



MINUTES

GBI Consensus Body for Existing Buildings- Call #6
 Webinar/Teleconference
 November 15, 2021 from 3:00 to 5:00 p.m. ET

NOTE ALL TIMES ARE EASTERN TIME

Consensus Body for Existing Buildings Members in Attendance

Full Name	Organization	11/15/21	10/25/21	10/14/21	10/7/21	5/7/21
Benjamin Bojda	Dominion Environmental Consultants NV, Inc	X	X	X	X	Absent
Larry Clark	Sustainable Performance Solutions	X (Proxy Shymko)	X	Absent	X	X
Michael Cudahy	PPFA - PPEF	X	X	Absent	Absent	Absent
Lawrence (Buddy) Humphries (Chair)	Efficient Green, LLC	X	X	X	Absent	X
Josh Jacobs	UL	N/A	N/A	N/A	N/A	X
Christoph Lohr	IAPMO	X	X (Proxy Zatz)	Absent	Absent	N/A
Max Puchtel	American Institute of Steel Construction	X	Absent	X	X	X
Dave Ray	GRN Vision	Absent	Absent	X	X	N/A
Benjamin Reeves	Arete Design Group	X	X (Proxy Shymko)	Absent	X	X
Jane Rohde	JSR Associates, Inc., The Vinyl Institute / Resilient Floor Covering Institute	X (Proxy Cudahy)	Absent	X	X	X
Anthony Serres	Signify North America Corporation	X	X	Absent	X	X
Gord Shymko	G. F. Shymko & Associates Inc.	X	X	X	X	X
Frank Sullivan	Kiewit	X	X	Absent	X	X
Kyle Thompson	IAPMO (International Association of Plumbing and Mechanical Officials)	N/A	N/A	N/A	N/A	Absent
Michael Zatz	ENERGY STAR Commercial & Industrial Branch, U.S. Environmental Protection Agency	X	X	X	X	X

Interested Parties in Attendance

Full Name	Organization	11/15/21	10/25/21	10/14/20	10/7/21	5/7/21
Rob Brooks	Rob Brooks Associates	X			X	
Soph Davenberry	Independent Consultant	X				
Viken Koukounian	K.R. Moeller Associates Ltd.				X	
James O'Brien	Independent Environmental Consultant	X	X			
Brenda Steinhauer	W.A. Richardson Builders, LLC				X	
Ray Tonjes	Ray Tonjes Builder, Inc.					X

Eric Truelove	Green Building Resources LLC					X
Doug Tucker	Mitsubishi Electric US, Inc.					X
John Yowell	EPA's Indoor Environments Division				X	

Staff in Attendance

Full Name	Organization	11/15/21	10/25/21	10/14/21	10/7/21	5/7/21
Emily Marx	Secretariat, GBI	X	X	X	X	X
Joseph Granada	Staff, GBI	X	X	X	X	
Sara Rademacher	Staff, GBI	X	X	X	X	X
Micah Thomas	Staff, GBI	X	X	X	X	X
Aparna Varadharajan	Staff, GBI	X	X	X	X	

Roll Call

Secretariat Emily Marx took roll call to establish quorum, reviewed the GBI Anti-Trust Policy, Code of Conduct policy and notified participants that the call was being recorded for the purpose of preparing minutes. No objections or concerns were raised. She asked if any guests or interested parties wanted to discuss any comment or topic. No interested party noted an item they wanted to discuss.

Marx reviewed the Consensus Body for Existing Buildings roster and noted the three interest categories, General Interest, Producer, and User. She stated that there is balance on the Consensus Body for Existing Buildings.

Administrative Items

Chair Lawrence Humphries welcomed everyone to the meeting. Humphries reviewed the agenda and asked if anyone had any comments or concerns. There were no comments or concerns.

MOTION: A Motion was made, seconded, and carried unanimously to approve the agenda as presented.

Humphries also reviewed the minutes from meeting #5 on October 25, 2021, and asked if anyone had any comments or concerns. There were no comments or concerns.

MOTION: A Motion was made, seconded, and carried unanimously to approve the minutes from meeting #5 on October 25, 2021, as presented.

ESG Public Comment Review

The ESG/IEQ Subcommittee Chair reviewed each item of new business before placing a motion to approve the proposed revision. He noted that two points were given from the IEQ Assessment Area to the ESG Assessment Area, and the revisions are for new and altering criteria to align with the two additional points.

There was agreement by the Consensus Body Chair, Subcommittee Chair and Secretariat to make one joint motion to approve all new text to the ESG Assessment Area.

ESG-5 – ESG-7

ESG-5 Proposed Revision: 1. ENVIRONMENTAL, SOCIAL, & GOVERNANCE (ESG) MANAGEMENT (~~105~~107 POINTS)

ESG-6 Proposed Revision: 1.1 OPERATIONS & MAINTENANCE (~~47~~49 POINTS)

ESG-7 Proposed Revision: 1.1.1.5 There ~~is~~ are preventive maintenance programs for building systems and areas, which improve performance and the indoor environment. ~~takes into account service life.~~

1.1.1.5.1 There is a preventative maintenance program for HVAC and ventilation systems.

1.1.1.5.2 There is a regular maintenance schedule and cleaning policy for light fixtures.

1.1.1.5.3 There is a detailed cleaning schedule in place to ensure that high dusting, cleaning of ventilation vents and detail cleaning of kitchen appliances including microwaves, stoves, ovens, and refrigerators, if applicable.

7 ~~3~~ points

• 3 points are earned for 1.1.1.5.1

• 2 points are earned for 1.1.1.5.2

• 2 points are earned for 1.1.1.5.3

MOTION: The Motion was made and seconded to accept the new text for 1.1 of the ESG Assessment Area.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy

ESG-8

ESG-8 Proposed Revision: ~~1.1.1.8 There is a regular maintenance schedule and cleaning policy for light fixtures.~~
~~2 points~~

MOTION: The Motion was made and seconded to accept the remove the criteria for 1.1.1.8.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

ESG-9

Proposed Revision: 1.1.1.98 If spray humidification is used, there is a regular maintenance schedule for cleaning the system and verifying that it is free of rust, algae, or loose contaminants of any kind.

1 point

- Not applicable if a steam humidification system or no humidification is used.

~~1.1.1.109~~ For public restrooms:

~~1.1.1.109.1~~ There is a regular cleaning schedule available and posted for the public restrooms that includes a verification system.

~~1.1.1.109.2~~ There are signs posted to promote handwashing in public restrooms.

Maximum = 2 points

- One point is earned for ~~1.1.1.109.1~~.

o Not applicable if there are no public restrooms.

- One point is earned for ~~1.1.1.109.2~~.

o Not applicable if there are no public restrooms.

Discussion took place on the Editorial Revision:

- There was no concern or objection to updating the numbering of the criteria.

Site Public Comment Review

The Site/Materials Subcommittee Chair reviewed each item of new business and public comment before placing a motion to approve the action approved by the Subcommittee.

Site-8

Proposed Revision: 2.1.1 Site Pollution

Path A, B, or C

Three paths are available for determining a site's pollution status.

- 2.1.1A Path A: Environmental Site Assessment: Up to 30 points

OR

- 2.1.1B Path B: Site Undergoing Remediation: Up to 20 points

OR

- 2.1.1C Path C: Completed Remediation Approved: Up to 30 points

Points cannot be combined between paths. Select one of the paths below. There is no N/A option.

2.1.1A PATH A: ENVIRONMENTAL SITE ASSESSMENT

2.1.1A.1 The site was evaluated for conditions indicative of releases or threatened releases of hazardous substances, pollutants and contaminants, petroleum or petroleum products or controlled substances on, at, in, or to the site.

Maximum = 30 points

- 20 points are earned if no conditions were identified by a Phase I Environmental Site Assessment (ESA) conducted in accordance with ASTM E1527 and ASTM E1528.

- 30 points are earned if all identified conditions were below cleanup objectives or action levels set by the government authority having jurisdiction when measured by a Phase II ESA to determine their extent and spatial distribution in accordance with ASTM E1903.

OR

2.1.1B Path B: SITE UNDERGOING REMEDIATION

2.1.1B.1 The site has conditions that exceed cleanup objectives or action levels set by the government authority having jurisdiction, but a remediation plan was prepared and has been approved by the that government authority.

20 points are earned if there is a contractual or other legal commitment to implement and complete the approved remediation plan.

OR

2.1.1C Path C: COMPLETED REMEDIATION APPROVED

2.1.1C.1. The site has completed remediation for conditions identified pursuant to a Phase II ESA to determine their extent and spatial distribution in accordance with ASTM E1903.

30 points are earned if the final remediation report has been approved by the government authority having jurisdiction.

MOTION: The Motion was made and seconded to accept the revisions for 2.1.1 Site Pollution.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB104-5

Public Comment: Change "Is the existing building site free of contamination?" to read "Does the site contain any identified actionable pollutants/"

Reason: "free of contamination" is an unquantified, broad term.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The revision to take place is more explicit. The revision is below:

2.1.1 Site Pollution

Path A, B, or C

Three paths are available for determining a site's pollution status.

- 2.1.1A Path A: Environmental Site Assessment: Up to 30 points

OR

- 2.1.1B Path B: Site Undergoing Remediation: Up to 20 points

OR

- 2.1.1C Path C: Completed Remediation Approved: Up to 30 points

Points cannot be combined between paths. Select one of the paths below. There is no N/A option.

2.1.1A PATH A: ENVIRONMENTAL SITE ASSESSMENT

2.1.1A.1 The site was evaluated for conditions indicative of releases or threatened releases of hazardous substances, pollutants and contaminants, petroleum or petroleum products or controlled substances on, at, in, or to the site.

Maximum = 30 points

- 20 points are earned if no conditions were identified by a Phase I Environmental Site Assessment (ESA) conducted in accordance with ASTM E1527 and ASTM E1528.

- 30 points are earned if all identified conditions were below cleanup objectives or action levels set by the government authority having jurisdiction when measured by a Phase II ESA to determine their extent and spatial distribution in accordance with ASTM E1903.

OR

2.1.1B Path B: SITE UNDERGOING REMEDIATION

2.1.1B.1 The site has conditions that exceed cleanup objectives or action levels set by the government authority having jurisdiction, but a remediation plan was prepared and has been approved by the that government authority.

20 points are earned if there is a contractual or other legal commitment to implement and complete the approved remediation plan.

OR

2.1.1C Path C: COMPLETED REMEDIATION APPROVED

2.1.1C.1. The site has completed remediation for conditions identified pursuant to a Phase II ESA to determine their extent and spatial distribution in accordance with ASTM E1903.

30 points are earned if the final remediation report has been approved by the government authority having jurisdiction.

MOTION: The Motion was made and seconded to accept with modification the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB104-6

Public Comment: Make Phs 2 or 3 clean report worth 15 pts

Reason: Phs 2 or 3 (clean reports) are of equal if not higher value

Recommended Response: Thank you for your comment. Your comment has been accepted with modification for the following reason: We have taken the comment under consideration and have revised the entire section. Clean sites are now given a full 30 points available for the section.

The revision is below:

2.1.1 Site Pollution

Path A, B, or C

Three paths are available for determining a site's pollution status.

- 2.1.1A Path A: Environmental Site Assessment: Up to 30 points

OR

- 2.1.1B Path B: Site Undergoing Remediation: Up to 20 points

OR

• 2.1.1C Path C: Completed Remediation Approved: Up to 30 points

Points cannot be combined between paths. Select one of the paths below. There is no N/A option.

2.1.1A PATH A: ENVIRONMENTAL SITE ASSESSMENT

2.1.1A.1 The site was evaluated for conditions indicative of releases or threatened releases of hazardous substances, pollutants and contaminants, petroleum or petroleum products or controlled substances on, at, in, or to the site.

Maximum = 30 points

• 20 points are earned if no conditions were identified by a Phase I Environmental Site Assessment (ESA) conducted in accordance with ASTM E1527 and ASTM E1528.

• 30 points are earned if all identified conditions were below cleanup objectives or action levels set by the government authority having jurisdiction when measured by a Phase II ESA to determine their extent and spatial distribution in accordance with ASTM E1903.

OR

2.1.1B Path B: SITE UNDERGOING REMEDIATION

2.1.1B.1 The site has conditions that exceed cleanup objectives or action levels set by the government authority having jurisdiction, but a remediation plan was prepared and has been approved by the that government authority.

20 points are earned if there is a contractual or other legal commitment to implement and complete the approved remediation plan.

OR

2.1.1C Path C: COMPLETED REMEDIATION APPROVED

2.1.1C.1. The site has completed remediation for conditions identified pursuant to a Phase II ESA to determine their extent and spatial distribution in accordance with ASTM E1903.

30 points are earned if the final remediation report has been approved by the government authority having jurisdiction.

MOTION: The Motion was made and seconded to accept with modification the proposed response

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

Site-6

Proposed Revision: Delete 2.1.1.1 and move points to 2.1.1.3 (which would become new 2.1.1.2).

Reason: The current 2.1.1.1 and 2.1.1.2 award points for the same status. The current 2.1.1.2 (as modified by the task group on 8/23/21) is more specific about how the points are to be awarded. Moving the points to the current 2.1.1.3 would give a clean site the same number of points as one in the process of remediation. A companion suggested change would modify 2.1.1.3.

MOTION: The Motion was made and seconded to accept the proposed revision.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

P1-1203

Public Comment: While Green Globes does not use prerequisites in an effort to “be inclusive and recognize sustainable achievements in all areas,” this situation is different. This is not about selecting which areas of sustainability are most appropriate or attractive to an applicant, but rather about whether the building is in fact environmentally friendly or not. A building on a site that is contaminated should not be considered green until the cleanup is completed, not just underway. As a result, a prerequisite or other limit on eligibility would be needed.

Reason: It seems strange that GBI would want to award Green Globes recognition to a site that is contaminated, even if there are efforts underway to clean up the contamination. I think doing so devalues the brand and creates a big risk – imagine a news story about a property that has earned Green Globes certification but is highly contaminated with toxic material.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The committee wants to encourage the use of remediated sites. Green Globes evaluates the pursuit of sustainability by the project and failure to achieve goals is reflected in the final rating.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

P1-1204

Public Comment: Award additional points for this section, linking the number of points to the percentage of all parking spaces that are either EV-ready or have EV chargers in place. Suggest allocating at least 20 points to this section.

Reason: Adequate EV charging infrastructure in buildings is essential to incentivize more individuals to purchase and utilities EVs. Yet most buildings lack the infrastructure to support the tremendous growth in EVs that is set to happen in the coming decade. This is

especially true of multifamily properties. The current allocation of 4 points for the presence of just one EV does not incentivize installation of more EV infrastructure to prepare the building for the future.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. 20 points were not available, but 4 points were reallocated to address this issue. The committee decided to allocate the points according to the amount of electric vehicle stations.

The modification is below:

~~2.2.2.8 Onsite private parking spaces are EV ready and/or are equipped with electric charging stations are available based upon the annual transportation assessment results.~~

~~Maximum = 8 4 points~~

~~Eight points are earned for buildings when $\geq 10\%$ (minimum of 1) of private onsite parking spaces are EV ready and/or are equipped with electric charging stations.~~

~~Four points are earned for buildings when $\geq 5\%$ to $< 10\%$ (minimum of 1) of private onsite parking spaces are EV ready and/or are equipped with electric charging stations.~~

~~4 points~~

~~• Not applicable if the building is regularly unoccupied or does not have private onsite parking.~~

MOTION: The Motion was made and seconded to accept with modification the proposed response.

Discussion took place on the Motion:

~~• There was no discussion.~~

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

P1-502

Public Comment: There are indications that the site has been enhanced, such as an increase of indigenous species, the reestablishment of native vegetation corridors ~~including to provide~~ wildlife habitat, or filtration or reduction of stormwater runoff.

Reason: Increased vegetation will have very little affect on increasing the habitat value unless it includes plant species *native* to that region.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. We acknowledge the concept in this comment but think it needs to be more specific and have thus, made the following modification:

~~2.2.1.1 There are indications that the site has been enhanced by activities, such as an increase of indigenous species, or the re-establishment of vegetation corridors including to provide-wildlife habitat, or filtration or reduction of stormwater runoff.~~

~~5 points~~

~~• Not applicable if the building footprint occupies $> 80\%$ of the site.~~

Discussion took place on the Public Comment's Response:

~~• The Secretariat stated that no motion is needed because only the revision in the response has changed and no other part. She stated that the action and reason was already approved by the Consensus Body for EB during a prior meeting. There was no objection to updating the revision of the commenter's response.~~

Site-2

Proposed Revision: ~~2.2.1.1 There are indications that the site has been enhanced by activities, such as an increase of indigenous species, or the re-establishment of vegetation corridors including to provide-wildlife habitat, or filtration or reduction of stormwater runoff.~~

~~5 points~~

~~• Not applicable if the building footprint occupies $> 80\%$ of the site.~~

MOTION: The Motion was made and seconded to accept with modification the proposed revision.

Discussion took place on the Motion:

~~• There was no discussion.~~

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

There was agreement to make one joint motion for Public Comments P1-1205 and EB104-7 because they are on the same criteria and the action is the same.

P1-1205 & EB104-7

P1-1205 Public Comment: Delete the section, assuming ADA compliance is required by law.

P1-1205 Reason: I am not an expert on ADA compliance, but the way this is worded, a building that is not in compliance is awarded points for coming into compliance. If, as I assume, compliance is required by law, then no points should be awarded to any building under this section.

P1-1205 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

EB104-7 Public Comment: Delete and allocate points to other credits

EB104-7 Reason: Legal requirement so why includes in assessment

EB104-7 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

MOTION: The Motion was made and seconded to accept the proposed responses for P1-1205 and EB104-7.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

Water Public Comment Review

The Water Subcommittee Chair reviewed each item of new business and public comment before placing a motion to approve the action approved by the Subcommittee.

P1-1217

Public Comment: Change all instances of “WaterSense aerators on lavatory fixtures (not including main kitchen sink)” to “WaterSense faucets or WaterSense aerators on lavatory fixtures (not including main kitchen sink)”

Reason: In every instance where “WaterSense aerators” is mentioned there should also be a listing for “WaterSense faucets.”

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The committee supports changing the language throughout the standard to "WaterSense® labeled lavatory faucets and lavatory faucet accessories." The below revision will be replicated for the following:

- 4.2.1B.1a
- 4.2.1C.1a
- 4.2.1D.1a
- 4.2.1E.1a
- 4.2.1G.1a
- 4.2.1H.1a

4.2.1B.1a WaterSense® labeled aerators on lavatory faucets and lavatory faucet accessories fixtures (not including main kitchen sink)

For 4.2.1F.1a and 4.2.1BF.1b the text is below;

4.2.1F.1a WaterSense® labeled aerators on residential lavatory faucets and lavatory faucet accessories fixtures (not including main kitchen sink)

4.2.1F.1b WaterSense® labeled aerators on non-residential lavatory faucets and lavatory faucet accessories fixtures (not including main kitchen sink)

MOTION: The Motion was made and seconded to accept with modification the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 2 abstained.

Abstain: Mike Cudahy

Water-8

Proposed Revision: 4.2.2A.1 Irrigation is not used for landscaping. Permanent irrigations systems, such as inground water distribution, is not used for landscaping.

30 points

- Not applicable for sites with no landscaping (containerized planting are not considered landscaping adding planters or other non-irrigated landscape would enable the points).

MOTION: The Motion was made and seconded to accept the proposed revision.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB104-18

Public Comment: For so many points need explicit criteria to insure comprehensive policy

Reason: This will tend to be overly simplistic on less sophisticated project.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: There is a lack of information provided of the exact revision to take place within the document. Additional information with strikeout and underline needs to be provided for further consideration.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB104-19

Public Comment: Reallocate points to other water criteria that requires more efforts and has greater potential impact.

Reason: There are other water criteria that have greater potential impact that need additional points to encourage the pursuit of such criteria.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: We lack clarification on where to reallocate the points and there is not enough detail to establish such criteria.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB104-20

Public Comment: Expand on water usage policy meaning and clarify water reduction targets.

Reason: Many will provide a one or two sentence policy (clarify if this meets intent); Attainable water reduction targets will become smaller overtime as initial renovations and/or behaviors are incorporated in the project.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The criteria for 4.2.3.5 has been removed from the standard.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB104-21

Public Comment: Reallocate points to other water criteria that requires more efforts and has greater potential impact.

Reason: There are other water criteria that have greater potential impact that need additional points to encourage the pursuit of such criteria.

Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

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

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

P1-1220

Public Comment: Clarify with more detail how this section differs from the “written policy to minimize water use and encourage water conservation” for which 10 points are awarded in section 4.2.3.1

Reason: This section seems highly redundant with section 4.2.3.1.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The reason for modification is to eliminate redundancy and add clarity. The modification is below:

4.2.3.1 There is a written water usage policy intended to minimize water use and encourage water conservation which includes water-reduction targets and is endorsed by senior management.

10 points

~~4.2.3.5 There is a water usage policy including water reduction targets, endorsed by senior management.~~

~~10 points~~

MOTION: The Motion was made and seconded to accept with modification the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

There was agreement to make one joint motion to approve the new section on Leak & Abnormal Water Use Detection.

Water-2 – Water 7

Water-2 Proposed Revision: 4.2.4 Leak & Abnormal Water Use Detection (10 points)

Leak detection devices shall comply with IAPMO Z1349 and not interfere with fire protection systems.

Water Leak Detection Device: A plumbing appurtenance that monitors a water supply and distribution system in order to detect and report unusual conditions that may cause water waste.

Adaptive Plumbing System Monitoring and Control Device: A type of water leak detection device that utilizes sensor inputs to continuously monitor the hydraulic conditions and intelligently adapts to remotely report expected normal vs abnormal plumbing system states.

Water-3 Proposed Revision: 4.2.4.1 Water leak detection devices are installed for all water-intensive applications such as commercial kitchens, commercial laundries, laboratories, pools, spas, etc. Maximum = 1 point or N/A

- One point is earned for adaptive plumbing system leak detection devices.
- Not applicable where there are no water intensive applications.

Water-4 Proposed Revision: 4.2.4.2 Water leak detection devices are installed for water that is used for pressurized irrigation. Maximum = 2 points or N/A

- Two points are earned for adaptive plumbing system leak detection devices.
- Not applicable where there is no irrigation.

Water-5 Proposed Revision: 4.2.4.3 All water leak detection devices are linked to internet or a central Data Management System to store monitor and report data. 1 point

Water-6 Proposed Revision: 4.2.4.4 Chilled or hot water loops or cooling tower makeup water supply pipes are equipped with water leak detection devices. Maximum = 1 point or N/A

- One point is earned for adaptive plumbing system leak detection devices.
- Not applicable where there are no chilled or hot water loops.

Water-7 Proposed Revision: 4.2.4.5 Tenant water leak detection devices are used in multi-unit developments. Percentages are based on units with water supply. Maximum = 5 points or N/A

- Five points are earned when $\geq 90\%$ of the units in the development include adaptive plumbing system water leak detection.
- Four points are earned when $\geq 80\%$ to $< 90\%$ of the units in the development include adaptive plumbing system water leak detection.
- Two points are earned when $\geq 40\%$ to $< 80\%$ of the units in the development include adaptive plumbing system water leak
- One point is earned when $\geq 20\%$ to $< 40\%$ of the units in the development include adaptive plumbing system water leak detection.
- Not applicable where there is no multi-unit development.

MOTION: The Motion was made and seconded to accept the proposed revisions for the new section, 4.2.4 Leak & Abnormal Water Use Detection.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

Points-1

Proposed Revision: Water Leak Detection Device: A plumbing appurtenance that monitors a water supply and distribution system in order to detect and report unusual conditions that may cause water waste.

Adaptive Plumbing System Monitoring and Control Device: A type of water leak detection device that utilizes sensor inputs to continuously monitor the hydraulic conditions and intelligently adapts to remotely report expected normal vs abnormal plumbing system states.

Reason: Add to Section V, Definitions.

MOTION: The Motion was made and seconded to accept the proposed revision.

Discussion took place on the Motion:

- The Secretariat stated that this motion will also place the definitions in the Definitions section, V, of the draft standard.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

Materials Public Comment Review

The Site/Materials Subcommittee Chair reviewed each public comment before placing a motion to approve the action approved by the Subcommittee.

P1-601

Public Comment: Comment only, no requested revision.

Reason: When developing a LCCA, occupants have been identified as 87%-91% percent of the cumulative expenditure over the usable lifetime of a building while real estate and construction accounts for 8%-10% and energy use costs account for 1%-3%. Since expenses related to the wellness of occupants comprises the vast majority of the overall operating expense related to any building, it needs to have corresponding weight and significance applied in the EB Standard. How this can be most effectively articulated in the EB Standard should be explored further.

Recommended Response: Thank you for your comment. Your comment has been acknowledged. Volunteers will review the standard and will provide proposed guidance to GBI staff to identify Public Health Criteria within the Technical Manual.

MOTION: The Motion was made and seconded to acknowledge the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

EB-103-2

Public Comment: 5.1.1.2 Product standards for cycle renovations have been developed that require the following:

5.1.1.2.1 Products that include:

- Third-party verified multiple attribute standard certifications
- Environmental Product Declarations (EPDs)
- Being listed on NIST's (National Institute of Standards and Technology) BEES (Building for Environmental and Economic Sustainability) database

5.1.1.2.2 Product selections that include sustainable comparison utilizing:

- Higher level of certification based upon third party verified multiple attribute standard certifications for the same product type.
- Products that include a baseline EPD, and over time produces an updated EPD that demonstrates continual improvement from the baseline of a specific product.
- Comparison of similar building products utilizing NIST's BEES database, online analysis tool, and same impact indicators.

5.1.1.2.3 Products that include third-party sustainable forestry certification.

5.1.1.2.4 Products that include:

- Pre-consumer and Post-consumer Recycled content
- Biobased content (other than sustainable wood)

5.1.1.2.5 Products that include reused, refurbished and/or salvaged materials from off-site in place of new materials (including furnishings).

Maximum = 5 points

Points can be combined between each listed option, but maximum points awarded will not exceed 5 points total for 5.1.1.2.

- Five points are earned for 5.1.1.2.1.
- Five points are earned for 5.1.1.2.2.
- One point is earned for 5.1.1.2.3.
- Two points are earned for 5.1.1.2.4.
- Two points are earned for 5.1.1.2.5.

Points are earned based on the Sustainable Materials Index (SMI), the percentage of the total value of the building materials that have sustainable materials attributes. The sustainable materials attributes considered in calculating the SMI are pre-consumer recycled content, post-consumer recycled content, biobased content, third-party sustainable forestry certification content and materials or that meet the requirements of the Eco-Certified Composite sustainability standard. The SMI is the sum of the value of these attributes divided by the Total Materials Value (TMV) expressed as a percentage.

Sustainable Materials Index (%) =

100 x

(\$ value of pre-consumer recycled content

±

\$ value of post-consumer recycled content

±

\$ value of biobased content

±

\$ value of third-party sustainable forestry certification content

±

\$ value of Eco-Certified Composite/TMV

Only the portion of materials that has the identified attribute should be included. For example, if a product has 40% pre-consumer recycled content, only 40% of the value of that product is included.

Products that are claimed for credit under Third-Party Sustainable Forestry Certification are not also included as biobased content. Biobased content percentage may be calculated by weight or in accordance with ASTM D6866-16 Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis.

The following forest certification systems are recognized:

- Forest Stewardship Council (FSC): <https://us.fsc.org/en-us> (last accessed 8/30/17)
- Sustainable Forestry Initiative, Inc. (SFI): <http://www.sfiprogram.org/> (last accessed 8/30/17)
- American Tree Farm System (ATFS): <https://www.treefarmssystem.org/> (last access 8/30/17)
- Canadian Standards Association Sustainable Forestry Management (CSA): <http://www.csasfmforests.ca/> (last accessed 8/30/17)
- Programme for the Endorsement of Forest Certification (PEFC): <https://www.pefc.org/> (last accessed 8/30/17)

Maximum = 15 points

Points are earned where the Sustainable Materials Index is greater than 10%:

- Fifteen points are earned for $\geq 38\%$.
- Fourteen points are earned for $\geq 36\%$ to $< 38\%$.
- Thirteen points are earned for $\geq 34\%$ to $< 36\%$.
- Twelve points are earned for $\geq 32\%$ to $< 34\%$.

- Eleven points are earned for ≥30% to <32%.
- Ten points are earned for ≥28% to <30%.
- Nine points are earned for ≥26% to <28%.
- Eight points are earned for ≥24% to <26%.
- Seven points are earned for ≥22% to <24%.
- Six points are earned for ≥20% to <22%.
- Five points are earned where for ≥18% to <20%.
- Four points are earned where for ≥16% to <18%.
- Three points are earned for ≥14% to <16%.
- Two points are earned for ≥12% to <14%.
- One point is earned for ≥10% to <12%.
- No points are earned for <10%.

Reason: Reward use of ECC certified substrates where composite panels are used by adding a section for sustainable materials attributes and adding ECC certification. The existing standard has several sections which could be combined into one sustainable materials section without sacrificing points power.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Commercial buildings in New Construction evaluates all materials when putting together a materials list for a project. When completing Cycle Renovations, it would be based on evaluation of products used for continuous improvement and maintenance. Therefore, utilizing ECO labels, certifications and declarations would be the approach used to select individual products during cycle renovations.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

P1-503

Public Comment: • ~~Five~~ Four points are earned for 5.1.1.2.1.

- ~~Five~~ Four points are earned for 5.1.1.2.2.
- One point is earned for 5.1.1.2.3.
- Two points are earned for 5.1.1.2.4.
- ~~Two~~ Four points are earned for 5.1.1.2.5.

Reason: “The greenest materials are those that already exist.” Section 5.1.1.2.5 should be weighted more heavily as it would most effectively reduce embodied carbon during a renovation.

Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

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

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 0 abstained.

Jane Rohde left the meeting. She noted that her proxy, Mike Cudahy will be abstaining for her for all upcoming votes.

P1-402

Public Comment: Completely rewrite language around comparison of product certification levels and EPDs to ensure that there is an apple to apple comparison.

Reason: This language is much too simplified for the suggested pathway. Comparison of EPDs requires significant parameters be detailed to ensure there is no gaming of the system.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The rewrite was completed to address comparison of product from a continuous improvement process perspective. The requirements are laid out to avoid gaming of the system.

The revision is below:

5.1.1.2 Product standards for cycle renovations have been developed that require the following:

5.1.1.2.1 Products that include:

- Third-party verified multiple attribute standard certifications
- Industry Average or Product Specific Environmental Product Declarations (EPDs)
- Being listed on NIST’s (National Institute of Standards and Technology) BEES (Building for Environmental and Economic Sustainability) database

5.1.1.2.2 Product selections that include sustainable comparison and/or improvements utilizing:

- Higher level of certification based upon third party verified multiple attribute standard certifications for the same product type.
- Product that is included in an Industry Average EPD and have subsequently produced a Product Specific EPD for the same product.
- Products that include a baseline Product Specific EPD, and over time produces an updated Product Specific EPD that demonstrates continual improvement from the baseline of a specific product. LCA method (TRACI, CML, etc.) and Product Category Rules (PCR) are required to be the same for comparability.
- Comparison of similar building products utilizing NIST's BEES database, online analysis tool utilizing the, and same impact indicators for comparison.

5.1.1.2.3 Products that include third-party sustainable forestry certification.

5.1.1.2.4 Products that include:

- Pre-consumer and Post-consumer Recycled content
- Biobased content (other than sustainable wood)

5.1.1.2.5 Products that include reused, refurbished and/or salvaged materials from off-site in place of new materials (including furnishings).

Discussion took place on the Public Comment.

- The Secretariat noted that the commenter wants to be present for the discussion of their comment and that we would skip the approval of the action. She stated that this public comment will be reviewed at the next Consensus Body meeting.
- A member who may not be present for the next call explained the changes to the criteria and EPD use of different products seen in an existing building. She noted that some revisions would take place within the Technical Manual to give more guidance to users.
- There was discussion of the comparability criteria but that the industry average aspect is very important and needs to be included within the criteria.

EB102-1

Public Comment: Products that include third-party sustainable forestry certification, categorized as Responsible or Certified Sources in accordance with ASTM D7612.

Reason: ASTM D7612 Responsible and Certified Sources are extensively recognized in green standards such as the USGBC LEED Pilot Credit, 2020 ICC-700, 2015 IgCC and the USDA BioPreferred program. For more information, see www.responsible-source.com. ASTM D7612 recognizes all existing sustainable forestry certification programs and this addition will not impact procurement of wood materials.

Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

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

Discussion took place on the Motion:

- A member on the call stated that although he is not against the ASTM D7612 standard, some of the requirements are legal where some are certifiable. He noted that a high standard of certifiable and responsible sourced forestry may pose problems. He also noted that this change is watering down the current criteria. He also argued that it is not clear on what all this would apply to. The member stated that many of the partners of this standard do not include any language of being 'responsible' on their websites. It was argued that the revision gives an advantage to the wood market and may have negative effects on the concrete or steel industries. He believes that the revision is an unwarranted expansion.
- The public commenter stated that the ASTM standard was released in 2010 and has been included in competitor standards or codes for at least a few years. He noted examples of the use of the ASTM standard and in different ways it could be used.
- A member who opposed the revision stated that it does go farther and could be used for more aspects of a building than what he imagined or is worried about. However, the worry still exists in what ways it could all effect a building.
- It was argued that the ASTM standard does have a large effect but that it's effect may not be in line with what the EB21 draft standard is trying to achieve but may fall under a different standard in pre-development by GBI.
- It was argued that the Consensus Body is voting for whether a project gets a credit, which is important since this may affect many projects.

VOTE: The Motion carries with 6 in favor, 1 opposed, 4 abstained.

Opposed: Max Puchtel

Abstain: Mike Cudahy, Mike Zatz, Jane Rohde, Christoph Lohr

EB-103-1

Public Comment: ~~5.1.1.3 The building meets one or more of the following Levels:~~

~~5.1.1.3.1 Level 1: A safety data sheet (or Health Product Declaration (HPD)) is available for specified products.~~

~~5.1.1.3.2 Level 2: The safety data sheet (SDS) or other certification documentation indicates the presence of chemicals that are considered carcinogenic, mutagenic, or reprotoxic (CMR) to reproduction or human development.~~

~~5.1.1.3.3 Level 3: If a CMR chemical is present the product manufacturer has evaluated the potential for exposure to the chemical during the use phase of the product.~~

~~Maximum = 8 points~~

- ~~Two points are earned for a requirement of ≥10 products for 5.1.1.3.1.~~
- ~~One point is earned for a requirement of ≥5 to <10 products for 5.1.1.3.1.~~
- ~~Two points are earned for a requirement of ≥10 products for 5.1.1.3.2.~~
- ~~One point is earned for a requirement of ≥5 to <10 products for 5.1.1.3.2.~~
- ~~Four points are earned for a requirement of ≥10 products for 5.1.1.3.3.~~
- ~~Two points are earned for a requirement of ≥5 to <10 products for 5.1.1.3.3.~~

Select at least one formulated product that has a completed Occupant Exposure Screening Report (OESR) prepared in accordance with ASTM E3182-20 - Standard Practice for Preparing an Occupant Exposure Screening Report (OESR) for Substances in Installed Building Products.

Points are earned for discrete products with different functional uses and not variations of the same product, unless the manufacturers show substantial difference between the chemical constituents or components.

Maximum = 10 points

Points are earned where products undergo a screening-level product risk assessment:

- Ten points are earned for 10 products.
- Nine points are earned for 9 products.
- Eight points are earned for 8 products.
- Seven points are earned for 7 products.
- Six points are earned for 6 products.
- Five points are earned for 5 products.
- Four points are earned for 4 products.
- Three points are earned for 3 products.
- Two points are earned for 2 products.
- One point is earned for 1 product.

Reason: Recognize the ASTM risk assessment process (Commercial Buildings language is pasted below). This new standard recognizes the concept of risks due to exposure vs list-based hazards of individual ingredients that HPD propagates, and is easily attached to an existing document such as an SDS or technical data sheet.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. We are accepting this comment because we recognize ASTM E3182-20 - Standard Practice for Preparing an Occupant Exposure Screening Report (OESR) as more specific in keeping with evaluations with the effects of ingredients on occupant health.

~~.5.1.1.3 The building meets one or more of the following Levels:~~

~~5.1.1.3.1 Level 1: A safety data sheet (or Health Product Declaration (HPD)) is available for specified products.~~

~~5.1.1.3.2 Level 2: The safety data sheet (SDS) or other certification documentation indicates the presence of chemicals that are considered carcinogenic, mutagenic, or reprotoxic (CMR) to reproduction or human development.~~

~~5.1.1.3.3 Level 3: If a CMR chemical is present the product manufacturer has evaluated the potential for exposure to the chemical during the use phase of the product.~~

~~Maximum = 8 points~~

- ~~Two points are earned for a requirement of ≥10 products for 5.1.1.3.1.~~
- ~~One point is earned for a requirement of ≥5 to <10 products for 5.1.1.3.1.~~
- ~~Two points are earned for a requirement of ≥10 products for 5.1.1.3.2.~~
- ~~One point is earned for a requirement of ≥5 to <10 products for 5.1.1.3.2.~~
- ~~Four points are earned for a requirement of ≥10 products for 5.1.1.3.3.~~
- ~~Two points are earned for a requirement of ≥5 to <10 products for 5.1.1.3.3.~~

Select at least one formulated product that has a completed Occupant Exposure Screening Report (OESR) prepared in accordance with ASTM E3182-20 - Standard Practice for Preparing an Occupant Exposure Screening Report (OESR) for Substances in Installed Building Products.

Points are earned for discrete products with different functional uses and not variations of the same product, unless the manufacturers show substantial difference between the chemical constituents or components.

Maximum = 10 points

Points are earned where products undergo a screening-level product risk assessment:

- Ten points are earned for 10 products.
- Nine points are earned for 9 products.
- Eight points are earned for 8 products.
- Seven points are earned for 7 products.
- Six points are earned for 6 products.
- Five points are earned for 5 products.
- Four points are earned for 4 products.
- Three points are earned for 3 products.

- Two points are earned for 2 products.
- One point is earned for 1 product.

5.1.1.4 An annual assessment and inventory of available existing furniture (including systems furniture) for re-use or refurbishment has been completed as part of the cycle renovation process.

~~4-2~~ points

MOTION: The Motion was made and seconded to accept with modification and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-1222

Public Comment: Consider adding a section to encourage enhanced handling of waste other than recyclables.

Reason: It is interesting that points are awarded for having storage/handling facilities dedicated to recyclables, but not for hazardous or other types of waste.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: There is not a specific suggestion being proposed and the committee does not know precisely what the comment intends the end result to be.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

IEQ Public Comment Review

The ESG/IEQ Subcommittee Chair reviewed each public comment before placing a motion to approve the action approved by the Subcommittee.

EB101-4 Public Comment: 6.2.3.3 If a poor air quality event has occurred in the building or in the community, the following techniques to rapidly improve air quality can take place pending longer term and/or permanent resolution of the problem:
6.2.3.3.1 Increasing air changes (where feasible) or provide equivalent air changes per hour (eACH) through UVGI equipment.

EB101-4 Reason: Using UVGI is an effective way to provide an an Equivalent Air Change (eAC).

EB101-4 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: This section has been struck from the draft standard.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-803

Public Comment: N/A

Reason: Should points be awarded if a radon mitigation system is installed?

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The reason for modification is to remove the high risk designation because it is not consistent with EPA's criteria for appropriate use of the maps. The wording also recognizes the importance of mitigation systems. The modification is below:

6.3.2.1 The building has had a radon survey during the last 2 years which indicates that measured radon levels are below 4 pCi/L after any mitigation measures have been activated. ~~is located outside a high risk area or a radon survey has been completed which indicates levels below 4 pCi/L.~~

~~Maximum = 6 points~~

~~• Six points are earned when the building is located outside a high risk area.~~

~~• Six points are earned when a site-specific radon assessment shows the site is free of radon.~~

MOTION: The Motion was made and seconded to accept with modification the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-103

Public Comment: If built prior to 1978, is there no lead within the building?

Assessment Guidance

Lead has been found to be a hazardous material, particularly to children.

Reason: To clarify existing regulations and industry best practices

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: This section has been struck from the draft standard.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-104

Public Comment: If there is lead in the building, has the building been certified that all lead hazards have ~~has been encapsulated~~ abated ?

Assessment Guidance

Lead can be encapsulated when it is in paint or other architectural coatings. If there is no lead in the building, mark N/A.

Reason: To clarify existing regulations and industry best practices

P1-104 Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The reason for modification is to change the text from a question to a statement to be consistent with the draft standard. The modification is below:

If there is lead in the building, the building has been certified that all lead hazards have ~~has been encapsulated~~ abated.

MOTION: The Motion was made and seconded to accept with modification the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

EB101-5

Public Comment: ~~6.4.2.2 In regularly occupied spaces, replacement or existing lighting includes a Correlated Color Temperature (CCT) between 2700°K and 4500°K and one CCT is used consistently throughout occupied spaces.~~

We recommend that this section be removed in its entirety.

Reason: Limiting CCT to a range and single CCT prevents the installation of new human centric lighting systems which support the body's natural day-night rhythm to help occupants stay active during the day and rest well at night.

These systems create immersive environments by mimicking the daily rhythm of the sun (CCT varies throughout the day etc.), varying intensities, introducing artificial skylights, applying natural colors and dynamics on walls, and creating natural light scenes to energize, relax, present, etc.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Credit for human centric lighting systems is addressed in 6.4.2.4.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 9 in favor, 1 opposed, 1 abstained.

Opposed: Anthony Serres

Abstain: Jane Rohde

P1-1223

Public Comment: Delete this section.

Reason: The use of occupancy sensors is an energy efficiency measure and not part of Indoor Environmental Quality, which is the subject of this section. It will be reflected in total energy use and the points awarded for such.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The committee believes this is an appropriate place for the topic/criterion.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- It was asked if this should be in the Energy Assessment Area instead, but it was noted that this section is in the correct place in the IEQ Assessment Area.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-1224

Public Comment: Delete this section.

Reason: The use of photosensors is an energy efficiency measure and not part of Indoor Environmental Quality, which is the subject of this section. It will be reflected in total energy use and the points awarded for such.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The committee believes this is an appropriate place for the topic/criterion.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-1225

Public Comment: Delete this section.

Reason: While a small number of points, it seems to me that all buildings should provide access to potable water, and so it shouldn't factor in to evaluating the "greenness" of a building.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The committee believes that the assumption of potable water is conveniently available is not necessarily valid.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

P1-1226

Public Comment: Delete this section.

Reason: While I certainly support the intention and health and wellness issues related to building occupants, I don't believe the ones included here relate to the "greenness of the building."

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The committee believes that the purpose to have an environmentally friendly building is to improve the wellness of occupants.

MOTION: The Motion was made and seconded to reject the comment and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

The ESG/IEQ Subcommittee Chair asked reviewed a large proposal from the IEQ Review Task Group to make many revisions to the Assessment Area. He asked the Secretariat to review the redline of the Assessment Area. She went through each of the Task Group's changes and the Chair noted large changes to the Health and Wellness section and the reasons why. There were no comments or concerns on the proposed revisions. There was agreement to make one joint motion to approve all changes except for the Acoustic section.

Proposed Revisions ESG/IEQ-4 – ESG/IEQ-38, ESG/IEQ 46, CB-1, CB-2, and CB-3.

ESG/IEQ-4: 6.3.1.1 If there is asbestos, the building has been certified that all asbestos has been remediated or encapsulated.

~~2-3~~ points

ESG/IEQ-5: 6.3.2.1 The building has had a radon survey during the last 2 years which indicates that measured radon levels are below 4 pCi/L after any mitigation measures have been activated ~~is located outside a high-risk area or a radon survey has been completed which indicates levels below 4 pCi/L.~~

Maximum = 6 points

- ~~Six points are earned when the building is located outside a high-risk area.~~
- ~~Six points are earned when a site specific radon assessment shows the site is free of radon.~~

~~ESG/IEQ-6: 6.3.3.1~~ There is no lead within the building.

~~2~~ points

ESG/IEQ-7: 6.3.3.2₁ If there is lead in the building, the building has been certified that all lead hazards have ~~has been~~ abated ~~encapsulated.~~

~~2~~ 3 points

- Not applicable if there is no lead in the building.

ESG/IEQ-8: 6.3.3.3₂ There is a documented lead management plan that includes precautions to be taken during repairs and cycle renovations.

~~1~~ 2 points

- Not applicable if there is no lead in the building.

~~ESG/IEQ-9: 6.3.3.4 The lead levels in the potable water been tested and certified safe.~~

~~1 point~~

~~ESG/IEQ-10: 6.4.1.3 There are indirect, or combination indirect/direct artificial lighting solutions provided to reduce glare.~~

~~2 1 points~~

~~ESG/IEQ-10 Reason: Text update, the intention when the criteria was created for it to be worth 1 point. The section should add up to 36, not 37.~~

~~ESG/IEQ-11: IEQ INDOOR AIR QUALITY (IAQ) SYSTEMS & MEASURES (67 89 POINTS)~~

~~ESG/IEQ-12: • 6.1.2.1A Path A: Offices, Higher Education, General Commercial Facilities: Up to 10 points~~

~~OR~~

~~• 6.1.2.1B Path B: Multifamily: Up to 10 points~~

~~OR~~

~~• 6.1.2.1C Path C: Healthcare: Up to 10 points~~

~~ESG/IEQ-12 Reason: Update numbers throughout 6.1.2 Paths~~

~~ESG/IEQ-13: 6.2 IEQ MANAGEMENT (34 POINTS)~~

~~ESG/IEQ-14: 6.2.1.1.4 IAQ MANAGEMENT~~

~~ESG/IEQ-14 Reason: Update numbers throughout 6.2.1 to 6.1.4~~

~~ESG/IEQ-15: 6.2 HAZARD MITIGATION (16 POINTS)~~

~~ESG/IEQ-16: 6.2.3.1 ASBESTOS~~

~~ESG/IEQ-16 Reason: Update numbers throughout 6.3.1 to 6.2.1~~

~~ESG/IEQ-17: 6.2.3.2 RADON~~

~~ESG/IEQ-17 Reason: Update numbers throughout 6.3.2 to 6.2.2~~

~~ESG/IEQ-18: 6.2.3.3 LEAD~~

~~ESG/IEQ-18 Reason: Update numbers throughout 6.3.3 to 6.2.3~~

~~ESG/IEQ-19: 6.3 HAZARD PREVENTION (26 POINTS)~~

~~ESG/IEQ-20: 6.2.3.1 CLEANING & DISINFECTION~~

~~ESG/IEQ-20 Reason: Update numbers throughout 6.2.3 to 6.3.1~~

~~ESG/IEQ-21: 6.2.3.2 INTEGRATED PEST MANAGEMENT (IPM)~~

~~ESG/IEQ-21 Reason: Update numbers throughout 6.2.2 to 6.3.2~~

~~ESG/IEQ-22: 6.3.3.4 HEALTH, SAFETY, AND MANAGEMENT OF CHEMICALS & HAZARDOUS MATERIALS~~

~~ESG/IEQ-22 Reason: Update numbers throughout 6.3.4 to 6.3.3~~

~~ESG/IEQ-23: 6.4.1 DAYLIGHTING & ELECTRICAL LIGHTING FEATURES~~

~~ESG/IEQ-24: 6.4.2 LIGHTING QUALITY & MANAGEMENT~~

~~ESG/IEQ-24 Reason: Update numbers throughout 6.4.2 to 6.4.1.~~

~~ESG/IEQ-25: 6.5 THERMAL COMFORT, HEALTH, & WELLNESS (38 7 POINTS)~~

~~ESG/IEQ-26: • 6.5.1A Path A: ASHRAE 55 Assessment: 3 4 points~~

~~OR~~

~~• 6.5.1B Path B: ISO Standards Based Assessment: 3 4 points~~

~~6.5.1A.1 Comfort levels have been evaluated using Section 7 Evaluation of Comfort in Existing Buildings.~~

~~34 points~~

~~6.5.1B.1 HVAC systems and the building envelope have been designed to meet ISO 7730: 2005 and ISO 17772-2017.~~

~~34 points~~

~~ESG/IEQ-27: 6.6 ACOUSTICAL PRIVACY & COMFORT (14 POINTS)~~

~~ESG/IEQ-27 Reason: Update numbers throughout 6.5.2 to 6.6.~~

~~ESG/IEQ-28: 6.7 OCCUPANT COMFORT & WELLNESS (15 POINTS)~~

~~ESG/IEQ-28 Reason: Update numbers throughout 6.5.3 to 6.7.~~

~~ESG/IEQ-29: 6.7.1.5.3.1 There is convenient access to potable drinking water, including water bottle refilling stations available throughout the building.~~

~~ESG/IEQ-30: 6.5.3.2 There are water bottle refilling stations available throughout the building.~~

~~2 points~~

~~ESG/IEQ-31: 6.5.3.7.1.2 The incoming potable water for the building has been tested and if the There is a water quality report indicates needs for improvement there is a remediation policy available for the primary drinking water source.~~

~~2 points~~

~~ESG/IEQ-32: 6.5.3.4 If the water quality report indicates needs for improvement there is a remediation policy.~~

~~2 1 points~~

~~ESG/IEQ-33: 6.5.4.7.2.2 The following is in place for stairwells:~~

~~6.5.4.2.1 If the building is multi-story, the building includes a minimum of one centrally located, highly visible stairwell that is fully accessible by all building occupants from each floor.~~

~~6.5.4.2.2 If the building is multi-story, There are cues, signage, or other design features that encourage use of stairs over the elevator or escalator.~~

~~6.5.4.2.3 Best practices for stair safety are observed by including a minimum of two of the following:~~

- Handrails
- Materials
- Lighting
- Visual cues

Maximum = 4 1 points

- ~~Two points are earned for 6.5.4.2.1.~~
 - o Not applicable if the building is one story.
- ~~One point is earned for 6.5.4.2.2.~~
 - o Not applicable if the building is one story.
- ~~One point is earned for 6.5.4.2.3.~~
 - o Not applicable if the building is one story.

ESG/IEQ-34: 6.7.2.5.4.3 If a building includes Food and/or Vending Services, contracts provide the following is included:

ESG/IEQ-35: 6.7.2.5.4.4 The building includes:

- 6.7.2.4.1 ~~a~~ An exercise room and/or fitness center or is access to an off-site fitness facility available for use by building occupants.
- 6.7.2.4.2 A multi-purpose room that includes the scheduling of exercise classes, nutritional educational classes, and other similar scheduled events that focus on health and wellness.

Maximum = 2 points

- One point is earned for 6.7.2.4.1.
- One point is earned for 6.7.2.4.2.

ESG/IEQ-36: 6.7.2.5.4.5 The building includes the following staff spaces that promote health and wellness:

- 6.7.2.5.4.5.1 ~~Break areas that accommodate space for eating meals.~~
- 6.5.4.5.2 ~~Policy for regularly cleaning appliances within staff break room.~~
- 6.5.4.5.3 ~~A quiet room that provides individual privacy.~~
- 6.7.2.5.4.5.4 ~~A lactation room that includes a lactation station, refrigerator, and sink.~~
- 6.5.4.5.5 ~~A multi-purpose room that includes the scheduling of exercise classes, nutritional educational classes, and other similar scheduled events that focus on health and wellness.~~

Maximum = 5 2 points

- One point is earned for 6.7.2.5.4.5.1.
- ~~One point is earned for 6.5.4.5.2.~~
- ~~One point is earned for 6.5.4.5.2.~~
- One point is earned for 6.7.2.5.4.5.4.
- ~~One point is earned for 6.5.4.5.5.~~

ESG/IEQ-37: 6.5.4.6 On the main entry floor:

- 6.5.4.6.1 ~~T~~ here is a public amenity with signage, such as a café, library, etc. available for public access.
- 6.5.4.6.2 ~~There is dedicated signage near a building entry for the public amenity being provided.~~

Maximum = 2 1 points

- ~~One point is earned for 6.5.4.6.1.~~
- ~~One point is earned for 6.5.4.6.2.~~

ESG/IEQ-38: 6.2.1.1.4.3 ~~There is a policy and procedure are procedures and policies for maintaining the air quality that include the following components: good IAQ that include:~~

- ~~6.2.1.1.4.3.1~~ HVAC operations
- ~~6.2.1.1.4.3.2~~ Housekeeping procedures
- ~~6.2.1.1.4.3.3~~ Preventive maintenance
- ~~6.2.1.1.4.3.4~~ Procedures for unscheduled maintenance
- 6.1.4.3.5 Operations and maintenance of UVGI or other technologies including ionization of particles to address potential infectious particles
- ~~6.2.1.1.4.3.6~~ Utilizing low-emitting products and materials that have conforming VOC content limits and low VOC emissions for maintenance and cycle renovations

Products shall meet testing requirements found in and be in compliance with California Department of Public Health (CDPH) Standard Method v1.2, Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers, using private office scenario.

Adhesives and sealants shall meet CDPH/EHLB Standard Method V1.2, private office scenario and SCAQMD Rule 1168, Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168.}

Maximum = 10 points

- Two points are earned for 6.2.1.1.4.3.1.
- Two points are earned for 6.2.1.1.4.3.2.
- Two points are earned for 6.2.1.1.4.3.3.
- Two points are earned for 6.2.1.1.4.3.4.

- Two points are earned for 6.2.1.1.4.3.5.

- Two points are earned for 6.1.4.3.5.

ESG/IEQ-46: 6. INDOOR ENVIRONMENTAL QUALITY (203 205 POINTS)

CB-1: • Environmental, Social, & Governance (ESG) Management (1075 points)

- Site (95 points)
- Energy (310 points)
- Water (185 points)
- Materials (100 points)
- Indoor Environmental Quality (2035 points)

CB-2: Indoor Environmental Quality

- IEQ Systems & Measures
- ~~Hazard Mitigation IE Management~~
- Hazard Prevention
- Lighting
- ~~Thermal Comfort,~~
- Thermal Comfort
- Occupant Health, & Wellness

CB-3: ENVIRONMENTAL, SOCIAL, & GOVERNANCE (ESG) MANAGEMENT (1075 points)

INDOOR ENVIRONMENTAL QUALITY (2035 points)

MOTION: The Motion was made and seconded to accept the proposed changes to the IEQ Assessment Area and the changes to the front summary pages of the draft standard.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

ESG/IEQ-39 – ESG/IEQ-45

ESG/IEQ-39: 6.6 ACOUSTICAL PRIVACY & COMFORT (14 POINTS)

ESG/IEQ-39 Reason: Raise total points for section from 5 to 14.

~~ESG/IEQ-40: 6.5.2.1 Noise limits have been evaluated.~~

~~1 point~~

~~6.5.2.2 An acoustical plan has been developed to address acoustical privacy and comfort.~~

~~1 point~~

~~6.5.2.3 If there is a sound masking system, it has been measured in accordance with ASTM E1573-18.~~

~~1 point~~

~~• Not applicable if there is no need for a sound masking system or if there is no sound masking system.~~

~~6.5.2.4 There are spaces available to engage in a private conversation, make telephone calls, or complete focused work without noise distraction.~~

~~1 point~~

~~• Not applicable for unoccupied buildings and buildings with no regular working occupants.~~

~~6.5.2.5 There are a variety of workspaces available that meet the acoustical needs of the building occupants.~~

~~1 point~~

~~• Not applicable for unoccupied buildings and buildings with no regular working occupants.~~

ESG/IEQ-41: 6.6.1 ACOUSTICAL PROGRAM

6. 6.1.1 The acoustical program includes provisions dedicated for 'quiet' spaces for occupants; for reasons which include focus work, in-person, phone and teleconference meetings, and relaxation. 1 point

6. 6.1.2 The acoustical program establishes noise limit criteria and sound masking levels for occupiable spaces. 1 point

6. 6.1.3 The acoustical program establishes acoustical expectations for privacy for spaces. 1 point

6. 6.1.4 The acoustical program establishes requirements for reverberation time for spaces. 1 point

ESG/IEQ-42: 6.6.2 BACKGROUND NOISE LIMITS

6. 6.2.1 Background noise levels in spaces, measured and assessed in accordance with ANSI/ASA S12.72-2015(R2020) Measuring The Ambient Noise Level In A Room, comply with noise criteria limits, as defined in the acoustical program. Maximum = 2 points

• 2 points are earned if ≥10% of spaces are assessed.

• 1 point is earned if ≥5% to <10% of spaces are assessed.

ESG/IEQ-43: 6.6.3 SOUND MASKING SYSTEMS

6. 6.3.1 There is a sound masking system, and a report in accordance with ASTM E1573-18 Standard Test Method for Measurement and Reporting of Masking Sound Levels Using A-Weighted and One-Third-Octave-Band Sound Pressure Levels, showing its operation to be in compliance within tolerances of the specified overall masking sound level and spectrum for occupiable spaces, as defined in the acoustical program. 3 points

ESG/IEQ-44: 6.6.4.1 Reasonable safeguards to provide acoustical and speech privacy are assessed and reported in accordance with ASTM E336-20 Standard Test Method for Measurement of Airborne Sound Attenuation between Rooms in Buildings, ASTM E1130-16 Standard Test Method for Objective Measurement of Speech Privacy in Open Plan Spaces Using Articulation Index and/or ASTM E2638-10(2017) Standard Test Method for Objective Measurement of the Speech Privacy Provided by a Closed Room.
• 2 points are earned if ≥10% of enclosed room partitions are assessed.

6.6.4.2. Assessment results in 6.6.4.1 show compliance with expectations for privacy, as defined in the acoustical program.

6.6.4.2.1 If reasonable safeguards do not meet acoustical expectations for privacy established in the acoustical program, remediation strategies are explored and implemented.

6.6.4.2.2 Remediation efforts are reassessed according to the methods in 6.6.4.1.

Maximum = 2 points

• 2 points are earned for 6.6.4.2.

OR

• 1 point is earned for 6.6.4.2.1.

• 1 point is earned for 6.6.4.2.2.

ESG/IEQ-45: 6.6.5 REVERBERATION TIME

6.6.5.1 There are acoustical treatments in spaces, measured and assessed in accordance with Section A.4 Verification of conformance to reverberation time requirements of ANSI/ASA S12.60-2015(R2020) Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools, showing compliance with reverberation time requirements, as defined in the acoustical program. 1 point is earned if ≥10% of occupiable spaces are assessed.

MOTION: The Motion was made and seconded to accept the proposed changes to the Acoustical Comfort section.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

CB-4

Proposed Revision: Update numbering throughout whenever a change is needed.

Discussion took place on the Editorial Revision:

- There was no concern or objection to updating the numbering of criteria where needed.

CB-5

Proposed Revision: Update V. Definitions, and VI, References & Guideline when needed.

MOTION: The Motion was made and seconded to accept necessary revisions to sections V and VI.

Discussion took place on the Motion:

- The Secretariat stated that this motion would allow GBI staff to update the sections to accurately portray what was passed throughout the draft standard by the Consensus Body for Existing Buildings.

VOTE: The Motion carries with 10 in favor, 0 opposed, 1 abstained.

Abstain: Jane Rohde

Public Participation

There was no discussion.

New Business

There was no new business.

Action Items

GBI staff reminded participants that the next meeting is on Wednesday, November 17, 2021, from 3:00-5:00pm ET.

MOTION: The motion was made, seconded, and carried unanimously to adjourn.

Meeting adjourned at 5:00 PM EST.