



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Department of Enterprise Services

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Energy Code Technical Advisory Group Meeting Review Notes for June 29, 2018

| Agenda Items | TAG Actions |
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| 1. Welcome and Introductions | Meeting called to order at 9:05 a.m. Duane Jonlin welcomed everyone and introductions were made |
| <p>TAG Members Present: Duane Jonlin, Chair; *Al Audette; Amy Wheelless; *Bill Krause; Bryan Russo; Chuck Murray; *Andrew Pultorak; Dave Baylon; Gary Heikkinen; Jared Sheeks; Kim Barker; Lisa Rosenow; Mike Lubliner; Mike Fowler; *Patrick Hayes; Robby Oylear; Treasa Sweek</p> <p>Visitors Present: Eric Vander Mey, Jay Crandall, Rick Crooks, Dave Hanson, Mike Kennedy, Eric Lacey, Roger LeBrun, Eric Makela, David Mann, Medgar Marceau, David Reddy, Michael Rosenberg, Daniel Salinas, Louis Starr, Amy Schmit, Tom Young, Matt Zeigler</p> <p>TAG Members Absent: Alan Duer, Dean Moody, Jonathan Jones, Todd Blevins, Paul Highly</p> <p>Staff: Krista Braaksma</p> <p style="text-align: right;">* indicates an alternate member</p> | |
| 2. Review and Approve Agenda | Agenda approved as modified. There are no minutes available from the last meeting. The TAG also voted to reopen proposal Env010-2018 in light of some new information. |
| 3. Review and Approve meeting notes for June 15 | Unavailable—deferred to the next meeting. |
| 4. Review of Commercial Admin/Scope and Envelope Code Change Proposals | |
| Env010 | <p>Duane noted there was an error discovered with the equations as approved at the last meeting. The corrections in the revised proposal will take care of it. Patrick Hayes felt that the NFRC procedure should be used rather than this default method.</p> <p>Motion: Chuck Murray, Treasa Sweek moved to recommend approval as modified. The motion carried with one opposing vote.</p> |
| Env016 | <p>This proposals adds a standard framing value for wood framed walls.</p> <p>Motion: Chuck Murray, Bryan Russo moved to recommend approval. The motion carried with one opposing vote.</p> |
| Env017 | <p>The next proposal eliminates the R-21 option for residential and required continuous insulation. David Mann noted the proposal addresses material flexibility, providing options for a range of different insulation types and structural concerns. Lee Crandall also noted the U-factor was lowered and this option is equivalent to the 2018 IECC requirements.</p> <p>Patrick felt that U-0.050 would be a hardship and is not a material that is commercially</p> |

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| | <p>available. He also noted that continuous insulation does not work well with a rainscreen. He suggested R-25 with a U-factor of 0.051 as Seattle requires would be a better option. Lisa Rosenow felt intermediate framing and standard framing options was helpful, but people could comply through the prescriptive U-factor path and multiple standard options were unnecessary.</p> <p>Motion: Patrick Hayes moved to disapprove. The motion died for lack of a second.</p> <p>Motion: Chuck Murray, Dave Baylon moved to recommend approval as modified. Motion carried with two opposing votes.</p> |
| Env018 | <p>The revised proposal from the proponent responded to earlier TAG comments and correlated the R-values to the current U-factor table.</p> <p>Motion: Dave Baylon, Treasa Sweek moved to recommend approval as modified. It was suggested that the changes in the wood row be removed to avoid any conflicts with the changes in 017. Accepted as a friendly amendment to the motion. The motion carried with no opposing votes.</p> |
| Env019 | <p>Chuck and Lisa both spoke in support for the proposal, stating it was cost effective and improved compliance with other code provisions. Patrick noted that Seattle requirements were more stringent, and that this is a constructible wall.</p> <p>Tom Young noted the proposal had no economic data supporting the change and should not be accepted. He felt there were issues regarding constructability and pairing with other common wall systems.</p> <p>Motion: Patrick Hayes, Jared Sheeks moved to table to allow the proponent to bring back an economic analysis. The motion carried with one opposing vote.</p> |
| Env020 | <p>David Mann noted this proposals deals with limiting this option to the building types more associated with semi-heated spaces.</p> <p>Chuck proposal adds requirements to restrict the use to a single wythe wall exposed on both sides and to specify it is a prescriptive exception only and cannot be traded off.</p> <p>Motion: Chuck Murray, Dave Baylon moved to recommend approval as modified. Patrick Hayes proposed a friendly amendment to retain swimming pools in the list. Chuck stated his intent was not to change the use types from the original proposal.</p> <p>Tom Young noted, similar to the previous proposal, this one does not include the economic analysis. He does agree with some of the changes Chuck has made to the proposal. David Mann stated he did not have the resources to run modeling.</p> <p>Patrick Hayes did not support Chuck’s modification. There are other building types that need the durable surfaces.</p> <p>Motion: Treasa Sweek, Dave Baylon moved to table, to allow the modeling and economic analysis to be done. The motion carried with no opposing votes.</p> <p>Duane directed the proponents and Tom Young to come up with guidelines on how this should be modeled and determine who will run the models.</p> |
| Env021 | <p>This proposal deals with adding building types to the masonry exception.</p> <p>Chuck spoke against the proposal, noting the new use types include buildings that have nearly 24-hour occupancy. He feels this would be a step backwards, which is prohibited in statute.</p> <p>Motion: Jared Sheeks, Lisa Rosenow moved to recommend approval. The motion failed.</p> |

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| | <p>Motion: Chuck Murray, Dave Baylon moved to recommend disapproval. Motion carried with no opposing votes</p> |
| <u>Env022</u> | <p>Duane noted this was similar to his proposal 009 in adding stainless steel, which was recommended for disapproval by the TAG. Duane also felt the reduction factor was incorrect.</p> <p>Mike Kennedy suggested modifying the second section to specifically refer to peripheral edge of concrete floors so there is less confusion with the mass transfer slab edge.</p> <p>Motion: Dave Baylon, Patrick Hayes moved to recommend disapproval. The motion carried with no opposing votes.</p> |
| <u>Env024</u> | <p>Eric said this proposal adds an R-value for mass edges for a prescriptive compliance path and a footnote to provide a correlation with the default table in Appendix A. There was some discussion as to how this would work prescriptively.</p> <p>Motion: Mike Fowler, Chuck Murray moved to recommend approval <u>as modified</u>. The motion carried with no opposing votes.</p> |
| <u>Env026/027</u> | <p>Mike Kennedy noted he has a more recent, cleaner version.</p> <p>Motion: Chuck Murray, Dave Baylon moved to table. The motion carried with no opposing votes.</p> |
| <u>Env028</u> | <p>This proposal adds a reference to the DOAS section in the equation that should be there.</p> <p>Motion: Treasa Sweek, Patrick Hayes moved to recommend approval for both the 2015 and 2018 codes. The motion carried with no opposing votes.</p> |
| <u>Env029</u> | <p>The proposal includes a steel framed wall calculation method that should be referenced in the equation.</p> <p>Motion: Amy Wheelless, Mike Lubliner moved to recommend approval. The motion carried with no opposing votes.</p> |
| <u>Env030</u> | <p>This provides a clarification for a collection basin around a low point in the roof to allow for drainage at the roof drain and exclude that area from the area weighted average.</p> <p>Dave Baylon proposed increasing the insulation to R-10. It was suggested that R-13 would be a more common application. Patrick said most of these are 2 foot by 2 foot.</p> <p>Motion: Patrick Hayes, Dave Baylon moved to recommend approval <u>as modified</u>. The motion carried with no opposing votes.</p> |
| <u>Env031</u> | <p>This is a similar proposal on how to insulate around HVAC curbs. Patrick suggested modifying the proposal to R-13 to match the drain proposal.</p> <p>Motion: Patrick Hayes, Amy Wheelless moved to recommend approval <u>as modified</u>. The motion carried with one opposing vote.</p> |
| <u>EP141</u> | <p>Mike Rosenberg had a <u>PowerPoint presentation</u> (at 2:35:39) on ASHRAE 90.1 Appendix G.</p> <p>There was debate about the use of carbon emissions as a metric and the values used. There was also a question of how the appendix and its references to 90.1 would mesh with the mandatory requirements of the WSEC. There was also concern that this would require an additional expenditure to purchase 90.1.</p> |

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| | <p>Mike Rosenberg noted the target was based on the requirements in the integrated draft and may need to be adjusted based on what is actually adopted.</p> <p>Motion: Chuck Murray, Mike Lubliner moved to recommend approval.</p> <p>Motion: Chuck Murray, Treasa Sweek moved to table to allow time to research the issues brought to the table. The motion carried with no opposing votes.</p> |
| <u>EP143</u> | <p>The proposal sets a limit on how much the envelope insulation can be reduced when using C407.</p> <p>Motion: Chuck Murray, Amy Wheelless moved to recommend approval. The motion carried with two opposing votes.</p> |
| <u>EP144</u> | <p>The proposal sets a five percent limitation on the use of on-site power production consistent with the 2018 IECC when using C407. Mike Rosenberg noted there would be a similar provision in 90.1-2019. Eric Vander Mey noted the statute specifies up to 20% renewables to meet the 2030 challenge. It was pointed out that this just applies to the allowance in C407.</p> <p>Motion: Mike Kennedy, Dave Baylon moved to modify the limit to three percent. Motion carried with two opposing votes.</p> <p>Motion: Dave Baylon, Chuck Murray moved to recommend approval <u>as modified</u>. The motion carried with two opposing votes.</p> |
| <u>Env032</u> | <p>The proposal clarifies how you calculate the U-factor for fenestration with both fixed and operable portions, using the worst-rated portion of the mixed fenestration.</p> <p>Patrick noted there should be additional language added for mulled windows, which are tested as separate windows.</p> <p>Motion: Patrick Hayes, Dave Baylon moved to recommend approval as modified.</p> <p>Duane wanted to refer the proposal back to Eric for some wordsmithing. He specifically disliked “needs to take into consideration” since it was not code language.</p> <p>Motion: Patrick Hayes/Chuck Murray moved to table. The motion carried with no opposing votes.</p> |
| <u>Env033</u> | <p>The proposal adds a sentence from the IECC that was absent in the integrated draft on north orientation. It also adds a sentence dealing with fenestration in areas that are completely shaded.</p> <p>There was discussion over the phrase “has no exposure to direct or indirect solar radiation” and whether that would include fenestration shaded by an adjacent building.</p> <p>Motion: Robby Oylear, Mike Fowler moved to recommend approval <u>as modified</u>. The motion carried with no opposing votes.</p> |
| <u>Env034</u> | <p>The proposal removes the material specific requirements in the fenestration table.</p> <p>Patrick noted this would reduce the stringency of the code and would impact all of the high glazing allowance requirements. There was some discussion of changing the U-factors, but then there was an issue of availability.</p> <p>Motion: Patrick Hayes, Dave Baylon moved to recommend disapproval. The motion carried with no opposing votes.</p> |
| <u>Env036</u> | <p>The proposal introduces a prescriptive path for triple glazed windows in curtain wall situations. This is a break even proposal to the existing tables with 70 percent glass with the SHGC.</p> |

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| | <p>Duane felt this was something you could already do and just adds “needless complexity” to the code.</p> <p>Motion: Dave Baylon, Mike Fowler moved to recommend approval. The motion failed, three to five.</p> <p>Motion: Patrick Hayes, Jared Sheeks moved to recommend disapproval. The motion carried eight to three.</p> |
| <u>Env035</u> | <p>Eric Makela said this proposal makes the table frame agnostic and lumps all the windows noted that, for structural reasons, cannot meet the lower U-factors into a fixed or operable category. All of the other windows would fit into the “all other” category. It would require a better window for punched openings in multi-family than is currently required.</p> <p>Duane asked if there were 0.30 metal framed windows available.</p> <p>Motion: Patrick Hayes, Dave Baylon moved to recommend disapproval. The motion failed, four to six.</p> <p>Motion: Chuck Murray, Mike Fowler moved to recommend approval. Motion carried 6 to 3.</p> |
| <u>Env037</u> | <p>Lisa noted this proposal addressed three points: to clarify that the window/wall ratio is a total building value; the different conditioned areas are looked at separately; and interior partitions are included in the area with the highest area.</p> <p>Motion: Patrick Hayes moved to recommend disapproval. The motion failed for lack of a second.</p> <p>Motion: Chuck Murray, Dave Baylon moved to recommend approval. Motion carried with one opposing vote.</p> |
| 6. Other Business | The next meeting is scheduled for July 13 at the Smart Building in Seattle. |
| 7. Adjourn | The meeting was adjourned at 3:00 p.m. |