrew Pultorak, Mike Kennedy, Laura Wynn; Dave Nehren; Louis Starr; Eric Makela, Brad Rowe, Scott Kenaston, Krishnan Gowri, Caroline Traube, Max Greenhalgh, Roger LeBrun, Michael Hendrick</p> <p>TAG Members Absent: Amy Wheelless, Alan Duer</p> <p>Staff: Krista Braaksma</p> <p style="text-align: right;">* indicates an alternate member</p>	
2. Review and Approve Agenda	Agenda approved as written. Duane Jonlin welcomed everyone and thanked them for volunteering to work on the Technical Advisory Group.
3. 2018 Adoption Process	<p>Krista Braaksma provided a brief overview of the new code adoption and review process. The codes were divided into two groups, with one group being evaluated each year. The first step in the process is to prepare a report on the model code changes. The WSEC ID draft essentially performs this task for the Energy Code. When the Council receives the report, they will set a deadline for code change proposals, for roughly 60 days after Council review of the report.</p> <p>There was some concern from the TAG that pushing off the deadline would result in summer meetings that may be poorly attended.</p>
4. Review Integrated Draft – 2015 Washington State Energy Code, Commercial	
<i>2018 WSEC ID Draft</i>	Duane noted the TAG would need to work towards the statutory goal for the 2031 energy efficiency goal, with the Governor's directive to achieve the goal as soon as possible. But changes need to be cost effective and buildable. The draft document being reviewed today integrates all of the 2018 IECC changes. This will be the starting document for people making code change proposals. We need to make it as clean as possible. The

	<p>intent is the TAG will do any cleanup necessary, including anything noted that would be less stringent or energy efficient than the current code, but anything else that would be a substantive change would need to be done via a code change proposal.</p> <p>Krista noted the TAG should also note if any change has any cost or enforcement impacts, or any that represent a significant change from the 2015 requirements. Duane noted there was not much done at the model code level other than some of the lighting changes.</p>
--	---

<p><i>Chapter 1</i></p>	<p>Patrick Hayes felt there was a conflict with the language in C101.4.1 and C402 regarding mixed res and com buildings. The TAG had some disagreement and Duane said this would need to be made via a code change proposal.</p> <p>C103.6.2, Robby Oylear noted the last sentence should be Record documents rather than construction documents. He also had some question on using the phrase “catalogue number.” The TAG compromised with “model number.”</p> <p>C103.6.2, Lisa Rosenow questioned the addition of the word control. The TAG changed it to “control device.”</p> <p>C103.6.5, Krista asked if this was the correct location for this section. General agreement to move it under C103.6.2 as a subsection. Robby questioned the requirement for a label. This should be broken out into a new paragraph and specify on the equipment. Other than the last two sentences, the language is redundant with requirements already in C103.6.2.</p> <p>The TAG debated combining C104.3 and C104.6. The TAG concluded to leave it as is to reduce the number of amendments.</p>
-------------------------	--

	<p>The TAG identified no significant changes in this report.</p>
--	--

<p><i>Chapter 2</i></p>	<p>Lisa felt the definition for <i>Attic and other</i> was confusing and contradictory to requirements in Chapter 4. She will be submitting a code change proposal.</p> <p>Duane felt the definition for <i>Captive key override</i> should be deleted, since it doesn’t occur in the code and isn’t an accurate definition. The TAG agreed it should be changed to <i>Captive key device</i>.</p> <p>Duane also felt the definition for <i>Computer room</i> should be deleted. The new definition with a description as being less than a specific lighting level. Krista noted the intent of the change was to differentiate between a data center, but there is no definition for data center. The TAG agreed to strike the definition.</p> <p>Duane had issues with the definition to <i>Demand recirculation water system</i>. Eric suggested keeping the old definition and not accept the changes. Robby felt it should be a code change proposal since it supports current code language. General agreement.</p> <p>Lisa had some question on the definition of <i>Entrance door</i>. Duane also had concerns but felt it would need to be changed via a code change proposal.</p>
-------------------------	---

	<p>Mike Kennedy noted there was a grammatical error in the definition of <i>Semi heated buildings</i>. The word maximum should be deleted and insert greater than or equal to 3.4.</p> <p>Lisa noted the draft doesn't have the current WSEC language for <i>Luminaire level lighting level</i>. Krista noted it was just an oversight in the draft and should be changed. Several people voiced the intent to submit a code change proposal on this.</p> <p>Todd Blevins noted the state does not adopt requirements for R-4 and thus should be struck from the definition of <i>Group R</i>. General agreement. Ditto in <i>Residential building</i>.</p> <p>Lisa noted the definition for <i>Repair</i> was too wide open. It was noted the ICC definition had some additional language. Krista will research if this was deleted by a prior TAG action.</p>
	No significant changes to report.
<i>Chapter 3</i>	No significant changes to report.
<i>Chapter 4</i>	<p>Duane reported there was a very messy situation with the mandatory vs. prescriptive headings on the Section titles. It was suggested that they be struck from the code language, and insert a table in C407 that lists all the other sections that must be followed, and strike the references in item 2 of C401.2. Mike Kennedy will work with Krista to provide something to look at for the next meeting.</p> <p>Mike felt Section C410 for refrigeration should be referenced in C401.2. Duane said that should be approached through a code change proposal.</p>
<i>C402</i>	<p>Lisa noted Semi heated buildings shouldn't be a subset of Low energy buildings. The section will be retitled and renumbered.</p> <p>Table C402.1.3, Lisa said footnote g should be on the door line rather than the title. Mike noted the reference to C-factors in the footnotes was confusing. Duane said that change would need to be done via code change proposal.</p> <p>It was noted that the new garage door U-factor has some conflicts with the definition of glazed door and nonswinging door and may need a code change proposal.</p> <p>In C402.1.5, there's an E in the equation that should be eliminated.</p> <p>C402.2.3, Duane felt the last phrase should be "whichever is lower" rather than "whichever is less." Mike suggested going back to the 2015 WSEC language. The TAG ended up modifying the last sentence and deleting the reference to C-factors.</p> <p>C402.2.6, Lisa noted a conflict between this section and Appendix A requirements that cavities be filled. Jurisdictions are having a problem with using airspace. The TAG should look at Appendix A.</p> <p>C402.4.2, Duane had some issues with the use of toplit and sidelit without any definition. CJ Brockway agreed. After discussion of whether a definition should be added, the TAG felt a definition pointing to the defining section of C405 should be added.</p>

	<p>Lisa Rosenow brought up a problem with Section C402.4.2. There is a big loophole for warehouses. She will be preparing a code change proposal to address it.</p>
<p>C403</p>	<p>Mike Kennedy noted there were several lines within the efficiency tables that had different equipment types than ASHRAE or IECC. He will send the corrections to Krista, along with some other details from ASHRAE.</p> <p>Krista included two versions of Table C403.3.2(9). One is the IECC version of the table and one the ASHRAE 90.1 table. The TAG chose to go with the ASHRAE version.</p> <p>C403.3.5, Variable flow capacity, was moved to C403.2.3. The variable flow control and limitations on cooling towers sections should move to C403.9 under heat rejection.</p> <p>Mike Kennedy also advocated renaming Section C403.3 to “equipment selection.”</p> <p>C403.5.4 is used as a section number twice.</p> <p>C403.6.10 DDC shouldn’t be under multi-zone systems. It should be C403.4.11.</p> <p>C403.11.2, Lisa felt the word “manual” should be removed since it is not possible to configure a manual control to shut off at a given temperature.</p> <p>C403.4, Mike felt the title should go back to the previous language.</p> <p>C403.10.1, should read as “steel” rather than “metal” to match the code.</p> <p>C403.7, Ventilation and exhaust systems. Mike felt this section title was inappropriate and should be changed. Robby felt the fan control section in DOAS should be moved to the fan section, C403.7.4.2 to C403.8.5. If that were done, the title wouldn’t need to be changed. Duane felt the DOAS should just be moved to its own section, C403.3.6.</p> <p>C403.9.6 should be moved into C403.2 and be retitled steam condensate systems. Instead of moving it, it was suggested the title of C403.9 be changed to heat rejection and heat recovery equipment.</p> <p>C403.9.7 title should be changed to refrigeration condenser heat recovery.</p> <p>C403.8.4, Lisa suggested the table be retitled “Group R Exhaust Fan Efficacy.”</p> <p>Table C403.8.5.1, Lisa questioned having two different sizes in the chilled water line. This was a holdover from when there were different effective dates. It should be ¼ hp.</p> <p>C403.7.8, Kitchen hoods, the term “replacement air” should be replaced with “make up air” for consistency with the mechanical code.</p> <p>C403.5, exception 4, the phrase “water cooled refrigeration equipment” should be just “equipment” for clarity.</p>

	<p>C403.6.1, Robby noted the exceptions 4 and 5 to this section should be struck.</p> <p>C403.6.9, the exception is pointing to a nonexistent section. It should point to C403.6.8</p>
	<p>The TAG concluded that while the changes look complicated, it is primarily just reorganized and there are no significant changes to report.</p>
6. Meeting Schedule	<p>There was consensus Friday was the best day to meet. With the State Building Code Council meeting scheduled for next Friday, with an ASHRAE meeting on the Friday following that, the next TAG meeting was tentatively set for January 26 in Bellevue. More details will follow later.</p>
7. Adjourn	<p>The meeting was adjourned at 2:00 p.m.</p>