



MINUTES

GBI Consensus Body - Call #10 Webinar/Teleconference September 3, 2020 from 12:00 to 2:00 p.m. ET

NOTE ALL TIMES ARE EASTERN TIME

Consensus Body Members in Attendance

Full Name	Organization	9/3/20	8/13/2020	8/6/2020	7/17/2020	6/26/2020	6/19/2020
Gregg Bergmiller	The S/L/A/M Collaborative	X (Arrived Late)	Absent	х	Absent	X	X
Benjamin Bojda	Dominion Environmental Consultants NV, Inc	X	X	Х	Absent	Х	Х
Jeff Bradley	American Wood Council	Х	Х	Х	Х	Х	Х
Karen Butler	EPA	X	X	X	X	X	X
Virgil Campaneria	Gurri Matute PA	X (Arrived Late)	х	X (Proxy Shymko)	x	X	Х
John Cross	American Institute of Steel Construction	X	X	Absent	N/A	N/A	N/A
Michael Cudahy	PPFA - PPEF	X	Х	Х	X	X	Х
Chris Dixon	Morrison Hershfield	Х	Х	Х	Х	Х	Х
David	Grumman/Butkus	Х	Х	Х		Absent	(Proxy
Eldridge	Associates	(Arrived Late)					Shymko)
Josh Jacobs	UL	X	X (Left Early)	Absent	X	Absent	Х
Gary Keclik	Keclik Associates Ltd.	Х	X	X (Proxy Rohde	X	Х	Х
Charles Kibert	University of Florida	Х	Х	Х	X (Acting as Chair)	Х	Х
Michael Lehman (Chair)	Chair	Х	Absent	Absent	Absent	X	Х
Tim Miller	Sidock Group Inc	Absent	Absent	Absent	Х	Absent	Х
James O'Brien	Independent Environmental Consultant	X	Х	Х	X	X	Х
Jane Rohde	JSR Associates, Inc., The Vinyl Institute / Resilient Floor Covering Institute	X (Arrived Late)	X (Arrived Late)	Х	x	X	X
Kirk Sander	National Waste and Recycling Association	Absent	X (Left Early)	X (Left Early)	Absent	Absent	Х
Gord Shymko	G. F. Shymko & Associates Inc.	Х	X	X	X	Х	Х

Stephen	American Concrete	Х	Х	Х	X	Х	Х
Szoke	Institute	(Arrived					
		Late)					
Kyle	IAPMO	Х	Х	Absent	N/A	N/A	N/A
Thompson							
Angela Tin	American Lung Association	Х	Х	Х	Х	Х	Х
Doug	Mitsubishi Electric US, Inc.	Absent	Х	Х	Х	Х	Х
Tucker							

Voting Alternate in Attendance

Full Name	Organization	9/3/20	8/13/20	8/16/2020	7/17/2020	6/26/2020	6/19/2020
Dan Cole	IAPMO	N/A	N/A	Х	N/A	N/A	N/A

Interested Parties in Attendance

Full Name	Organization	9/3/20	8/13/20	8/6/2020	7/17/2020	6/26/2020	6/19/2020
Tara Brooks	American Lung Association	Х				х	х
John Cross	American Institute of Steel Construction				х		х
Domenic DeCaria	The Vinyl Institute			х	х		
Robyn Dowsey	Eco Build Strategies						х
Larry Eisenberg	Ovus Partners 360	Х			х	х	х
Michael Gardner	M Gardner Services, LLC						х
Sara Greenwood	The Greenwood Consulting Group, LLC	Х					
Jonathan Humble	American Institute of Steel Construction			х	x		
Jim Kendzel	American Supply Association					х	
Alison Kinn Bennett	EPA		X				
Viken Koukounian	K.R. Moeller Associates Ltd.	Х	X	х	х		х
Emily Lorenz	Independent Consulting Engineer	Х	X		х		Х
Cambria McLeod	Kohler Company						х
Kyle Thompson	ΙΑΡΜΟ		N/A		х		х
Martha VanGeem	Independent Consulting Engineer		Х	Х		Х	х

Staff in Attendance

Full Name	Organization	9/3/20	8/13/20	8/6/2020	7/17/2020	6/26/2020	6/19/2020
Vicki Worden	President & CEO, GBI	Absent	Absent	Absent	Absent	Absent	Absent

Emily Marx	Secretariat, GBI	Х	Х	Х	Х	Х	Х
Megan Baker	Staff, GBI	Absent	Absent	Absent	Absent	Absent	Absent
Kate Callahan	Staff, GBI	Absent	Absent	Absent	x	Х	Х
Elizabeth Fjerstad	Staff, GBI	Absent	Absent	Absent	x		
Sara Rademacher	Staff, GBI	Х	Х	Х	Absent	Х	Х
Micah Thomas	Staff, GBI	Х	Х	X	Absent	Absent	Absent
Adam Wellen	Staff, GBI	Absent	Absent	Absent	Absent	Absent	Absent

Welcome

Chair Michael Lehman welcomed everyone to the meeting.

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.

Administrative Items

Lehman reviewed the minutes from meeting #9 on August 13, 2020 and asked if anyone had any comments or concerns. No objections or concerns were raised.

MOTION: A Motion was made, seconded, and carried unanimously to approve the minutes from meeting #9 on August 13, 2020 as presented.

Lehman reviewed the topics on the agenda and asked if anyone had comments or concerns. No objections or concerns were raised.

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

Jane Rohde and David Eldridge joined the call.

Materials Assessment Area

CB-17

Proposed Revision:

10.4.1.1 Points are earned <u>based on the Sustainable Materials Index (SMI)</u>, 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 based on adding percentages of materials, by material cost, that carry the pre-consumer recycled content, post-consumer recycled content, biobased content, or third party sustainable forestry certification content attribute, 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.

Product Sustainable Attribute MaterialSustainablilitySustainable Materials Index (%) or Percentage =

100 x multiplied by

(\$ value of Ppre-consumer recycled content-%

+

<u>\$ value of</u> Ppost-consumer recycled content-%

- +
- <u>\$ value of b</u>eiobased content %

+

<u>\$ value of t</u>+hird <u>p</u>Party <u>s</u>Sustainable <u>f</u>Forestry <u>c</u>Certification content-%

+

\$ value of Eco-Certified Composite/TMV

Use the formula below above to determine the percentages by cost of the products that carry the listed attributes. 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.

Sustainable Attribute % = Sum for all materials: (Portion of the Material with the Attribute x materials cost)/(Total Material Value)

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.

Discussion took place on the Proposed Revision:

Charles Kibert presented the proposed change and stated that it is to simplify how to determine the appropriate
percentage of recycled content. He noted that in the first sentence it should state "Sustainable Materials Index
(SMI)," which was updated by Marx.

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

Discussion took place on the Motion:

• No discussion took place on the motion.

VOTE: The Motion carries with 12 in favor, 1 opposed, 2 abstained.

Opposed: Josh Jacobs

Abstain: Kyle Thompson, David Eldridge

Virgil Campaneria joined the call.

Materials Task Group-4 Proposed Revision:

. Maximum = <u>10</u> 15 points

Points are earned where the Product-Sustainable Attribute Materials Index is greater than 10% between 11% and 29% or greater:

- 15 Fifteen points are earned for 38% or greater.
- 14 Fourteen points are earned for 36% through 37%.
- 13 Thirteen points are earned for 34% through 35%.
- 12 Twelve points are earned for 32% through 33%.
- 11 Eleven points are earned for 30% through 31%.
- Ten points are earned for ≥28% through 29%.
- Nine points are earned for $\geq 26\%$ and through < 28227%.
- Eight points are earned for ≥24% and through <2625%.
- Seven points are earned for ≥22% and through <2423%.
- Six points are earned for $\ge 20\%$ and through < 2221%.
- Five points are earned where for $\ge 18\%$ and through < 2019%.
- Four points are earned where for $\ge 16\% \frac{16\%}{3} \frac{110\%}{10\%}$.
- Three points are earned for ≥14% and through <1615%.
- Two points are earned for $\ge 12\%$ and through < 1413%.
- One point is earned for $\geq 1110\%$ and through < 1211%.
- No points are earned for less than <1110%.

Discussion took place on the Proposed Revision:

Marx stated that during a review of the redline changes, there was inconsistencies with the percentages in the
proposed revision for 10.4.1.1. She also noted that there is a text update in the first sentence that is consistent with
the revision passed in the previous motion.

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

Discussion took place on the Motion:

• No discussion took place on the motion.

VOTE: The Motion carries with 13 in favor, 0 opposed, 3 abstained.

Abstain: David Eldridge, Jeff Bradley, Virgil Campaneria

Editorial Proposed Revisions

Marx reviewed a series of editorial revisions and asked for any objections or comments on each proposal.

CB-7

Proposed Revision: 10.2.1.1 Product Manufacturers provide one or more of the following for a minimum of twenty products that at a minimum evaluate the cradle-to-gate product life cycle:

• Third party verified Type III Environmental Product Declarations (EPD) according to ISO 21930: 2007 2017 or ISO 14025: 2006, either product specific or industry average. Environmental Product Declaration developed according to ISO 21930: 2007 shall be acceptable through December 31, 2024-;

Discussion took place on the proposed revision:

• There was no objection to the revision to remove the period after December 31, 2024.

CB-8

Proposed Revision: 10.2.1.2 A minimum of five products include one or more of the following verifications that evaluate the products through end of life (cradle-to-grave product life cycle):

• Third party verified Type III Environmental Product Declarations (EPD) according to ISO 21930: 2007 2017 or ISO 14025: 2006. Environmental Product Declaration developed according to ISO 21930: 2007 shall be acceptable through December 31, 2024.;

Discussion took place on the proposed revision:

• There was no objection to the revision to remove the period after December 31, 2024.

CB-16

Proposed Revision: Occupants in private offices less than 250 ft2 (23.23 m2) and in open office work_station areas can adjust their direct overhead lighting levels via

Discussion took place on the proposed revision:

• There was no objection to the revision to make work station two words throughout the standard.

CB-9

Proposed Revision: • Three points are earned where the test is conducted. There is are no pass/fail criteria for conducting this test.

Discussion took place on the proposed revision:

• There was no objection to the revision.

CB-10

Proposed Revision: 11.3.4.1 A minimum of 75% of electric light sources have a Lumen Maintenance factor of 35,000 hours to L70 or greater (the output of the lights have has lost no more than 30% of their initial output at 35,000 hours). 35,000 hours is based on at least 1 hour of operation per start.

Discussion took place on the proposed revision:

• There was no objection to the revision.

5b-13-c

Proposed Revision: Thank you for your comment. Your comment has been accepted with modification to adopt the new 2018 FGI Guidelines, including new titles for the FGI Guidelines. The revisions is the following:

11.5.5.1 Design complies with background sound levels associated with mechanical systems in accordance with

ANSI/ASA S12.2 Standard "Criteria for Evaluating Room Noise" and as follows:

• Airborne sound power levels from HVAC unit do not exceed the Room Criteria detailed in ASHRAE Systems Application Handbook 2014. Chapter 8, Table 1 for listed spaces when HVAC units are in operation; use <u>one of the following as</u> <u>applicable:</u>

o 2018 FGI Guidelines for Design and Construction of Hospitals

o 2018 FGI Guidelines for Design and Construction of Outpatient Facilities;

o 2018 FGI Guidelines for Design and Construction of Residential Health, Care, and Support Facilities 2014 FGI

Guidelines for Design and Construction of Health Care Facilities; and

• Spaces are designed such that room background noise using the Room Criteria (RC) ratings complies with ASHRAE Systems Application Handbook-2014, Chapter 48, Table1; use <u>one of the following as applicable:</u>

o 2018 FGI Guidelines for Design and Construction of Hospitals

o 2018 FGI Guidelines for Design and Construction of Outpatient Facilities 2014 FGI Guidelines for Healthcare Spaces. o 2018 FGI Guidelines for Design and Construction of Residential Health, Care, and Support Facilities Discussion took place on the proposed revision:

• Marx explained that the motion made on 5b-13-c was to accept the comment. However, the response states "accepted with modification." The proposal is to remove "with modification" in the response to the commenter. There was no objection to the revision.

CB-11

Proposed Revision: reclaimed [recycled] water: highly treated waste-water that can be used for irrigation or other non-potable uses to extend water supplies.

Discussion took place on the proposed revision:

• There was no objection to the revision to make wastewater one word throughout the standard.

CB-12

Proposed Revision: Points are earned where products include one of the listed third_party verifications/certifications **Discussion took place on the proposed revision:**

• There was no objection to the revision to hyphenate third-party throughout the standard.

CB-13

Proposed Revision: Reasons for Use of <u>Non-Not</u> applicable Criteria Discussion took place on the proposed revision:

• There was no objection to the revision.

CB-14

Proposed Revision: ASTM E336-14 Standard Test Method for Measurement of Airborn<u>e</u> Sound Attenuation between Rooms in Buildings

Discussion took place on the proposed revision:

• There was no objection to the revision.

CB-15

Proposed Revision: The analysis is a life cycle cost analysis (LCCA) that compares the life-time benefits of ownership to the subsequent costs. The analysis accounts for and cle?arly states all calculation assumptions related to: **Discussion took place on the proposed revision:**

• There was no objection to the revision to make lifetime one word throughout the standard.

Stephen Szoke joined the call.

Site Assessment Area

8-21

Public Comment: 7.3.5 Bird Strikes

• No construction or site disturbance takes place in bird migration or flyaway zones

OR

• Techniques/materials are used throughout 50% of the building exterior to mitigate bird strikes.

Informational Reference(s):

• Cornell Lab of Ornithology: https://mailchi.mp/cornell/release-study-lists-top-cities-where-lights-endanger-migratorybirds

• San Francisco Planning, Standards for Bird-Safe Buildings: https://sfplanning.org/standards-bird-safe-buildings, and Bird-Safe Building Checklist: http://default.sfplanning.org/publications_reports/bird_safe_bldgs/Standards for Bird Safe Buildings - 11-30-11.pdf

• Chicago, Bird Friendly Building Ordinance (proposed): https://birdfriendlychicago.org/ordinance

Reason: Add criteria on bird strikes

Resources:

• Cornell Lab of Ornithology: https://mailchi.mp/cornell/release-study-lists-top-cities-where-lights-endanger-migratory-birds

• San Francisco Planning, Standards for Bird-Safe Buildings: https://sfplanning.org/standards-bird-safe-buildings, and Bird-Safe Building Checklist: http://default.sfplanning.org/publications_reports/bird_safe_bldgs/Standards for Bird Safe Buildings - 11-30-11.pdf

• Chicago, Bird Friendly Building Ordinance (proposed): https://birdfriendlychicago.org/ordinance

Recommended Response:

Thank you for your comment. Your comment has been accepted with modification because of the need to provide more clarity and more information. The modification is the following: <u>7.3.5 Bird Strikes</u>

7.3.5.1 Measures to address bird strikes include, but are not limited to the following:

Glass and Façade Treatments:

Fritted and Frosted Glass

Angled Glass

Ultra-Violet Glass

• Film and Art Treatment of Glass

External Screens

• Architectural Features

Netting

Other Considerations:

• Wind generators

• Lighting Treatments

Location-Related Hazard:

• Buildings located inside of, or within a clear flight path of less than 300 feet from an Urban Bird Refuge (defined below) require treatment when:

o New buildings are constructed

o Additions are made to existing buildings (Note: only the new construction will require treatment)

o Existing buildings replace 50% or more of the glazing within the "bird collision zone" on the façade(s) facing the Urban Bird Refuge

Bird Collision Zone:

The portion of buildings most likely to sustain bird strikes. This area begins at grade and extends upwards for 60 feet. This zone also applies to glass façades directly adjacent to large landscaped roofs (two acres or larger) and extending upward 60 feet from the level of the subject roof.

Maximum = 4 points

• 3 points are awarded earned for implementing measures identified in 7.3.5.1.

• 1 point is awarded earned for assessing and reporting on the design analysis for bird safety. **Discussion took place on the Public Comment:**

• Marx stated that for consistency in the standard "awarded" should be changed to "earned."

MOTION: The Motion was made and seconded to revise "awarded" to "earned".

Discussion took place on the Motion:

• There was no discussion on the text update.

VOTE: The Motion carries with 15 in favor, 0 opposed, 2 abstained.

Abstain: David Eldridge, Stephen Szoke

Water Assessment Area

Water-22

Proposed Revision: <u>9.8 Leak Detection (10 points)</u> Leak detection devices shall comply with IGC 349 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.

9.8.1 Leak Detection

<u>9.8.1.1 Install water leak detection device for all water-intensive applications such as commercial kitchens, commercial laundries, laboratories, pools, spas, etc.</u>

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.

9.8.1.2 Install water leak detection device 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.

9.8.1.3 Link all water leak detection devices to internet or a central Data Management System to store monitor and report data.

<u>1 point</u>

<u>9.8.1.4 Equip chilled or hot water loops or cooling tower make up water supply pipes with lwater leak detection devices.</u> <u>Maximum 1 point or N/A</u>

• One point is earned for adaptive plumbing system leak detection devices.

• Not applicable where there are no chilled or hot water loops.

<u>9.8.1.5.</u> Use tenant water leak detection devices in multi-unit developments. Percentages are based on units with water supply.

Maximum = 5 points or N/A

• Five points are earned when at least 90% of the units in the development include adaptive plumbing system water leak detection.

• Four points are earned when at least 80% of the units in the development include adaptive plumbing system water leak detection.

• Two points are earned when at least 40% of the units in the development include adaptive plumbing system water leak detection.

• One point is -is-earned when at least 20% of the units in the development include adaptive plumbing system water leak detection.

• Not applicable where there is no multi-unit development.

Discussion took place on the proposed revision:

• There was no objection to the editorial revision to remove the second "is" in 9.8.1.5.

5a-2

Public Comment: • One point is earned where at least 80% of each fixture type meets credit requirements; and
Four points are earned where 90% of each fixture type meets credit requirements;

Reason: The responses say "and." This implies the points are cumulative. If 92% of each fixture type meets requirements then do you get 1 point PLUS 4 points for a TOTAL of 5 points? Seems the "and" should be removed. **Recommended Response**: Thank you for your comment. Your comment has been accepted with modification. The calculation methodology has been revised. The new criteria is as follows: Maximum = 45 points or N/A • For points to be earned awarded fifty percent of fixtures must comply.

o Points earned awarded = percentage of compliant fixtures x 45 (fractional points are rounded upward.)

• One point is earned where at least 80% of each fixture type meets credit requirements; and

• Four points are earned where 90% of each fixture type meets credit requirements; and

• Forty-five points are earned where at least 98% of each fixture type meets credit requirements.

Seventy-five total points are deducted if less than 80% of each fixture and fitting type meets credit requirements as
listed in Path D. (Note: Points are deducted from the Water Assessment Area)

- Not applicable where no fixtures or fittings exist.
- Not applicable where Path A, B or C is followed.

Discussion took place on the Public Comment:

- Marx stated that for consistency in the standard "awarded" should be changed to "earned."
- MOTION: The Motion was made and seconded to revise "awarded" to "earned".

Discussion took place on the Motion:

• There was no discussion on the text update.

VOTE: The Motion carries with 16 in favor, 0 opposed, 1 abstained.

Abstain: David Eldridge

Gregg Bergmiller joined the call.

CV-2

Proposed Revision: 6.1.2.1 Employ an Integrated Design Process (IDP) with evidence of comprehensive pre-design, design phase, and construction phase planning and coordination.

Job functions involved in the IDP include but are not limited to the following:

- Architect;
- Building Envelope Specialist;
- Civil Engineer;
- Commissioning Agent;
- Community Representative;
- Electrical Engineer;
- Energy Engineer;
- Facilities Manager;
- General Contractor/Construction Manager:
- o Specialty Contractors;
- Industrial Hygienist or Occupational Health and Safety Professional;
- Infection Control Preventionist;
- Interior Designer;
- Irrigation Designer;
- Landscape Architect or Designer;
- Lighting Designer/Illuminating Engineer;
- Mechanical Engineer Plumbing, HVAC, AND/OR Refrigeration;
- Owner's Representative;
- Structural Engineer;
- Sustainability Consultant;
- AND/OR
- User Group Representative.

Discussion took place on the Proposed Revision:

• Gord Shymko stated that many proposed revisions were discussed by the COVID-19 Task Group and this one had the most agreement.

MOTION: The Motion was made and seconded to accept the proposed revision. Discussion took place on the Motion:

• There was no discussion on the motion.

VOTE: The Motion carries with 14 in favor, 1 opposed, 3 abstained.

Opposed: Josh Jacobs

Abstain: David Eldridge, Stephen Szoke, James O'Brien

Marx asked if the chair would like to have further discussion on the New Business item, CV-1, which was adding two new green design goals to 6.1.1.1. The chair asked for the revision to be sent back to the Task Group for further review.

Public Participation

There were no items discussed during public participation.

New Business

There was discussion on rounding up and whether a formal statement needs to be added to the standard. A member argued that it should be clarified in the Technical Manual. There was a fear that rounding points or percentages could result in doctoring points.

It was agreed to have the Points Allocation Subcommittee review the notion of point rounding during a subsequent meeting.

Action Items

Lehman thanked members for their time and participation working on the Consensus Body and Subcommittees. Marx stated that public commenters will be notified of the Consensus Body responses in the next few days and will have an opportunity to object. If an objection occurs a Subcommittee and Consensus Body meeting will occur to review the public comment and response. She also stated that the redline of the standard will go out for a second round of public comment in mid-September and October and invited members to submit a public comment.

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

Meeting adjourned at 12:48 PM EST.