MINUTES

GBI Consensus Body - Call #13
Webinar/Teleconference
March 12, 2021 from 2:00 to 4:00 p.m. ET

NOTE ALL TIMES ARE EASTERN TIME

Consensus Body Members in Attendance

Full Name	Organization	3/12/21	2/11/21	2/5/21	9/3/20	8/13/2020
Gregg Bergmiller	The S/L/A/M Collaborative	Absent	X	X	X (Arrived Late)	Absent
Benjamin Bojda	Dominion Environmental Consultants NV, Inc	X	X	X	X	X
Jeff Bradley	American Wood Council	X	Absent	Absent	X	X
Karen Butler	EPA	X	X	X	X	X
Virgil Campaneria	Gurri Matute PA	X	X	X	X (Arrived Late)	X
John Cross	American Institute of Steel Construction	X	X	X	X	X
Michael Cudahy	PPFA - PPEF	Absent	X	X	X	X
Chris Dixon	Morrison Hershfield	X	X	X	X	X
David Eldridge	Grumman/Butkus Associates	X	X	X	X (Arrived Late)	X
Josh Jacobs	UL	X	X	X	X	X (Left Early)
Gary Keclik	Keclik Associates Ltd.	Absent	X	X	X	X
Charles Kibert	University of Florida	N/A	N/A	N/A	X	X
Michael Lehman (Chair)	ConTech Lighting	X	X	X	X	Absent
Tim Miller	Sidock Group Inc	Absent	Absent	Absent	Absent	Absent
Amlan Mukherjee	Michigan Technological University	Absent	X	X	N/A	N/A
James O'Brien	Independent Environmental Consultant	X	X	X	X	X
Jane Rohde	JSR Associates, Inc., The Vinyl Institute / Resilient Floor Covering Institute	X	Absent	X	X (Arrived Late)	X (Arrived Late)
Kirk Sander	National Waste and Recycling Association	X	X	X	Absent	X (Left Early)
Gord Shymko	G. F. Shymko & Associates Inc.	X	X	X	X	X
Stephen Szoke	American Concrete Institute	X	X	X	X (Arrived Late)	X
Kyle Thompson	IAPMO	X (Arrived Late)	X	X	X	X
Angela Tin	American Lung Association	X	X	X	X	X
Doug Tucker	Mitsubishi Electric US, Inc.	X	X	X	Absent	X

Voting Alternate in Attendance

Full Name	Organization	3/12/21	2/11/21	2/5/21	9/3/20	8/13/20

Dan Cole	IAPMO	X				
Matt Hunter	American Wood Council	N/A	X	X	N/A	N/A

Interested Parties in Attendance

Full Name	Organization	3/12/21	2/11/21	2/5/21	9/3/20	8/13/20
Tara Brooks	American Lung Association				X	
Larry Eisenberg	Ovus Partners 360		X		X	
Sara Greenwood	The Greenwood Consulting Group, LLC				X	
Greg Hekman	Sustainability, Commercial Solutions		X			
Lawrence Humphries	Efficient Green	X				
Aaron Johnson	Indoor Environments Division / US EPA		X			
Alison Kinn Bennett	EPA			X		X
Viken Koukounian	K.R. Moeller Associates Ltd.	X	X	X	X	X
Emily Lorenz	Independent Consulting Engineer				X	X
Martha VanGeem	Independent Consulting Engineer					X

Staff in Attendance

Full Name	Organization	3/12/21	2/11/21	2/5/21	9/3/20	8/13/20
Emily Marx	Secretariat, GBI	X	X	X	X	X
Sara Rademacher	Staff, GBI	X	X	X	X	X
Micah Thomas	Staff, GBI	X		X	X	X

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 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.

Lehman also reviewed the minutes from meeting #12 on February 11, 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 #12 on February 11, 2021 as presented.

Site Proposal Review

Points-4

Proposed Revision: 7.4.1.1 A ~~civil engineer~~ qualified professional makes a stormwater management report that shows the following:

• 7.4.1.1.1: The project meets a minimum of 80% Total Suspended Solids (TSS) removal or complies with municipal AND/OR local watershed water quality control targets, whichever is more stringent; and
• 7.4.1.1.2: 50% annual average total phosphorus (TP) removal assuming typical pollutant concentrations in urban runoff.
• 7.4.1.1.3: Additional target pollutant removals are as follows:
o Nitrate + nitrite reduction of 40%
AND/OR
o pH below 6.5
AND/OR
o Alkalinity below 10 mg CaCO3/L.
Note: Infiltration is not to be used as a treatment method if the site is located within 0.25 mi (0.4 km) of a lake or wetland.
OR
• 7.4.1.1.4: The site retains at least the 95th percentile storm volume as per a site water balance assessment, to be included in the stormwater management report.

Points-5

Proposed Revision: qualified professional: an individual licensed or accredited by a jurisdictional body, third-party or other recognized organization on the subject matter being addressed.

Discussion took place on the Proposed Revisions for Points-4 and Points-5:

- The vice chair of the Site Subcommittee explained that there was discussion that civil engineer may be too limiting and that there was agreement that a definition for "qualified professional" should be added to the standard as well.

MOTION: The Motion was made and seconded to accept the proposed revisions for Points-4 and Points-5

Discussion took place on the Motion:

- There was discussion of whether the definition fits other instances of when it appears in the standard. The Standard was reviewed, and it was noted that the definition does fit the one other instance that "qualified professional" appears in the standard.
- It was noted that OSHA includes "experience" within the definition of qualified professional.

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

Opposed: Jeff Bradley, John Cross
Abstain: Jane Rohde, Josh Jacobs

Energy Proposal Review

CB-1

Proposed Revision: One additional point is earned for each 2% beyond the requirements of ANSI/ASHRAE/IES Standard 90.1-2013 or 2015 IECC up to an additional 15 points out of a maximum of 20 points for ~~8.3.2.1.1~~ 8.1.1.3.2.1.1.

Discussion took place on the Editorial Proposed Revision:

- Marx noted that during a recent review she found an instance where the number sequence was not updated correctly in summer 2020. There were no concerns about the editorial revision.

Materials Public Comment Review

201-1
Public Comment: 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: 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;
~~• Third-party Multiple Attribute Product Certification; AND/OR~~
• Third-party verified product life cycle assessment based upon ISO 14040: 2006 and ISO 14044: 2006.

10.2.1.2 A minimum of five products include a verification to a Third-party Multiple Attribute Product Certification that evaluates at least the following areas of a product:
•embodied carbon
•embodied water
•end of life
•performance
•manufacturing facility quality control
•manufacturing facility sustainability
~~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: 2017 or ISO 14025: 2006. Environmental Product Declaration developed according to ISO 21930: 2007 shall be acceptable through December 31, 2024; AND/OR~~
~~• Third-party verified product life cycle assessment based upon ISO 14040: 2006 and ISO 14044: 2006. Compliance with 10.2.1.2 can be used for 10.2.1.1~~
Reason:
While EPDs are an incredibly important tool for understanding the carbon crisis that we are in, they should not be given double credit. This rewrite would allow EPDs to still qualify for credit in 10.2.1.1, but would remove them from 10.2.1.2 and have that criteria focus on multi-attribute product standards which don't look for transparency, but for measurement and verification of sustainable attributes across the life cycle of a product.
Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The public commenter asked for the motion to be rejected and to be reviewed again at a later date/meeting.
Discussion took place on the Public Comment:

- The vice chair of the Materials Subcommittee, who also submitted the comment stated that the revision is not ready to be included in the standard at this time because of market constraints.

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 16 in favor, 0 opposed, 0 abstained.

201-2
Public Comment: 10.2.1.1.1 A minimum of at least 5 products are selected that are shown to have lower impacts than an industry average product or previous version of product for at least 3 of the 7 below indicators.

Indicators:

• Global warming potential (GWP)/climate change;
• Acidification potential;
• Eutrophication potential;
• Ozone depletion potential (ODP);
•Photochemical Ozone Creation Potential;
•Depletion of Abiotic Resources (Elements); and
•Depletion of Abiotic Resources (Fossil Fuels)

This can be shown thru third-party verified publicly available life cycle assessment or Third-party verified Type III EPD.

When comparing these the same Product Category Rules for EPDs shall be used for Product to Product or Product to Industry Wide EPD comparison and the LCA software and datasets shall be the same when comparing LCAs.
Reason: Transparency of environmental impacts is only half the battle. Selecting products based on their impact is where the true sustainable concepts are implemented. While rewarding projects that select products that have EPDs is imperative to getting to the first step of understanding, rewarding projects that actually select lower embodied impact materials should be done to help us accelerate sustainable building.
Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: GBI embraces the concept of the proposal but the language needs to be refined throughout standards.
Discussion took place on the Public Comment:

- The vice chair of the Materials Subcommittee, who is also the commenter stated that the criteria should be included at some point in time but that the industry is not ready yet for this requirement.

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 stated that it could possibly be included during the next revision cycle.

VOTE: The Motion carries with 16 in favor, 0 opposed, 0 abstained.
Abstain: Josh Jacobs

202-1
Public Comment: Maintain points at 30; or, points should be equal to or greater than points available in section 10.2
Reason: The push towards product specific environmental disclosure, and specifically GWP, is shifting environmental impact reduction to manufacturers. This shift has become immediate, and the reality is that manufacturing processes (steel, cement, glass, aluminum, plastics, etc.) have been optimized over decades, but can't completely redesign manufacturing in the immediate future. Maintaining a significant status of WBLCA is important as the transition between operating to embodied occurs over time. By reducing the points, I believe it lessens the professional services (Arch/Eng) focus to optimize their design and placement of building materials.
Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: While whole building LCA is a difficult task and is important, it is not used widely in the market today compared to other criteria in this section. Thus, the Subcommittee and Consensus Body voted to allocate points to other areas.
Discussion took place on the Public Comment:

- The vice chair of the Materials Subcommittee noted that the topic does have a lot of value but that points should be used in other areas at this point in time.

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 noted that if GBI wants to push the industry to complete EPDs and LCAs, then we should better incentivize it.

VOTE: The Motion carries with 10 in favor, 3 opposed, 3 abstained.
Opposed: David Eldridge, James O'Brien, Stephen Szoke
Abstain: Jane Rohde, Jeff Bradley, Kirk Sander

205-5
Public Comment: Delete entire section
~~10.3.1 Occupant Exposure Screening Report (OESR)~~
~~10.3.1.1 Select at least one formulated product or article 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.~~
Reason: While occupant exposure screening reports might be a good concept, ASTM 3182-2020 is a new standard and I am not aware of any occupant exposure screening reports that comply with ASTM 3182. Moreover, it is not clear that these contain more information than what is already available in MSDS, and if they do, whether the information is useful or worth the cost of an occupant exposure screening report.
Manufacturer's funds are probably better used improving their products, or preparing LCAs or EPDs, rather than complying with another reporting mechanism especially since this is so similar to an MSDS.
I caution the committee against adopting criteria that has never been used before.

Recommended Response: Thank you for your comment. Your comment as been rejected for the following reason: The Subcommittee feels that this is an important part of the rating system and this should be retained. It is not similar to a MSDS and while new, the standard is available for manufactures to use and provide the required the OESR.

Discussion took place on the Public Comment:

- It was stated that the criterion was just revised during the last update in summer 2020 and the prior reference was not being updated and thus, something had to replace it. The OESR was the best option.

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 noted that OESR is not heavily used yet and it may be best to review this section again in the near future.

VOTE: The Motion carries with 12 in favor, 1 opposed, 3 abstained.

Opposed: Josh Jacobs

Abstain: Gord Shymko, Kirk Sander, Stephen Szoke

Materials-3, Materials-4, Materials-5, Materials-7

Materials-3 Proposed Revision: ~~CAS Numbers~~

Materials-4 Proposed Revision: ~~product formulation~~

Materials-5 Proposed Revision: ~~recovered [reclaimed] material~~

deconstruction: the systematic dismantling and removal of a structure or its parts to salvage and harvest the components, for the purpose of reusing and recycling the reclaimed materials for their maximum value; the disassembly of a building with the explicit intent of recovering building materials for safe and economical reuse. Reclaimed material is material that would have otherwise been disposed of as waste or used for energy recovery (e.g., incinerated for power generation), but has instead been collected and recovered as a material input, in lieu of virgin primary material, for recycling or a manufacturing process.

Materials-7 Proposed Revision: ~~recycled material~~

Discussion took place on the Proposed Revision:

- It was noted that the definitions are to all be removed except for "deconstruction" which will also include the definition of "reclaimed material."

MOTION: The Motion was made and seconded to remove the definitions for CAS numbers, product formulation, and recycled material, and to update the definition of deconstruction.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 15 in favor, 0 opposed, 1 abstained.

Abstain: Jeff Bradley

Indoor Environment Public Comment Review

204-1

Public Comment: In "Table 11.2.1.2: Paint and Coatings VOC Content Criteria" change the limit for Low Solid Coatings from 100g/L to 120g/L. Also add an asterisks to indicate that Low Solid Coatings VOC units are VOC per liter of coating including water and exempt compounds.

Reason: "Table 11.2.1.2: Paint and Coatings VOC Content Criteria" states that "The VOC content conforms to the California Air Resources Board Suggested Control Measure for Architectural Coatings, February 1, 2008 (CARB 2007 SCM) VOC limits. VOC limits are expressed as grams of VOC per liter less water and less exempt compounds, with no exception for methylene chloride and perchloroethylene."

CARB states that the VOC for Low Solids Coatings should be in the units of VOC per liter of coating including water and exempt compounds. The value listed in the table should be 120 g/L (including water and exempt compounds) for Low Solid Coatings per CARB. In order to be considered as a "low solids" coating, the product must contain <=1 lb of solids per gallon of material.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification for the following reason:

We are removing the table so that there is no conflict with the VOC limits between the rating system and the referenced standard.

The revision is as follows:

11.2.1.2 Paints and coatings applied on site within, or are a part of, the building's continuous plane of air tightness

comply with ~~prescribed limits of~~ VOC content limits detailed in CARB 2007 SCM for 90% of products by volume AND/OR VOC emissions criteria) for 70% of products by volume.

~~Table 11.2.1.2: Paint and Coatings VOC Content Criteria~~

Discussion took place on the Public Comment:

- It was stated that the table for 11.2.1 has been updated since the last version in 2019. It was discussed that it would be best to reference the exact reference and not the actual table.

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 16 in favor, 0 opposed, 0 abstained.

IE-4, IE-5, IE-6, IE-7, IE-8, IE-9, IE-10, IE-11

Proposed Revision: Updates to the Acoustic Comfort Section

Discussion took place on the Proposed Revision:

- The chair of the Indoor Environment Subcommittee noted that some text has been removed but a lot of the criteria was moved around to different sub-sections. The chair of the Acoustic Comfort Task Group presented the proposal and stated that a group of SMEs met throughout the winter to update the section.

MOTION: The Motion was made and seconded to accept the proposed revisions to the Acoustic Comfort Section.

Discussion took place on the Motion:

- There was no discussion.

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

Front/Back End Public Comment Review

203-1

Public Comment: Update references throughout document for ANSI/ASHRAE/IES Standard 90.1 – 2013 to the most current revision which is 2019

Reason: Important to referenced the most current revisions to standards referenced in the document.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The various versions of ASHRAE 90.1 that are cited throughout the standard set a baseline which reflects market conditions and allows for the improvement and awarding of points for performance beyond that baseline.

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 16 in favor, 0 opposed, 0 abstained.

Points-3

Proposed Revision: 6.5 Commissioning or Systems Manual & Training (29 points)

6.5.1 Commissioning or Systems Manual & Training
Path A or B
Two paths are available for assessing Commissioning or Systems Manual & Training.

• 6.5.1A.1 Path A: Building Commissioning and Training: 29 points
OR
• 6.5.1B.1 Path B: Systems Manual and Training: 20 points
6.5.1A.1 Path A: Building Commissioning and Training
6.5.1A.1.1 Commissioning and building operator training is conducted in accordance with ANSI/ASHRAE/IES Standard 202–2018, Commissioning Process for Buildings and Systems, and ASHRAE Guideline 0-2019, The Commissioning Process, and ASTM E2813-18 Standard Practice for Building Enclosure Commissioning and ASTM E2947-16a Standard Guide for Building Enclosure Commissioning for the following building systems as applicable:
• 6.5.1A.1a~~.1.1~~: HVAC&R systems and controls;
• 6.5.1A.1b~~.1.2~~: Building envelope;

• 6.5.1A.1c.~~1.3~~: Lighting systems and controls;
• 6.5.1A.1d.~~1.4~~: Plumbing;
• 6.5.1A.1e.~~1.5~~: Irrigation systems;
• 6.5.1A.1f.~~1.6.~~ Electrical system including all renewable electrical generation;
• 6.5.1A.1g.~~1.7~~: Elevating and conveying systems;
• 6.5.1A.1h.~~1.8~~: Communication AND/OR Sound Masking systems; AND/OR
• 6.5.1A.1i.~~1.9~~: Other significant functional AND/OR energy systems (describe) that account for 10% or more of the total building energy use (describe).

Discussion took place on the Editorial Proposed Revision:

- Marx explained that the revision is to add a letter to the number sequences of paths to help differentiate between them. There were no concerns or objections.

Points-6

Proposed Revision: Move the sections of 5.2 Abbreviations and Acronyms and 12 References and Guidelines to outside of the standard and have them be informative only.

Discussion took place on the Proposed Revision:

- Marx stated that the revision is to remove 5.2 Definitions, Abbreviations and Acronyms and 12 References and Guidelines to outside of the standard and have them be informative only so that they can be updated by the Secretariat accordingly after all revisions have been reviewed and approved by the Consensus Body.

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 15 in favor, 0 opposed, 1 abstained.

Abstain: Kirk Sander

Points-7

Proposed Revision: Revise all relevant criteria with the use of the greater than (>) and lesser than (<) signs.

Discussion took place on the Proposed Revision:

- Marx stated that the revision is to use the greater than (>) and lesser than (<) signs consistently throughout the standard.

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 16 in favor, 0 opposed, 0 abstained.

CB-2

Proposed Revision: ~~Smart Water Application Technology (SWAT)~~

Discussion took place on the Proposed Revision:

- Marx stated that the Smart Water Application Technology (SWAT) was removed from the standard with the acceptance of 206-27.

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 16 in favor, 0 opposed, 0 abstained.

CB-3

Proposed Revision: lavatory faucet(s)~~.~~: a fitting that controls the flow of water into a *lavatory*.

Discussion took place on the Editorial Proposed Revision:

- Marx stated that the period should be removed for grammatical reasons. There were no objections.

Kyle Thompson joined the meeting and Dan Cole, his voting alternate, left.

Public Comment: **Integrated water factor (IWF)**: the quotient of the total weighted per-cycle water consumption for all wash cycles in gallons ~~cold wash~~ divided by the cubic foot (or liter) capacity of the clothes washer.
Reason: Revised definition to be consistent with ENERGY STAR's definition for integrated water factor, as indicated in the ENERGY STAR Program Requirements Product Specification for Clothes Washers. https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Final%20Version%208.0%20Clothes%20Washer%20Partner%20Commitments%20and%20Eligibility%20Criteria.pdf
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:

- It was argued that liter should be by cubic foot as well, like it is written for gallon.
- It was noted that the definition is on the size of the washing machine, as well as how much water the machine uses.
- It was stated that the size of the machine does not matter, but how much water is being used. However, it was argued that the text needs to be updated to have it make sense.
- It was noted that the decision should be whether it is gallon or liter divided by cubic foot.
- It was agreed that Energy Star should be notified of the possible mistake.
- There was agreement that more research is needed to update the definition to ensure it is correct.

VOTE: The Motion carries with 8 in favor, 4 opposed, 4 abstained.
Opposed: Benjamin Bojda, Gord Shymko, Kirk Sander, Stephen Szoke
Abstain: James O'Brien, Josh Jacobs, Karen Butler, Kyle Thompson

206-1
Public Comment: ~~**landscape irrigation sprinkler(s):** hydraulically operated mechanical device that discharges pressurized water into the air through a nozzle(s) as a spray or stream of water.~~
landscape irrigation sprinkler(s): An emission device consisting of a sprinkler body with one or more orifices to convert irrigation water pressure to high velocity water discharge through the air, discharging a minimum of 0.5 gallon per minute (1.9 liters per minute) at the largest area of coverage available for the nozzle series when operated at 30 psi (206.8 kPa) or more with a full-circle pattern.
Spray. A sprinkler that continuously applies water in a pattern to a defined landscape area.
Rotor. A sprinkler that applies water in a pattern by means of one or more rotating streams to a defined landscape area.
Reason: Replace and expand definitions of sprinklers and other irrigation emission devices to be consistent with those included in consensus-based standard (i.e., ASABE/ICC 802-2014 Landscape Irrigation Sprinkler and Emitter Standard). The ASABE/ICC 802-2014 is under revision and expected at the end of 2020. Depending on the timing of the publication of *ANSI/GBI 01-2019 Green Globes Assessment Protocol for Commercial Buildings*, if available at time of publication, we recommend using the revised definitions.
Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The submitter is including substantive requirements within the definition and some additions are not currently included in the standard or the suggested revisions.
Discussion took place on the Public Comment:

- The Water Subcommittee Vice Chair argued that the definitions should not include requirements, but that the criteria should.

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 14 in favor, 0 opposed, 2 abstained.
Abstain: Kirk Sander, Stephen Szoke

206-2
Public Comment: **Sprinkler Body.** The exterior case or shell of a sprinkler incorporating a means of connection to the piping system, designed to convey water to a nozzle or orifice.
Reason: Add definition for "sprinkler body" based on comment submission "206-29", which recommends the addition of allowing for WaterSense labeled spray sprinkler bodies in Section 9.8.1.3 (old)/9.9.1.3 (redline).
Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

Discussion took place on the Public Comment:

- It was noted that this definition is needed because of new criteria.

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 14 in favor, 0 opposed, 2 abstained.

Abstain: Jeff Bradley, Kirk Sander

206-3

Public Comment: **makeup water**: water added ~~to a cooling tower~~ for water replenishment or water quality maintenance in a cooling tower, evaporative cooler, humidifier, steam boiler, fountain, pool, or other items in which water is continually depleted or used during operation.

Reason: Remove redundancy in definition. Definition initially indicates make-up water is for cooling towers but then goes on to list other equipment.

Suggest adding steam boilers, since this equipment also requires make-up water to replenish water lost to blowdown, steam traps, or other means.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification because a list of applications is not required in the definition. The modification is below:

makeup water: water added for losses, especially losses caused by evaporation. ~~to a cooling tower for water replenishment or water quality maintenance in a cooling tower, evaporative cooler, humidifier, fountain, pool, or other items in which water is continually depleted or used during operation.~~

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

Discussion took place on the Motion:

- It was noted that the definition does not include what makeup water is and that more clarity could be added.

VOTE: The Motion carries with 13 in favor, 1 opposed, 2 abstained.

Opposed: Jeff Bradley

Abstain: Stephen Szoke, Kirk Sander

206-5

Public Comment: **once-through water-cooled equipment:** equipment that uses water within a heat exchange process for cooling only once before discharge ~~of the water~~ to a drainage system.

Reason: Suggest revising definition for clarity.

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

Discussion took place on the Public Comment:

- It was stated that this is a simple improvement to the definition.

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 14 in favor, 0 opposed, 2 abstained.

Abstain: Kirk Sander, Jane Rohde

206-6

Public Comment: **Pressure regulator (or pressure regulation valve):** a device used to maintain a constant, desired down-stream water pressure in a pipeline or emission device.

Reason: "Pressure regulation" can be incorporated as a feature of other types of devices (such as a spray sprinkler body). The specific device meant to ensure system-wide pressure is called a pressure regulator or a pressure regulation valve.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification because the definition is well understood and the term is used with common usage, thus has been removed from the standard. The modification is below:

~~pressure regulation: a device used to maintain a constant, desired down-stream water pressure in a pipeline or emission device.~~

Discussion took place on the Public Comment:

- It was noted that there was agreement at the subcommittee level that pressure regulator is an accepted term and instead of revising it, it should just be removed from the standard.

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 16 in favor, 0 opposed, 0 abstained.

206-7

Public Comment: **soil moisture sensor (SMS):** a device connected to an irrigation system used to measure the moisture level in the soil ~~and which is, in some instances, connected to an irrigation system to~~ and either signal the bypass of the scheduled irrigation cycle if the soil moisture is above a specified level (bypass SMS) or initiate irrigation at a lower preset moisture level and terminate irrigation at an upper preset soil moisture level (on-demand SMS) .

Reason: Revise definition to require the connection of the soil moisture sensor to an irrigation controller and also to allow for "on-demand" technologies in addition to bypass technologies. "On-demand" technologies initiate irrigation at a lower preset moisture level and terminate irrigation at an upper preset soil moisture level.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The comment raised an issue with the current definition being too specific and going beyond a normal definition. The revision is below:

soil moisture sensor: a device connected to an irrigation system used to measure the moisture level in the soil. ~~and which is, in some instances, connected to an irrigation system to signal the bypass of the scheduled irrigation cycle if the soil moisture is above a specified level.~~

Discussion took place on the Public Comment:

- It was noted that the definition should actually be shortened and simplified instead of accepting the revision.

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 16 in favor, 0 opposed, 0 abstained.

206-31

Public Comment: Suggest reverting back to old definitions for clothes washer that were included in "old" version of standard, and/or aligning with definitions included in ENERGY STAR Product Specification for Clothes Washers.

clothes washer, commercial: A soft-mounted front-loading or soft-mounted top-loading clothes washer that is designed for use in applications in which the occupants of more than one household will be using the clothes washer, such as multi-family housing common areas and coin laundries. For the purposes of this standard, commercial clothes washers have a container volume of 8.0 cubic feet or less.

clothes washer, residential: a clothes washer designed for use in applications in which the occupants of one or more households will be using the clothes washer, including multi-family housing common areas or self service laundry.

tunnel washer: an industrial laundry machine design specifically to accommodate heavy wash loads; also called a continuous batch washer. In operation, laundry progresses through the washer in one direction, while water and washing chemicals move through in the opposite direction on a continuous basis.

washer extractor: a type of commercial laundry machine commonly used for on-premise/institutional laundry in commercial buildings. For the purposes of this standard, washer extractors have a container volume greater than 8.0 cubic feet.

Reason: ANSI/GBI 01-2019 Green Globes Assessment Protocol for Commercial Buildings is a rating system for commercial buildings; therefore, limiting requirements to only cover residential clothes washers is unlikely to address potential water use from non-residential units.

Non-residential units are not as easily defined by a single term and cover a large number of different technologies.

These are previously acknowledged by ANSI/GBI 01-2019 Green Globes Assessment Protocol for Commercial Buildings but, in the redline version, these definitions/differences were eliminated. Suggest maintaining definitions for tunnel washers (which still have requirements associated with them in the redline version) and commercial clothes washers, and establishing a new definition for washer extractors.

See ENERGY STAR specification for clothes washers for definitions and to determine what is in and out of scope for ENERGY STAR.
https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Final%20Version%208.0%20Clothes%20Washer%20Partner%20Commitments%20and%20Eligibility%20Criteria.pdf

See also comments 206-21 and 206-22.
Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The reason for revisions is because the terms clothes washer commercial and clothes washer extractor are not used in the standard, clothes washer residential is already defined in the standard and consistent with the commenter's submittal. The revision is below:

clothes washer, residential: a clothes washer designed for use in applications in which the occupants of one or more households will be using the clothes washer, including multi-family housing common areas or self service laundry.

clothes washer, tunnel: an industrial laundry machine design specifically to accommodate heavy wash loads; also called a continuous batch washer. In operation, laundry progresses through the washer in one direction, while water and washing chemicals move through in the opposite direction on a continuous basis.
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 16 in favor,0 opposed, 0 abstained.

206-4
Public Comment: **water meter (or sub-meter)**: an instrument used to measure the volume and/or rate of flow of water in a conduit or channel.
Reason: Meters can apply to measuring water or energy use. Since sub-meter is later defined as it relates to energy use, suggest differentiating between a water meter (or sub-meter) and an energy meter (or sub-meter)
Recommended Response: Thank you for your comment. Your comment has been accepted with modification. After formal review this definition has been superseded to be as follows:

sub-meter: a metering subdivision of the energy, water, gas, or sound that records the use of the metered subject by specific building systems and equipment.
Discussion took place on the Public Comment:

- It was noted that "meter" and "sub-meter" were both found in the standard and revised for clarity.

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 16 in favor, 0 opposed, 0 abstained.

206-8
Public Comment: **energy meter (or sub-meter)**: a subdivision of the utility metering of a building that records the proportionate energy use of specific building systems and appliances.
Reason: See comment 206-4. Existing definitions distinguish between measurement of water and energy.
Recommended Response: Thank you for your comment. Your comment has been accepted with modification. After formal review this defection has been superseded to be as follows:

sub-meter: a metering subdivision of the energy, water, gas, or sound that records the use of the metered subject by specific building systems and equipment.
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 16 in favor, 0 opposed, 0 abstained.

Points-2

Proposed Revision: sub-meter: a metering subdivision of the ~~utility~~ energy, water, gas, or sound ~~metering of a building~~ that records the ~~proportionate energy~~ use of the metered subject by specific building systems and ~~appliances~~ equipment.

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 16 in favor, 0 opposed, 0 abstained.

Water Public Comment Review

Water-13

Proposed Revision: 9.1.2.1 Residential clothes washers are ENERGY STAR 8.0 labeled and possess a maximum Integrated Water Factor (IWF) of 5.4 gal/ft.3 (720 L/m3) per full cycle.

9.1.2.2 Residential dishwashers are ENERGY STAR 6.0 labeled and possess a maximum water use of 3.8 gal/ft.3 (510 L/m3) per cycle.

• 9.4.1.2.4: Dishwashers comply with ENERGY STAR 2.0 requirements and consume 1.6 gal/rack (6.1 L/rack) or less. Rackless flight-type dishwashers consume 160 gal/hr. (605.7 L/hr.) or less.

• 9.4.1.2.5: Ice Makers comply with ENERGY STAR 3.0 requirements where such requirements exist.

9.4.3.1 Self service clothes washers meet the prescribed integrated water factor (IWF) performance as follows:
• Clothes washers have an IWF of 4.3 or less and comply with ENERGY STAR 8.0 requirements

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

Discussion took place on the Motion:

- It was noted that "Integrated" should be added before "Water Factor."

AMENDMENT: The amendment was made and seconded to add "Integrated" before "Water Factor" and change "WF" to "IWF."

Discussion that took place on the Amendment:

- There was agreement that this should be updated editorially throughout the standard.

VOTE: The Amendments carries with 15 in favor, 0 opposed, 1 abstained.

Abstained: Kirk Sander

Discussion that took place on the Amended Motion:

- There was no discussion.

VOTE: The Motion carries with 15 in favor, 0 opposed, 1 abstained.

Abstained: Kirk Sander

Points-1

Proposed Revision: 9.4.2.1 ~~Equip~~ When installed, ~~S~~steam sterilizers are equipped with ~~the following:~~

~~• 9.4.2.1.1: M~~mechanical vacuum systems~~;~~ and
~~• 9.4.2.1.2: W~~water tempering devices that only allow water to flow when the discharge of condensate or hot water from the sterilizer exceeds 140oF (60oC).
Maximum = 1 point or N/A

~~• One-half (1/2) point is earned where steam sterilizers are equipped per each listed item up to a maximum of 1 point.~~
• Not applicable where there are no steam sterilizers.

Discussion took place on the Proposed Revision:

- The Water Subcommittee Vice Chair stated that there was discussion at the Water Subcommittee meeting of whether it should be "and" or "or" before there was agreement that it should be "and."

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 16 in favor, 0 opposed, 0 abstained.

Jeff Bradley and Josh Jacobs left the meeting.

206-9

Public Comment: Integrated water factor (IWF): the quotient of the total weighted per-cycle water consumption for all wash cycles in gallons ~~cold wash~~ divided by the cubic foot ~~(or liter)~~ capacity of the clothes washer.

Reason: "Revised definition to be consistent with ENERGY STAR's definition for integrated water factor, as indicated in the ENERGY STAR Program Requirements Product Specification for Clothes Washers. https://www.energystar.gov/sites/default/files/ENERGY%20STAR%20Final%20Version%208.0%20Clothes%20Washer%20Partner%20Commitments%20and%20Eligibility%20Criteria.pdf "

Recommended Response: "Thank you for your comment. Your comment has been accepted with modification. The definition has been changed to be consistent for Energy Star's definition of integrated water factor.

Integrated water factor (IWF): the quotient of the total weighted per-cycle water consumption for all wash cycles in gallons cold wash divided by the cubic foot (or liter) capacity of the clothes washer."

Discussion took place on the Public Comment:

- There was discussion on integrated water factor and whether it could be revised now to increase clarity and ensure it is correct. Text was reviewed including adding "(or liters) after "gallons" before it was finalized.

MOTION: The Motion was made and seconded to reconsider the acceptance of 206-9 and to accept with modification the proposed response.

Discussion took place on the Motion:

- There was no discussion.

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

Abstain: Kirk Sander

Public Participation

There was no discussion.

New Business

There was no discussion.

Action Items

Marx stated that the comments and revisions will be reviewed by staff and if nothing was found that was missed or needs further discussion, the Consensus Body meeting for March 16, 2021 will be canceled. She stated that the standard will go out for public comment review at the end of March and all submissions will be reviewed by the chair of whether they should be reviewed during this cycle or the next continuance maintenance cycle scheduled to start in the beginning of 2022.

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

Meeting adjourned at 3:38 PM EST.