### Minutes
GBI Consensus Body Meeting #21  
BSR/GBI 01-2016  
Webinar  
Tuesday, August 9th, 2016 12:00 PM ET to 4:00 PM ET

#### Attendance:

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Organization(s)</th>
<th>8-9-2016</th>
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<tbody>
<tr>
<td>1</td>
<td>Gregg Bergmiller</td>
<td>S/L/A/M Collaborative</td>
<td>Absent</td>
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<tr>
<td>2</td>
<td>Paul Bertram</td>
<td>Kingspan Insulated Panels, Inc.</td>
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<td>3</td>
<td>Allan Bilka</td>
<td>International Code Council</td>
<td>X</td>
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<td>4</td>
<td>Jeff Bradley</td>
<td>American Wood Council</td>
<td>X</td>
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<td>5</td>
<td>William Carroll</td>
<td>American Chemistry Council</td>
<td>X</td>
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<tr>
<td>6</td>
<td>Chris Dixon</td>
<td>NBBJ (rep. self)</td>
<td>X</td>
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<tr>
<td>7</td>
<td>Nicole Dovel-Moore</td>
<td>CTA Architects Engineers</td>
<td>X</td>
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<td>8</td>
<td>Amber Dzikowicz</td>
<td>NSF International</td>
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<td>9</td>
<td>David Eldridge</td>
<td>Grumman/Butkus Assoc.</td>
<td>X</td>
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<td>10</td>
<td>William Freeman</td>
<td>Resilient Floor Covering Institute</td>
<td>X</td>
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<td>11</td>
<td>Susan Gitlin</td>
<td>U.S. EPA</td>
<td>X</td>
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<td>12</td>
<td>Don Horn</td>
<td>GSA</td>
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<td>13</td>
<td>Josh Jacobs</td>
<td>UL Environment</td>
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<td>14</td>
<td>Greg Johnson</td>
<td>Johnson Consulting Services, Greenscape Alliance</td>
<td>X</td>
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<td>15</td>
<td>Karen Joslin</td>
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<td>16</td>
<td>Malee Kaolawanich</td>
<td>NIH (rep. self)</td>
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<td>17</td>
<td>Rachel Minnery</td>
<td>AIA</td>
<td>Absent</td>
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<tr>
<td>18</td>
<td>Charles Kibert</td>
<td>University of Florida</td>
<td>X (Acting Chair)</td>
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<td>19</td>
<td>Gary Keclik</td>
<td>Keclik Associates</td>
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<td>20</td>
<td>Jennifer Kowalonek</td>
<td>Alfred Benesch &amp; Company</td>
<td>Absent</td>
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<td>21</td>
<td>Thomas Pape</td>
<td>Alliance for Water</td>
<td>X</td>
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<td>Efficiency</td>
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<td>22</td>
<td>Tien Peng</td>
<td>National Ready Mix Concrete Assn.</td>
<td>Absent</td>
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<td>23</td>
<td>Jane Rohde</td>
<td>JSR Assoc. Inc., Vinyl Institute</td>
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<td>24</td>
<td>Gord Shymko</td>
<td>G.F. Shymko &amp; Associates, Inc.</td>
<td>X (By Proxy)</td>
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<td>25</td>
<td>Kent Sovocool</td>
<td>Southern Nevada Water Authority</td>
<td>Absent</td>
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<tr>
<td>26</td>
<td>Steve Strawn</td>
<td>JELD-WEN</td>
<td>Absent</td>
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<tr>
<td>27</td>
<td>George Thompson</td>
<td>Chemical Compliance Systems, Inc.</td>
<td>X (by Proxy last 20 minutes)</td>
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<td>28</td>
<td>Angela Tin</td>
<td>American Lung Assn.</td>
<td>Absent</td>
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<tr>
<td>29</td>
<td>Douglas Tucker</td>
<td>Mitsubishi Electric Cooling &amp; Heating</td>
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<tr>
<td>30</td>
<td>Erika Winters Downey</td>
<td>American Institute of Steel Construction</td>
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**Voting Alternates**

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<tr>
<td>Abby Brokaw</td>
<td>American Lung Assn. (voting Alternate for Angela Tin)</td>
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<tr>
<td>Paul Karrer</td>
<td>AIA (Alternate for Rachel Minnery)</td>
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<tr>
<td>Bill Hoffman</td>
<td>UL Environment (Voting Alternate for Josh Jacobs)</td>
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<tr>
<td>Lance Davis</td>
<td>GSA (Voting Alternate for Don Horn)</td>
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<tr>
<td>D’Lane Wisner</td>
<td>D’Lane Wisner (Voting Alternate for William Carroll)</td>
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<tr>
<td>Mark Thimons</td>
<td>(Voting alternate for Erika Winters-Downey)</td>
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<tr>
<td>John Cross</td>
<td>American Institute of Steel Construction (Voting Alternate for Erika Winters-Downey)</td>
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<tr>
<td>Visitors</td>
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<tr>
<td>Martha VanGeem</td>
<td>Self (Principal Engineer)</td>
</tr>
<tr>
<td>Katie Chapman</td>
<td>JRB Enterprises &amp; Duro-Last Roofing, Inc.</td>
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<tr>
<td><strong>Staff/Consultants</strong></td>
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<tr>
<td>Michael Lehman</td>
<td>Chair</td>
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<tr>
<td>Vicki Worden</td>
<td>Executive Director, GBI</td>
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<tr>
<td>Emily Randolph</td>
<td>Secretariat Asst., GBI</td>
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<tr>
<td>Micah Thomas</td>
<td>Staff, GBI</td>
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<tr>
<td>Maria Woodbury</td>
<td>Secretariat, GBI</td>
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<tr>
<td>Chelsea Amaio</td>
<td>Staff, GBI</td>
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<tr>
<td>Kim Goldsworthy</td>
<td>Roberts-Rules Consulting</td>
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**Tuesday, August 9, 2016**

**Welcome & Roll Call**

Secretariat, Maria Woodbury welcomed participants and conducted roll call by self-introductions to establish quorum. The anti-trust statement was reviewed and participants were requested to comply with it fully.

Woodbury reviewed the participation options, stating that while observers are welcome to participate in the discussion, only Consensus Body Members are able to vote. Participants were reminded to raise hands should they desire to add something new to the discussion and staff would then call on them in order.

Woodbury reported that a Code of Conduct was approved by GBI’s Executive Committee. Staff will circulate a copy of the Code of Conduct to call participants shortly.

At this meeting, no members voted using a voting alternate. There were 2 members voting via proxy (Chris Dixon for Gord Shymko and Bill Freeman for George Thompson. Note: Thompson was present on the call until 3:41 pm ET. At said time, Freeman became Thompson’s proxy).

**Administrative Procedures and Related Matters**

Secretariat Assistant Emily Randolph reported on the progress made by the Consensus Body in reviewing comments. Randolph stated that the CB reviewed more comments on the previous call.
than ever before and that there were an estimated 12 hours of meeting time remaining to finish the review of the Public Comments.

Woodbury informed participants that Consensus Body chair, Mike Lehman, was unable to be present on the call and that vice chair, Charles Kibert, would chair the meeting.

Kibert welcomed participants and stated that when the time came to review the comments on the Materials Assessment Area, he would ask Energy chair, David Eldridge, to chair the Consensus Body.

Kibert reviewed the agenda, stating that there was a slight change in the order of presentations: IEQ and Materials traded places to allow for availability of certain participants. No objections were raised in response to the change in the agenda.

MOTION: A motion was made, seconded, and carried to approve the minutes from the previous Consensus Body Meeting #20 on July 19th, 2016
None Opposed
Abstained: Don Horn

Discussion of public comments
Old Business
• 52 – 35. Substantive. 9.6.2.2
  o Comment: Establish a new subsection for alternate sources of water for outdoor uses other than irrigation. The alternative sources of water could be reclaimed, harvested or reused water, condensates, etc. They could be used for evaporative cooling, wash waters, and construction, e.g., cement or other materials that require water.
  o Reason: The system should incentivize the uses of alternative water sources for outdoor activities excluding irrigation consistent with the points awarded for indoor uses of recycled or harvest rainwater. (5-10 points.)
  o Proposed Response: Accept as modified. 9.6.2.1 has been revised. The committee is not establishing a new subsection, but changing 9.6.2.1 to incorporate other uses besides irrigation.
  o Subcommittee Vote: 5 in favor, none opposed, none abstained.
Discussion: It was noted that this comment is a Water comment and the Chair of that Subcommittee was not present on the call. The suggestion was made to postpone the vote.
MOTION: The motion was made and seconded to postpone.
VOTE: The motion carried with 18 in favor, none opposed, and 2 abstained.
None Opposed
Abstained: George Thompson, Jeff Bradley

Project Management Section: Presented by Subcommittee Chair Karen Joslin
• 34 – 5. Substantive. 6.1.2
  o Comment: Delete this section and move points to another major section of GG
  o Reason: Meaningful evaluation of this process is unrealistic. Also it denotes a single work flow path for which many contracts may not lend themselves. Further, this penalizes a strong early, central management of the process.
  o Proposed Response: Reject. The Project Management Subcommittee wants to incentivize occupancy review and assessment The post-occupancy study is included in
6.1.3 (now 6.1.4) Recommended Documentation. Verification will require a written plan and contract for the work. The language in the last bullet point [in 6.1.1] has been edited: “Five points are earned for a written plan and contract for the work for occupancy review and assessment.”

- Subcommittee Vote: 3 in favor, 1 opposed.

Discussion before Motion:
- It was stated that the comment doesn’t go with this section. The sentiment was expressed that this should be rejected and something should be done in the Standard as a whole. The opinion was stated that this was addressed through other comments.
- It was stated that the commenter wants to delete 6.1.2. The process is not unrealistic because their concerns have been addressed in other sections.

MOTION: The motion was made and seconded to accept the proposed response to reject the comment using the propose reason.

Discussion took place on the motion:
- Speaking against the motion, questions were raised around whether this is an appropriate response.
- This should be sent back to the Project Management Subcommittee to rewrite the rejection.
- Confirmation was provided that this is indeed the correctly aligned response.

AMENDMENT: The amendment was made to reject comment based on the Standard’s desire to incentivize and reward an early central management of the process and the current language does that.

Discussion took place on the Amendment:
- The question was raised whether the Subcommittee should be responsible for drafting a new response rather than the Consensus Body.

There was no Second on the Amendment.

MOTION TO REFER TO SUBCOMMITTEE: The motion was made and seconded to refer to the Project Management Subcommittee for redrafting.

VOTE: The motion carried with 19 in favor, none opposed, and 1 abstained.

None Opposed
Abstained: Bill Carroll

- 7 – 6. Substantive. 6.1.2:
  - Comment: 6.1.2 Integrated Design Process  Maximum = 10 points  “Minimum = 25 points”
  - Reason: The optimization of the design of a project through an integrated or collaborative design process can yield a much greater reduction of environmental and energy impacts than any other item in the standard – in fact the improvement may be greater than all other aspects of this standard combined. Real world examples from structural steel projects indicate that a collaborative design process using BIM tools has reduced the both the amount material and the fabrication intensity for that material by as much as 25% (St Vincent Hospital, Toledo, OH). Similar savings are achievable for all building systems individually and collectively. The points within this section and possibly the standard should be adjusted to prioritize this credit. 10 points out of a possible 1000 point standard is not adequate to incentivize efforts to incorporate the expertise of the entire project team (architects, engineers, general contractors and specialty contractors) into design teams.
• Proposed Response: Accept as Modified. This comment will be sent to the points task group with the recommendation that we propose to overlay another set of points equal to or greater than the basic points to reward increasing the job junctions involved from 6 to 10 at every step. The goal is to reallocate some of those milestone points as a start.

MOTION: The motion was made and seconded to accept the proposed response, “Accept as Modified”.

Discussion took place on the motion:
• It was clarified that the response does not specifically reallocate points. The purpose of the response is to provide information to the Points task group. The Subcommittee believed a Consensus Body vote was needed to move this forward.

AMENDMENT: The amendment was made and seconded to read “accept as modified. The Points task group will consider possibilities for increasing the points minimum for this credit.”

There were objections raised to the Amendment.

Discussion took place on the Amendment:
• Concern was raised that the amendment doesn’t further clarify the original response. One participant felt that this is actually a rejection.
• It was clarified that the Consensus Body has decided to table any discussion related to specific points allocation until after the Points task group has had a chance to review. The question was raised whether there is a process in place for handling the type of comment.
• Concern was raised that this discussion is premature.

AMENDMENT WITHDRAWN with no objections.

Discussion took place on the Original Motion:
• The opinion was expressed that there needs to be controls on how people specifically earn points in relation to job functions to avoid people gaming the system. Concern was expressed that projects could earn points for anyone who signed the meeting attendance record.
• It was stated that the Consensus Body needs to recommend something to the Points task group as a basis for their work.
• The opinion was presented that the Subcommittees need to create a specific template for the points, then the Points task group can review. Currently, there’s no language or specific recommendations to vote on.

AMENDMENT: The amendment was made and seconded to “Accept as modified. Overlay an additional set of points equal to or greater than the basic points for increasing the job function from 6 to 10 at every step with the provision that the task group of point allocation.”

There was opposition to the Amendment.

Discussion took place on the Amendment:
• It was stated that the language is still too vague and will get lost too easily.
• Concern was raised that this comment is incomplete. It was stated that points can’t be randomly added. Concern was raised about point inflation. The speaker felt that this amendment needs to be rejected and the comment will be looked at later. The opinion was made that the Consensus Body should not write requirements on the floor.

VOTE ON AMENDMENT: The amendment failed with 4 in favor, 13 opposed, and 3 abstained.

Opposed: George Thompson, Jane Rohde, Bill Freeman, Gary Keclik, Allan Bilka, Paul Bertram, Greg Johnson, Josh Jacobs, Thomas Pape, David Eldridge, Don Horn, Malee Kaolawanich, Nicole Dovel-Moore

Abstained: Susan Gitlin, Doug Tucker, Jeff Bradley
VOTE ON MOTION: The motion failed with 8 in favor, 10 opposed, and 1 abstained.
Opposed: George Thompson, Bill Freeman, Susan Gitlin, Jeff Bradley, Allan Bilka, Greg Johnson, Paul Bertram, Thomas Pape, David Eldridge, Don Horn
Abstained: Malee Kaolawanich

MOTION TO REFER TO SUBCOMMITTEE: The motion was made and seconded to refer back to the Project Management Subcommittee to come back with specific language for what they want the point allocation to be.
Discussion took place on the Motion:
• The opinion was raised that in the future, discussions on points need to be tabled for the time when all points are discussed.
• One speaker stated their opposition to the motion, stating that they felt this comment needs to be rejected. They said that in order to add points, they need to be taken from somewhere. The speaker was against points being addressed piecemeal.

POINT OF ORDER: It was stated that the discussion needs to remained focused on Motion at hand re: sending the comment back to Subcommittee.
• Another speaker spoke in favor of rejecting the comment, stating that they disagree with the suggestion of making the IDP criteria worth a total of 25 points.

VOTE: The motion carried with 15 in favor, 5 opposed, 1 abstained.
Opposed: Thomas Pape, George Thompson, Don Horn, Josh Jacobs, Paul Bertram
Abstained: Jeff Bradley.

• 29 – 1. Editorial. 6.1.2
  o Comment: In the lead-in the item describes “architectural-engineering team” but then in the options below doesn’t list architect, but does list the MEP disciplines. Owner or owner’s representative or project manager should be included in the options as there are sometimes meetings with only the architect.
  o Reason: None given
  o Proposed Response: Accept as modified. The Consensus Body added the Architect to the list in response to 24 – 7. The charging language has been altered for clarity to “Job functions involved in the IDP include but are not limited to the following.”
  o Subcommittee Vote: Unanimously in favor. Low participation.

MOTION: The motion was made and seconded to accept the proposed response.
VOTE: The motion carried with 20 in favor, none opposed, and none abstained.
None Opposed
None Abstained

• 24 – 8. Substantive. 6.3.1.1
  o Comment: Identify the expected LCCA study period for compliance with the intended analysis.
  o Reason: LCCA is based on a study period, not necessarily whole building life cycle as is suggested in Path B. Different typologies may warrant different study periods but providing no context is asking for a user to subvert the intentions of the standard.
  o Proposed Response: Accept. Include ASHRAE 189.1 in the reference materials and add the language “The LCCA study period shall not be less than that reference in ASHRAE 189.1-2014, Table 10.3.2.3.” For consistency similar language will be added to Path B to determine the service life “The Service Life shall not be less than that reference in ASHRAE 189.1-2014, Table 10.3.2.3.”
Subcommittee Vote: Unanimously in favor. Low participation.

MOTION: The motion was made and seconded to accept the proposed response.

Discussion took place on the motion:

- The question was raised whether AHSRAE 189.1 should be referenced. The speaker felt that referencing another standard harms this Standard’s ability to stand on its own. It was stated that 189.1 is referenced elsewhere in the Standard.
- One speaker reminded the Consensus Body that the Subcommittee previously recommended rejecting the comment, but the CB voted to send the comment back to Subcommittee.
- It was stated that having an Informational reference is different than having a requirement in the Standard.
- The opinion was expressed that there doesn’t need to be a minimum. That’s addressed in the methodology in the LCCA.
- It was clarified that it’s just a table and not the whole handbook that project teams would be need to be within compliance.

VOTE: The motion carried with 13 in favor, 6 opposed, and 2 abstained.

Opposed: Bill Freeman, Jeff Bradley, Don Horn, Susan Gitlin, Paul Bertram, Thomas Pape.

Abstained: Malee Kaolawanich, David Eldridge

• 28 – 8. General. 6.3.1.1
  o Comment: Annualized utility cost features harmonize with design phase energy analysis conducted on the project (i.e., proposed annual energy costs for the proposed design are used for this LCCA).
  o Reason: There has got to be a simpler way of saying whatever it is that this says.
  o Proposed Response: Accept as modified by striking the first part of the sentence before the parentheses to clarify the language as requested.
  o Subcommittee Vote: 3 in favor, 1 opposed, none abstained

MOTION: The motion was made and seconded to accept the proposed response.

Discussion took place on the motion:

- It was stated that the new language is much more clear than the previous language.
- The opinion was expressed that “Projected” is better than “Proposed”.
- The commenter spoke up, stating that the initial language was “gobbledy-gook”. They clarified that they felt the revision was an improvement.

AMENDMENT: The amendment was made and seconded to change “Proposed” to “Projected” annual energy costs.

There was no Opposition to the Amendment.

VOTE: The amended motion carried with 21 in favor, none opposed, and none abstained.

None Opposed
None Abstained

Materials Section: Presented by Subcommittee Chair, Charles Kibert

NOTE: At this time Charles Kibert handed the chairmanship to David Eldridge.

• 49 – 6. Substantive. 5.1
  o Comment: pre-consumer recycled content: proportion of recycled material in a product diverted from the waste stream during . . .
- **Reason:** Recycled content is not a specific material
- **Proposed Response:** Accept as modified. Change to “portion of recycled material.” The subcommittee recommends this as better wording.
- **Subcommittee Vote:** 8 in favor, 1 abstained

**MOTION:** The motion was made and seconded to accept the subcommittee recommendation to accept the comment as modified.

**AMENDMENT:** The amendment was made and seconded to remove “portion of”.  

Discussion took place on the Amendment

- It was explained that the Subcommittee held extensive discussion on portion vs. proportion and about what exactly pre-construction recycling is. The Subcommittee agreed that it is in line with the comment.
- The opinion was raised that “portion of” is redundant. It’s simply the material from the product that has been diverted from the waste stream.
- One participant spoke about the need to look at the context of how it’s being used. The speaker was against the amendment.

**VOTE ON AMENDMENT:** The amendment failed with 6 in favor, 15 opposed, and none abstained.

Opposed: Thomas Pape, George Thompson, Chris Dixon, Gord Shymko, Nicole Dovel-Moore, Jane Rohde, Bill Freeman, Gary Keclik, Charles Kibert, Jeff Bradley, Allan Bilka, Paul Bertram, Josh Jacobs, Don Horn, Bill Carroll

None Abstained

**AMENDMENT:** The amendment was made and seconded to add “the” before “portion.”

There were no objections to the Amendment.

**VOTE ON AMENDED MOTION:** The amended motion carried with 21 in favor, none opposed, none abstained.

None Opposed
None Abstained

- **49 – 5. Substantive. 5.1**
  - **Comment:** post-consumer recycled content: proportion of recycled material in a product generated by households or by commercial . . .
  - **Reason:** Recycled content is not a specific material
  - **Proposed Response:** Accept as Modified. Change to “portion of recycled material. The Subcommittee Recommends this as better wording.
  - **Subcommittee Vote:** 9 in favor

**MOTION:** The motion was made and seconded to accept the proposed response with the editorial change to add “the” in front of “portion”.

Discussion took place on the motion:

- It was clarified that two modifications are being made from the commenter’s suggestion. The first, was the Subcommittee’s decision to change “proportion” to “portion”. The second was made by the maker of the motion to mirror the action taken on the previous comment.

**VOTE:** The motion carried with 20 in favor, none opposed, and none abstained.

None Opposed
None Abstained

- **11 – 2. Substantive. 5.1**
Comment: Post-consumer recycled content material (def.) and pre-consumer recycled content material (def): Consider referencing another established standard within the definition (i.e. as prescribed in International Organization of Standards document, ISO 14021 - Environmental labels and declaration - Self-declared environmental claims (Type II environmental labeling). Consider also add to the pre-consumer definition the further guidance that "this material is often referred to as post-industrial waste".

Reason: Referencing a specific standard within the definition avoids potential confusion with other standards which also provide definitions for like materials (i.e., FSC STD 40-007, Sourcing Reclaimed Materials). The definition being used by BSR/GBI 01-201X is consistent with that of ISO 14021.

Proposed Response: Reject. We recommend rejecting this comment and keeping the language “portion of recycled materials as indicated in the response to 49 – 6. More recently “post industrial waste” and “pre-consumer” are interchangeable with “pre-consumer” being preferred.

Subcommittee Vote: 8 in favor, 1 abstained.

MOTION: The motion was made and seconded to accept the Subcommittee’s recommendation to reject.

VOTE: The motion carried with 19 in favor, none opposed, and 1 abstained.

None Opposed

Abstained: Susan Gitlin

52 – 4. Substantive. 5.1

Comment: The definition for “risk assessment” is inconsistent with that used by EPA or the larger scientific community. Revise to increase consistency.

Reason: We suggest drawing from http://www2.epa.gov/risk/about-risk-assessment#whatisrisk

Proposed Response: Reject. The subcommittee and Consensus Body have approved a revised definition which contains elements of the EPA definition as well as the definition of risk assessment from the National Research Council and the Office of Management and Budget.

Subcommittee Vote: 8 in favor, 1 abstained

MOTION: The motion was made and seconded to vote in favor of the Subcommittee’s recommendation to reject the comment.

Discussion took place on the motion:

- The question was raised whether the proposed response answers the commenter’s comment. This speaker was against the motion.
- It was stated that the response needs to be more specific about how/why this is consistent with the larger scientific community to ensure the commenter doesn’t think this Standard is redefining a term.
- It was clarified that when the definition was discussed at the Subcommittee level, members had a table of the three definitions and drafted the current proposed language based on that work.

VOTE: The motion carried with 18 in favor, 1 opposed, and 1 abstained.

Opposed: Susan Gitlin

Abstained: Greg Johnson

7 – 2. Substantive. 5.1
o **Comment: recycled content**: proportion, by cost or weight, of recycled material in a product or packaging. Only pre-consumer recycled content: proportion, by cost or weight, of recycled material in a product or packaging. Only pre-consumer and post-consumer recycled materials are considered to be recycled content (see recycled material).

o **Reason**: The inclusion of cost as a basis for the calculation of recycled content is inappropriate for several reasons:

1. It violates the definition of recycled content in ISO 14021 which states that recycled content is “the proportion, by mass, of recycled material in a product or packaging.” The inclusion of cost as a basis for the calculation of recycled content is inappropriate for several reasons:

2. It is inconsistent with the examples of recycled content published by the Federal Trade Commission in their discussion of deceptive environmental marketing claims – it would appear that a claim of recycled content based on cost would be considered deceptive. In Part 260.7, paragraph (e), Recycled Content, the FTC provides: It is deceptive to misrepresent, directly or by implication, that a product or package is made of recycled material, which includes recycled raw material, as well as used, reconditioned and remanufactured components. Unqualified claims of recycled content may be made if the entire product or package, excluding minor, incidental components, is made from recycled material. For products or packages that are only partially made of recycled material, a recycled claim should be adequately qualified to avoid consumer deception about the amount, by weight, of recycled content in the finished product or package. Additionally, for products that contain used, reconditioned or remanufactured components, a recycled claim should be adequately qualified to avoid consumer deception about the nature of such components. No such qualification would be necessary in cases where it would be clear to consumers from the context that a product’s recycled content consists of used, reconditioned or remanufactured components.

3. The use of cost as a basis for calculation is inconsistent with other green codes, standards and rating systems that only allow the use of mass as the basis of the calculation of recycled content. Note: these systems use cost to calculate the contribution percentage of the recycled content to the required threshold for the entire project, but that is NOT the same as using cost to calculate the recycled content of a product or material.

4. The use of cost as a basis for the calculation of recycled content allows for gaming of the system, provides misleading guidance for product selection and demotivates the producer from using recycled material for low cost portions of the product. If a small portion of a product contains an expensive material, then a minimal amount of substituted recycled material would radically alter the calculated recycled content.
5. It is unclear whether a calculation based on cost would use the cost of the recycled material or the cost of the material for which it is substituted in the calculation of the recycled content.

- **Proposed Response:** Accept as modified. Strike both cost and weight and leave as proportion. The body of the Standard will define by what measure the proportion is measured.

- **Subcommittee Vote:** 6 in favor, 2 opposed, 1 abstained.

**MOTION:** The motion was made and seconded to accept the proposed response.

**Discussion took place on the motion:**

- The opinion was expressed that the response isn’t “accept as modified”, it’s rejecting because cost is still used in the credit. It was stated that this comment is solely on the definition, not the body of the Standard and that the response is appropriate in that context.

**VOTE:** The motion carried with 16 in favor, 2 opposed, and none abstained.

Opposed: Susan Gitlin, Allan Bilka
None Abstained

- 43 – 5. Substantive. 5.1
  - **Comment:** Change the definition of recycled content to be consistent with the definitions of pre-consumer recycled content and post-consumer recycled content:

    recycled material: materials that have been diverted from the waste stream and reprocessed and remanufactured to form part, or all of a new product, and have been collected and recovered as a material input in lieu of virgin primary material.

    **OR (Replace with this definition)**

    recycled material: material that has been processed from recovered (reclaimed) material by means of a manufacturing process and made into a final product or into a component for incorporation into a product. (See recovered material.)

    **OR**

    Delete use of term in the document. See other comment in 10.6.1.1 where it is used.

    - **Reason:** In the context of this standard, a recycled material does not need to reprocessed and remanufactured. It only needs to be used in lieu of a virgin material as a material input.

    - **Proposed Response:** Reject. The subcommittee believes the current definition is more appropriate.

    - **Subcommittee Vote:** 4 in favor, 3 opposed, 1 abstained.

**MOTION:** The motion was made and seconded to accept the proposed response to reject.

**Discussion took place on the motion:**

- It was stated that there needs to be a better reason stated as to why the comment is being rejected. It was clarified that the language was unnecessary and duplicative.

- Concern was raised that reprocessing means you’re recycling it. There was disagreement Disagreement around this assumption.

- The commenter wanted to include materials that had not been re-processed but recovered.

- It was stated that these terms have typically been used industry-wide in construction. It was clarified that recycled material and recyclable materials are two very different things and should not be confused.
• The opinion was stated that recovered and salvaged need to remain separate terms because recycled material being brought into a mill to be made into something new is recovered while salvaged is different from that.

• It was stated that using the term “reprocessed” implies the materials needs to be separated from the main process as a raw material.

• For clarification, the draft Standard was checked and it was discovered that the Construction Management Section used the wrong term and the CB previously voted to remove recycled materials from that section. The speaker was in favor of the motion.

VOTE: The motion carried with 15 in favor, 2 opposed, 3 abstained.
Opposed: Thomas Pape, Allan Bilka
Abstained: Susan Gitlin, Malee Kaolawanich, Don Horn

Indoor Environmental Quality Section: Comment presented by subcommittee vice chair Chris Dixon.
NOTE: Chairmanship reverted to Charles Kibert.

• 49 – 31. Editorial. 12
  o Comment: ASTM E1374-06 is referenced twice (within 4 lines of each other). Delete one of these references
  o Reason: None Given
  o Proposed Response: Accept. We will removed whichever one is appropriate for alphabetical order.
  o Subcommittee Vote: 8 in favor, none opposed, none abstained.

MOTION: The motion was made and seconded to accept the proposed response with editorial change to strike the “d” from “removed”
VOTE: The motion carried with 16 in favor, none opposed, and none abstained.

None Opposed
None Abstained

• 14 – 15. Substantive. 12
  o Reason: Missing reference
  o Proposed Response: Accept and put in alphabetical order.
  o Subcommittee Vote: 9 in favor, none opposed, none abstained

MOTION: The motion was made and seconded to accept the proposed response.
Discussion took place on the motion:
• It was stated that 2010 is not the most recent version of Standard 55 and the question was raised about why the 2013 version wasn’t being used.

AMENDMENT: The amendment was made and seconded to change the reference to Standard 55-2013.
Discussion took place on the Amendment:
• It was stated that 11.4.2 needs to be looked at because that is the Section where this references is used. It was confirmed that the reference to Standard 55 was updated in the section from 2010 to 2013.
• It was asked whether CB members received and reviewed a copy of 2013 version. It was stated that if not, we can’t vote something in without looking at it. The speaker was opposed to the amendment. Another speaker responded stating that they have
reviewed some of the changes and that overall it’s safe to reference the latest federal standard.

VOTE ON AMENDMENT: The amendment carried with 14 in favor, 1 opposed, and 2 abstained.
Opposed: Thomas Pape
Abstained: Jeff Bradley, Susan Gitlin

NOTE: This version of Standard 55 is viewable for free on the ASHRAE website.

VOTE ON MOTION: The amended motion carried with 18 in favor, none opposed, 1 abstained.
None Opposed
Abstained: Thomas Pape

  o Comment: In the GREENGUARD Environmental Institute section, “UL 2821…”
  o Reason: The standard is mislabeled.

• 24 – 32. Editorial. 12.
  o Comment: The GREENGUARD Environmental Institute section should be removed with both bulleted standards relocated to the UL section insofar as both are UL Standards.
  o Reason: Comment is self-explanatory.
  o Proposed Response: Accept 24 – 31 and 24 – 32 together. Put Greenguard under UL, since Greenguard no longer exists. This was left over from the 2010 draft.
  o Subcommittee Vote: 8 in favor, none opposed, none abstained.

MOTION: The motion was made and seconded to accept the proposed response.
VOTE: The motion carried with 19 in favor, none opposed, and none abstained.
None Opposed
None Abstained

  o Comment: In the Resilient Floor Covering Institute Section, the “Standard for Flooring Adhesives” is not a clearly identified document. What is its corresponding number or year of issuance?
  o Reason: Comment is self-explanatory.
  o Subcommittee Vote: 9 in favor, none opposed, none abstained.

MOTION: The motion was made and seconded to accept the proposed response.
Discussion took place on the motion:
  • It was stated that these standards are available on the SCS website and downloadable for free.
  • It was stated that these were both previously included in the Standard, but were incorrectly cited. VOTE: The motion carried with 15 in favor, none opposed, and 2 abstained.

None Opposed
Abstained: Thomas Pape, Jeff Bradley
29 – 12. Editorial. 9.5 (Sent from Water to IEQ)
  
  o Comment: Consider a claim for the legionella item from IEQ section, and reference ASHRAE standard 188-2015. Should be worth 10 points or more.
  
  
  o Proposed Response: Accept as Noted. ASHRAE 188 is referenced in the Standard in the Indoor Environmental Quality Assessment Area.
  
  o Subcommittee Vote: 9 in favor, none opposed, none abstained.

MOTION: The motion was made and seconded to accept the proposed response.

Discussion took place on the motion:

- It was stated this is rejecting, not accepting the comment. If it’s staying in IEQ the reason needs to be justified. It was stated that the Water Subcommittee directed this comment to the IEQ Subcommittee.
- It was noted that the comment part related to the 10 points needs to be addressed still, even if it just is saying it will be referred to the Points task group.

AMENDMENT: The amendment was made and seconded to add “The request for additional points will be addressed at a later date” to the comment response.

Amendment withdrawn with no opposition.

AMENDMENT: The amendment was made and seconded to add the following to the response: “At this point, we feel 3 points is the correct amount.”

There was opposition to the amendment.

Discussion took place on the Amendment:

- It was clarified that the previous amendment was withdrawn. This comment will not go to the Task Group.

Opposition withdrawn

VOTE ON AMENDED MOTION: The amended motion carried with 15 in favor, 2 opposed, and 1 abstained.

Opposed: Karen Joslin, Susan Gitlin
Abstained: Malee Kaolawanich

11 – 4. General. 5.2:

- Comment: add: EPD - Environmental Product Declaration, TPC - Third Party Certifier
- Reason: None Given
- Proposed Response: Reject. TPC is not used anywhere in the document, including additions made based on other comments.
- Subcommittee Vote: 8 in favor, none opposed, none abstained.
- Note: The part of the comment referring to EPD has already been voted on by the Consensus Body in response to work done by the Materials Subcommittee

MOTION: The motion was made and seconded to accept the proposed response.

Discussion took place on the motion:

- The question was raised whether the Consensus Body is certain that TPC was added in response to another comment. It was confirmed that the comment that incorporated the addition of TPC was accept as modified, but did not add TPC to the text.

VOTE: The motion carried with 18 in favor, none opposed, and none abstained.

None Opposed
None Abstained
• 10 – 1. General. 10.3.1 (Sent from Materials to IEQ)
  o Comment: This risk assessment protocol is favorable due to a rational approach by the
    use of chemical risk as a function of both hazard and exposure. In the consideration of
    VOC’s such as formaldehyde, applicable emission criteria for products should consider
    the background emissions from natural materials and human activity.
  o Reason: VOC criteria should take natural emissions into consideration
  o Proposed Response: Reject. VOC criteria consider both natural and manmade
    emissions.
  o Subcommittee Vote: 7 in favor, 1 opposed, none abstained.

MOTION: The motion was made and seconded to accept the proposed response.
Discussion took place on the motion:
• The opinion was stated that the proposed response is scientifically incorrect. VOC products
  do not include natural emissions. The air is scrubbed so it’s only manmade.

AMENDMENT: The amendment was made and seconded to change to VOC building clearance criteria.
There was no opposition to the Amendment.
Discussion took place on the Amendment:
• It was stated that there are a lot of VOC’s that are actually natural emissions.
• One speaker gave an explanation of natural vs. manmade: when doing an air quality
  test, it’s just a flat reading without interpreting what is the standard background level
  for natural exposure. The way this response is currently worded, it doesn’t compare to
  natural vs. manmade. The questions was raised if this needs to be teased out a bit to say
  VOC clearance quantitative criteria can be used to compare manmade emissions with
  natural emissions.
• It was clarified that this does decipher between the two. And also, X% above
  outdoor air, could make it significantly worse regarding indoor air.

AMENDMENT WITHDRAWN. No Opposition

AMENDMENT: The amendment was made and seconded to add “as indicated in 11.2.2.1 IEQ Pre-
Occupancy Testing”.
There was opposition to the Amendment.
Discussion took place on the Amendment:
• It was stated that it needs to be clear that this comment is being directed to IEQ section overall,
  and not one particular section. Follow it with “manmade and natural conditions are considered
  in relation to VOC and emissions”.
• The need to clarify to the commenter that this issue is not addressed in original place of 10.3.1.
  And it goes beyond 11.2.2.1 was expressed.

MOTION TO REFER TO SUBCOMMITTEE: The motion was made and seconded to refer to the
Subcommittee for a recorded reason for rejecting the comment.
Discussion took place on the Motion:
• The question was raised whether the motion could be made when there’s already a motion on
  the table. The parliamentarian clarified that the Motion to Refer to Subcommittee can be made
  at any time, but any unresolved motions and amendments will be picked up when the question
  comes back on the table.

VOTE: The motion carried with 14 in favor, none opposed, and 3 abstained.
Opposed: Allan Bilka
Abstained: David Eldridge, Josh Jacobs, Jeff Bradley
New Business
One member brought forward a revised version of Section 9.1 under the Water Efficiency Assessment Area. The member explained that they have been working with other members of the CB, the Water Efficiency Chair, and the Water Efficiency Subcommittee to attempt to eliminate prerequisites from the Standard to bring 9.1 in line with the rest of the Standard.

Discussion took place on the language:
• It was stated that this should not be voted on today because the Chair of the Water Subcommittee is not present. The opinion was raised that this points system is not appropriate. Indoor plumbing accounts for 40% of water use and conservation can easily be reached. The points allocation doesn’t reflect this.

MOTION: The motion was made and seconded to send to the Water Subcommittee.

Discussion took place on the Motion:
• It was stated that the assumption has been longstanding that there are no prerequisites in the Standard and Subcommittees have been making decisions based on that assumption.
• It was stated that we need a proposal without prerequisites.
  o Another spoke to disagree stating there has not been a requirement banning prerequisites.
• The question was raised if this is responding to a public comment or interest of Consensus Body/Subcommittee members.

It was clarified that this did not come from a public comment, but is being presented as new business. It was opined that procedurally, this needs to be tabled. It was clarified by the parliamentarian, that this is procedurally allowable, if irregular, and that any time the Consensus Body can revisit previously made decisions.

The suggestion was made to adjourn the meeting without voting on this issue. The Consensus Body was reminded that if no vote took place on the motion, it would become old business for the next meeting and would still require a vote, but the Water Subcommittee would be unable to work on revising the proposal until the Consensus Body voted.

VOTE: The motion carried with 12 in favor, 5 opposed, and 1 abstained.
Opposed: Susan Gitlin, Bill Carroll, Erika Winters-Downey, Karen Joslin, Don Horn
Abstained: Allan Bilka

Adjournment: The motion was made, seconded, and carried to adjourn the meeting.

--Meeting adjourned: 4:09pm ET--