



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

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MECHANICAL, VENTILATION & ENERGY SUMMARY MEETING MINUTES

LOCATION: Shoreline Fire Station 61, Training Room
Shoreline, Washington

MEETING DATE: March 6, 2014

Agenda Items	Committee Actions/Discussion
1. Welcome and Introductions	Meeting called to order at 10:00 a.m. <u>Members in Attendance:</u> Eric Vander Mey, Chair; Jeff Peterson, Vice Chair; Ray Allshouse; Duane Jonlin; Tom Balbo <u>Staff In Attendance:</u> Tim Nogler, Managing Director; Joanne McCaughan; Peggy Bryden <u>Visitors Present:</u> Kraig Stevenson, Mike Milliken, Brice Coconour, Bryan Ripley, Duane Lewellen, Lisa Rosenow
2. Review and Approve Agenda	The agenda was approved with the additional item of Public Comment on Items Not on the Agenda as third and Code Change Proposals as fourth.
3. Public Comment on Items not on the Agenda	None given.
4. Code Change Proposals – 2014	Tim Nogler summarized the options available to the Committee and what needed to be accomplished. March 1 is the deadline each year for code change proposals. The MVE Committee is to review 29 proposals today. The proposal form has been simplified this year. Also there is new an internal checklist to verify the completeness of the proposals. The checklist determined whether the proposal was a policy, technical, or an editorial proposal. If the proposal is editorial it doesn't have to go through the entire process. These can have an expedited rule. Duane Jonlin asked if any proposals were returned as incomplete. Tim replied there were several. Duane thinks most of the proposals will be reviewed by the TAG in 2015. Tim said the Council would not necessarily have to go into rulemaking, but the TAG could review, therefore not put all of the workload on next year and do some of the work this year. Others options would be to

	<p>deny, or return to the proponent for more information.</p> <p>E-01 is a policy change, a requirement for a third party special inspector for air leakage testing. Duane feels this one will be a “big conversation” and should be put on a specific agenda, the TAG being the best forum. Jeff Peterson asks Tim if this, as a policy change, should be referred to legal prior to sending it to the TAG. Tim said we could get the Attorney General’s opinion on this.</p> <p>Kraig Stevenson with ICC, as an observer, noted there are new changes to the process. We have the three changes that staff has determined. Will there be a posted scorecard so the public can collaborate, a meeting of the minds. We have discussed posting this, said Tim, but it is internal at this time.</p>
<p>Motion</p>	<p>Duane moved the committee have a review by the AG’s office, then forward to the TAG for consideration in the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>E-02 is a technical proposal. This would add an exception for air leakage testing.</p>
<p>Motion</p>	<p>Duane moved this proposal be forwarded to the TAG for consideration in the 2015 code. Jeff seconded the motion. Gary Nordeen, with WSU, said the reduced cost was \$250. The motion carried.</p>
	<p>E-03 the staff determined this to be a technical proposal. There are two things in this proposal, an approved third party and the other allows a certain amount of the ducts to be in the outside the conditioned space. Gary Nordeen commented this is the same language that appears in the IECC for blower door air leakage testing. It is not required unless indicated by the code official. The 2012 version of the code left this language out.</p>
<p>Motion</p>	<p>Duane moved the Committee forward this proposal to the TAG for consideration for the 2015 code. Ray Allshouse seconded the motion. Jeff asked if there was a cost benefit on the proposal. Gary said it would be a reduced cost. Motion carried.</p>
	<p>E-04, this adds to the efficiency table in the residential portion of the energy code. This adds an option to add a boiler. Gary said this was dropped from the 2009 code. He believes this is an editorial revision. Jeff said this would allow us to do radiant heat systems under Chapter 9 code. He would rather see it now rather than wait until 2015. Tim said if it is editorial, it will be effective in 45</p>

<p>Motion</p>	<p>days.</p> <p>Duane moved to have the Council put this into rulemaking as an editorial change. Jeff seconded. Motion carried.</p> <p>E-05 is also from Gary Nordeen, regarding high efficiency HVAC for residential. This is a companion to the other proposal. It talks about insulation and metal ducts. We think people should get credit if they have if they have their system inside the conditioned space. Tim stated staff felt this was a technical proposal and correlated with E-03. Duane asks Gary if part of this could be an interpretation, and he agreed.</p>
<p>Motion</p>	<p>Duane moved this be forwarded to the TAG for the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>E-06 staff felt this proposal was editorial. Gary felt this was another companion proposal. This has been in the code since 2009.</p>
<p>Motion</p>	<p>Duane moved to forward this to the TAG for consideration in the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>E-07 which refers to solar readiness and staff determined it was policy. Gary said he put in R-3s in single duplexes and townhouses. This will reserve a space on the roof for future solar installation. He would like the TAG to look at the proposal this year. This would allow for training preparation. Jeff feels this should go to several different TAGs. He asks Tim for suggestions on this. He commented staff marked this as no correlation. Last year we had a specific PV TAG.</p>
<p>Motion</p>	<p>Duane moved the proposal be forwarded to the PV TAG this year for 2015. Jeff seconded the motion. Motion carried.</p> <p>E-08 refers to the Residential Energy Code. Staff feels this is a technical proposal. Eric commented this was discussed last year and it makes the code less stringent.</p>
<p>Motion</p>	<p>Duane moved this be forwarded to the TAG for the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>E-09 refers to hot water pipe insulation. Tim said this is similar to the last one and is a technical change according to staff.</p>
<p>Motion</p>	<p>Duane moved this be forwarded to the TAG for consideration in the 2015 code. Jeff seconded the motion.</p>

<p>Motion</p>	<p>Motion carried.</p> <p>E-10 refers to a technical change of model code language. This takes the table out of the model code and amends it.</p> <p>Duane moved to have the proposal moved to the TAG for the 2015 code. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-11 is a change to clarify Section C403.2.6.2 to correlate with previous paragraph. Recommend adding heat recovery. Staff rated this as editorial.</p> <p>Duane moved this be considered for editorial rule change. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-12 is a change to Section C403.3.1 which adds an amendment to correlate with ASHRAE 90.1 2010 which provides an alternate path that would be equivalent to code. This is in the Seattle code. Staff rated this as technical</p> <p>Duane moved this be referred to the TAG for consideration in 2015. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-13 corrects Section C403.3.1. In the process of amending the code the AMPRS was applied to the wrong section of the code. Staff rated this as an editorial change.</p> <p>Duane move to consider as editorial change and have the change made by editorial rule change. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-14 refers to Section C403.3.1. People will try to classify their simple systems as the complex system. Staff rated this as technical. Duane feels this should be rated editorial. Jeff questions the cost impact.</p> <p>Duane moved this be accepted as an editorial change to correct an error. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-15 refers to Section C407, energy modeling path. It clarifies the intent of the code. Although rated as technical, Duane feels this is editorial because it puts the statements in an order to send you to the right location.</p> <p>Duane moved to accept the changes to Footnote B as an editorial change and not accept the changes to the terminology in Footnote C as a part of this proposal and to correct the typo. Jeff seconded the motion. Motion carried.</p> <p>E-16 refers to Table C407.5.1(1). Washington language</p>

<p>Motion</p>	<p>was inserted in this. The language is worded so it can be read either way. Proposal is to clarify this. Staff rated this as policy. There was discussion about making this proposal an interpretation.</p> <p>Duane moved to have a building official submit this as an interpretation. Jeff seconded the motion. Motion carried.</p> <p>E-17 is residential versus nonresidential. Various sections in the commercial code refer to these two terms in different ways. This proposal clarifies this terminology. Staff rated this as technical. Eric feels the TAG should review each instance to determine correctness. Jeff asked how the TAG could look at this sooner rather than later. Tim said the motion could be to have the TAG look at this in 2014.</p>
<p>Motion</p>	<p>Duane moved this be an editorial change with the exception of the definitions of “entrance doors” and “store front” not to insert the word commercial. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-18 refers to multi-zone and single-zone system. This impacts how you read the code throughout. It provides a definition of single-zone based on the IECC.</p> <p>Duane moved this be forwarded to the TAG for consideration in the 2015 code. Jeff seconded. Motion carried.</p>
<p>Motion</p>	<p>E-19 Duane said this proposal is to eliminate the columns in the current code that allow quick method to estimate R values or U values for tapered roof insulation. Staff rated this as policy/technical.</p> <p>Duane moved this be forwarded to the TAG for the 2015 code. Jeff seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>E-20 refers to Section C402.3.1, maximum glazing area. Duane reinstates an exception we had for store front glazing at ground level retail. Staff rated this as policy.</p> <p>Duane moved this go to the TAG for consideration in the 2015 code. Jeff seconded. Motion carried.</p>
<p>Motion</p>	<p>E-21 refers to Section C403.1.3(1), which is a different default table proposal. Staff rated this as technical.</p> <p>Duane moved this be reviewed by the TAG for the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>E-22 refers to Section C402.3.1, maximum area of glazing. This changes the commercial code maximum</p>

	<p>area of glazing percentage from 30% to 35% window to wall ratio. Staff rated this as policy/technical.</p> <p>Motion Duane moved this be forwarded to the TAG for consideration in the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>E-23 refers to residential energy code glazing percentage. It is to change the threshold from 15% of floor area to 35% of window to gross wall area. Staff rated this as policy/technical.</p>
	<p>Motion Duane moved this be forwarded to the TAG for consideration in the 2015 code. Also to correct the section cited which should be Section R402.1.4. Jeff seconded. Motion carried.</p>
	<p>E-24 refers to Section R402.1.4, total UA alternate which also adds a metal fix to Table R402.1.3. Staff rated as policy/technical.</p>
	<p>Motion Duane moved this be forwarded to the TAG for consideration in the 2015 code. Also correct the section referred. Jeff seconded the motion. Motion carried.</p> <p>E-25 refers to Table C402.1.4 and Table C402.2. Staff rated this as policy/technical. This allows a way to overcome the slab edge.</p>
	<p>Motion Duane moved this be forwarded to the TAG for consideration in the 2015 code. Also asks staff to find parallel work that has been done in the IECC for 2015. Lisa Rosenow with NW Energy Efficiency Council recommends the Committee consult a building scientist before relaxing the requirement to make sure that is addressed. Staff rated this as policy/technical.</p> <p>Duane amended his motion to also instruct the TAG to get advice from a building science consultant. Jeff seconded the motion. Motion carried.</p>
	<p>14-06 Staff rated this as editorial/technical. Proponent is concerned about the requirement for guards to be applied to existing buildings. He wants to have an exception for existing buildings. Eric feels this should be referred to the Building Code TAG.</p> <p>Jeff made a motion to refer this to the BFP Committee. Duane seconded the motion. Motion carried.</p> <p>14-07 refers to IMC Section 402.1 and 403.8.6.1 Item 2 which provides definition of how calculation is done for the functional area of an operable window and</p>

<p style="text-align: center;">Motion</p> <p style="text-align: center;">Motion</p> <p style="text-align: center;">Motion</p>	<p>clarification of this. Staff rated this as technical/editorial.</p> <p>Duane moved this be forwarded to the Mechanical TAG for consideration in the 2015 code. Jeff seconded the motion. Motion carried.</p> <p>14-08 refers to residential ventilation Section 403.8.1, Item 1.4. Clarifies how many trickle vents are required when leaving continuous operation and going to intermittent operation. Staff rated this as technical/editorial.</p> <p>Duane moved this be forwarded to the Mechanical TAG for consideration in the 2015 code. Jeff thinks this is editorial and doesn't need to go to the TAG. Duane feels the TAG experts can determine if it is editorial. He also feels it should be submitted as an interpretation to be clarified quickly. Jeff seconds the modified motion. Motion carried.</p> <p>14-09 refers to residential ventilation. There is no statement in the subsection that the forced air system has to serve every habitable space in the unit. The proposal repeats this language in the subsection. Staff rated this as editorial.</p> <p>Duane moved this as an editorial change. Jeff seconded the motion. Motion carried.</p>
<p>5. Aspirational Code</p>	<p>Tim Nogler reported the Green Building TAG had a very productive meeting last month and divided up the portions of that code for review. One is the energy chapter which is in development with ICC. There are provisions in there that could be considered an aspirational code particularly the outcome based code. There are other provisions in there that could be considered an aspirational energy code for local adoption measure. We are working on these measures and we will have that document available later this spring. Jeff feels it is important for this Committee to rapidly come to a decision whether we are going to do something with the aspirational code or not. There will be challenges with having a Built Green adoption. This will take a lot of resources. The MVE Committee needs to determine whether this is viable in the state. Tim agreed with Jeff. The IGCC is commercial so the Built Green and the residential is a separate standard. The emphasis at this time is on the commercial side.</p>
<p>6. Interpretations</p>	<p>14-MAR01 deals with a new section which will be a permanent rule as of April 1. There are four questions</p>

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regarding C402.3.1.3. Question 1 answer is no. Question 2 answer is yes. Question 3 answer is yes. Question 4 the answer is yes.

Duane feels the staff's answer to the first question may be correct, but it was not what was intended. There is a conflict in the code. We allowed 40% glazing to be the basis for a trade-off. **Eric** remembers the Council specifically capping the glazing at 40%. The Committee discussed this 40% for a time. Staff is asked to check records from that particular meeting.

Lisa Rosenow with NW Energy Efficiency Council is speaking for Mike Kennedy as they discussed this. Mike's understanding was that it wasn't to be capped at 40%.

There was more discussion among the Committee as to what the code said and if this question could be answered with an interpretation.

Duane moved to table this issue.

14-MAR03 was next referring to C402.4.5.2. The interp. has two questions. The answer to the first question should be no. **Eric** read the commentary from the code to clarify this answer. The code has a typo on this.

Mike Milliken with Micro Metl HVAC accessories. His interpretation is the intent is 3 cfm on the outside air and relief and 4 cfm on the return. It is worded poorly.

Eric stated the state modified this section.

Bryan Ripley representing Gensco, Trane, Rheem and ICP. No manufacturer in the US can meet this code. We can code write what we want, but if it is not made how can we do business in the state of Washington. We are asking for what is reasonable. **Eric** and **Bryan** discussed this matter. They agreed what is needed is a code change not an interpretation. **Duane** said this needs to be an emergency code change. Eric will draft language that would be consistent with 90.1 IECC.

Motion

Duane moved the chair draft a proposal for an emergency rule. **Jeff** seconded the motion. **The motion carried.**

14-MAR02 refers to refrigerated spaces. The answer is no there is no dividing temperature line between a refrigerated warehouse cooler and a conditioned space in the 2012 energy code.

Duane Lewellen said this issue came up on a refrigerated warehouse in Pierce County where there was a loading

	<p>dock used as a space to load product between the loading dock and the refrigerated coolers and freezers. What do you consider this vestibule? The vestibule was a buffer space and conditioned to 60 degrees. We need some clarification.</p> <p>Eric feels this isn't comfort cooling, but a refrigerated space.</p> <p>Lisa Rosenow stated there are unusual spaces such as wine tasting rooms. Under the 2009 code there was clear language stating that frozen storage was 28 degrees or below and cold storage was 28 to 45 degrees. Above 45 degrees a jurisdiction could understand this is a conditioned space, but not refrigerated. Now the line is not clear.</p> <p>Eric feels it is a judgment call, but could be adjusted in the 2015 code.</p> <p>There were questions asked by the committee of Duane Lewellen to clarify this space. The committee then had more discussion and comments came from Lisa Rosenow.</p> <p>Jeff Peterson moved the interpretation be revised to include a reference to the 2009 code as guiding language to classify the space. Ray Allshouse seconded the motion. Motion carried.</p> <p>14-MAR04 refers to C402.4.5.2 and C403.2.4.4. This was discussed previously. It was decided to align with the 90.1 and the 10 cfm.</p> <p>Bryan Ripley said this is the case of a VRS system with individual fan coils and an outdoor make-up air unit. Why is there a requirement for a fan coil from the outdoor unit. What was the intent?</p> <p>Eric answered this question. The discussion among the group determined the written answer to #1 is wrong and should be no. There will also be a slight modification to Answer 2 and Answer 3 is good.</p>
<p style="text-align: center;">Motion</p>	<p>Eric answered this question. The discussion among the group determined the written answer to #1 is wrong and should be no. There will also be a slight modification to Answer 2 and Answer 3 is good.</p> <p>Jeff made a motion that for #1 we will revise the code to match 90.1. In #2 the language will be redrafted and #3 is acceptable. Ray seconded the motion. Motion carried.</p> <p>14-MAR05 refers to C101.4.3 additions, alterations, renovation or repair and C402.4.1.2.3 air leakage, building test. The proposed answer is no. Eric commented there is no clear code direction, but for an alteration one is not subject to these requirements.</p> <p>Ray moved to approve the interpretation as written. Jeff</p>

	<p>Motion seconded the motion. Motion carried.</p> <p>14-MAR06 refers to C101.4.3.2 mechanical systems and C403.2.10 Air System Design and Control. The ICC doesn't specify a rule if altering a mechanical system. Jeff recommends adding "only" before the words "those parts" in all three answers</p> <p>Jeff moved that "only those parts" should be added to modify the interpretation in all three answers. Ray seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>14-MAR07 refers to C403.3.1 Economizers for Simple Systems. It is recommended to add an exception 5 to this code section for simple systems to use the complex system for electronics rooms and server rooms. The answer refers to Exception 4 and it should be stricken.</p> <p>Jeff made a motion to have Eric redraft the interpretation. Ray seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>14-MAR08 refers to CC403.2.10.3 Fractional HP Fan Motors. The proposed answer to this is yes.</p> <p>Jeff moved to accept the interpretation. Ray seconded the motion. Motion carried.</p>
<p>Motion</p>	<p>14-MAR09 refers to C405.2.1, C405.2.2 and C405.2.3 Lighting Controls. This interpretation was tabled until further information could be received.</p> <p>14-MAR10 refers to C402.5 and C402.6. Alternative methods could be used if approved by the building official should be added to the yes answer.</p>
<p>Motion</p>	<p>Jeff moved the interpretation be modified as discussed. Ray seconded the motion. Motion carried.</p> <p>14-MAR11 refers to mixed occupancy, C101.4.6 and is an air leakage test required. The question in the interpretation was misquoted. The three story mixed building should be tested residential in the residential areas and commercial in the commercial areas. But then which testing is more restrictive? The interpretation was tabled until more information could be gathered.</p> <p>14-MAR12 refers to vestibules and the answer is yes and let the code official make a judgment call.</p> <p>14-MAR13 refers to low energy or semi-heated buildings and the minimum temperature. The answer is yes, see 13-12.</p> <p>14-MAR14 refers to the definition of a Semi-heated Building. The answer is no, the building exceeds the</p>

<p style="text-align: center;">Motion</p>	<p>maximum heating system output. The city should request for an emergency rule due to the significant hardship.</p> <p>14-MAR-15 Refers to Appendix A. The answer is yes. See footnote “e” in Table C402.2.</p> <p>Ray moved that Interpretations 14-MAR12, 14-MAR13, 14-MAR14, 14-MAR15 be approved as noted. Ray seconded the motion. Motion carried.</p> <p>14-MAR16 refers to C409 Energy Metering. This interpretation needs to be reworded to be more clear. Therefore it was tabled.</p>
<p>7. Staff Report</p>	<p>Tim Nogler reported the BFP Committee and Council meetings are tomorrow.</p>
<p>8. Other Business</p>	<p>None given</p>
<p>9. Adjourn</p>	<p>The meeting was adjourned at 1:38 p.m.</p>