



MINUTES
GBI Consensus Body for Existing Buildings - Call #1
Webinar/Teleconference
March 31, 2025, from 12:00 to 2:00 p.m. ET

NOTE ALL TIMES ARE EASTERN TIME

Consensus Body Members in Attendance

Full Name	Company	3/31/25
Michael Cudahy	PPFA	X
Larry Eisenberg	Ovus Partners 360	X
Janis Fedorowick	Wavefront Planning and Design Incorporated	Absent
Buddy Humphries (Chair)	Efficient Green, LLC	X
Joe Menchefski	Advanced Glazings Ltd.	Absent
John Mullen	IAPMO	X
James O'Brien	Independent Environmental Consultant	X
Sarah Puls	American Wood Council	X
David Ray	SRAAG	Absent
Jane Rohde	JSR Associates, Inc.	X
Jiri Skopek	Jlri Skopek Architect	Absent
Frank X Sullivan	Kiewit	X
Kerry Sutton	American Concrete Institute (ACI)	Absent

Interested Parties in Attendance

Full Name	Organization	3/31/25
Viken Koukounian	Parklane	X

Staff in Attendance

Full Name	Organization	3/31/25
Emily Marx	Secretariat, GBI	X
Katy Johnson	Staff, GBI	
Sara Rademacher	Staff, GBI	X



Roll Call & Welcome

Secretariat Emily Marx welcomed everyone to the meeting, 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. The Consensus Body roster was reviewed and it was noted that there is balance.

Administrative Items

Chair Buddy Humphries thanked everyone for attending the meeting. Marx 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.

Attendees gave a brief overview of their background.

ESG Revision Review

The ESG/IEQ Subcommittee Chair reviewed each revision before placing a motion.

ESG-101 & ESG-102

ESG-101 Proposed Revision: 1.1.1.3 The following building related goals and targets are documented in the building environmental management plan:

1.1.1.3.1 Energy conservation

1.1.1.3.2 Water conservation

1.1.1.3.3 Waste reduction and recycling

1.1.1.3.4 CO2 equivalent (e) emission reduction

1.1.1.3.5 Environmental purchasing

1.1.1.3.6 Schedule for regular checks on air-handling units, cooling towers, boilers, chillers, and/or applicable HVAC system(s) and other significant energy consuming equipment

1.1.1.3.7 Indoor Air Quality (IAQ)

1.1.1.3.8 Reduction in use and proper handling of toxic or hazardous products

1.1.1.3.9 Training and education

Maximum = ~~8~~ 9 points

One point is earned for each target for a maximum of ~~eight~~ nine points.

- One point is earned for 1.1.1.3.1.

- One point is earned for 1.1.1.3.2.

- One point is earned for 1.1.1.3.3.

- One point is earned for 1.1.1.3.4.

- One point is earned for 1.1.1.3.5.

- ~~Not applicable if there are no air handling units, cooling towers, boilers, chillers, and/or applicable~~

~~HVAC system(s) and other significant energy consuming equipment.~~

- One point is earned for 1.1.1.3.6.

o Not applicable if there are no air handling units, cooling towers, boilers, chillers, and/or applicable HVAC system(s) and other significant energy consuming equipment.

- One point is earned for 1.1.1.3.7.

~~o Not applicable if there are no toxic or hazardous products.~~

- One point is earned for 1.1.1.3.8.

o Not applicable if there are no toxic or hazardous products.

- One point is earned for 1.1.1.3.9.

ESG-101 Reason: Less confusing for clients

Fixing N/A line up to be accurate

ESG-102 Proposed Revision: 1.1.1.1 There is an integrated team and process that regularly reviews the Environmental Management System (EMS).

~~5~~ 4 points

MOTION: The Motion was made and seconded to accept the proposed revisions, ESG-101 & ESG-102.

Discussion took place on the Motion:

- It was argued that the list in 1.1.1.3 ought to be reviewed frequently to ensure that nothing should be added or removed.
- The chair noted that the data pulled from the Existing Buildings 2021 certification for the criteria was very interesting and not all projects achieved points even though it could be easy to do so.

VOTE: The Motion carries with **7 in favor, 0 opposed, 0 abstained.**

ESG-103

Proposed Revision: 1.2.2.1 The following emergency response procedures are in place:

1.2.2.1.1 Documented procedures readily available in case of emergency.

1.2.2.1.2 Staff trained to deal with and obtain prompt assistance for emergencies such as fire, spills, power failures and illness.

1.2.2.1.3 An automated emergency notification system

1.2.2.1.4 A current schedule for a designated first responder to be available during ~~work~~ all hours.

Maximum = 8 points

- Two points are earned for 1.2.2.1.1.
- Two points are earned for 1.2.2.1.2.
- Two points are earned for 1.2.2.1.3.
- Two points are earned for 1.2.2.1.4.

o Not applicable for residential spaces.

Reason: Assessor Feedback: A designated first responder only during working hours? I understand that is a business approach. Sadly, the disasters seem to happen in the most inopportune times.



Having to get up in the middle of the night to even address a business facility seems like it should just be part of the deal.

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 7 in favor, 0 opposed, 0 abstained.

ESG-104

Proposed Revision: 1.1.1.5 There are preventive maintenance programs for building systems and areas, which improve performance and the indoor environment.

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 gym equipment and kitchen appliances including microwaves, water dispensers, stoves, ovens, and refrigerators, if applicable.

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

Discussion took place on the Motion:

- There was discussion on whether the addition would be on fixed or movable equipment. Examples of both were given and it was noted that maintaining fixed gym equipment like basketball hoops is usually included in the maintenance budget.

VOTE: The Motion carries with 6 in favor, 1 opposed, 0 abstained.

Opposed: Mike Cudahy

ESG-105

Proposed Revision: 1.2.3.3 A building occupant and/or visitor satisfaction survey and/or focus group has been completed in the last 3 years.

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

Discussion took place on the Motion:

- It was asked how frequently focus groups occur in the real world when determining building satisfaction. It was noted that it could happen, but probably doesn't occur often.

VOTE: The Motion carries with 6 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy

Site Revision Review

The Site/Materials Subcommittee Chair reviewed each revision before placing a motion.

Site-101



Proposed Revision: • 2.1.1A Path A: Environmental Site Assessment (ESA): Up to 30 points

Twenty 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.

Reason: Add ESA to Acronym list and 2.1.1 section

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 7 in favor, 0 opposed, 0 abstained.

Site-102

Proposed Revision: 2.2.2.5 The following are incorporated in the project:

2.2.2.5.1 Secure bike shelters for minimum 10% of occupants

2.2.2.5.2 Bike paths/lanes that connect the site to the surrounding community

2.2.2.5.3 Changing facilities with lockers and/or showers

OR

2.2.2.5.4 A Gold or better ActiveScore certification rating.

Maximum = 6 points

- Two points are earned for 2.2.2.5.1.
- Two points are earned for 2.2.2.5.2.
- Two points are earned for 2.2.2.5.3.

OR

- Six points are earned for 2.2.2.5.4.
- No points are earned if none are incorporated.
- Not applicable if the building is unoccupied.

Reason: Consistent with NC24

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

Discussion took place on the Motion:

- It was noted that this is a consistent change that was approved for the New Construction 2024 Standard.

VOTE: The Motion carries with 7 in favor, 0 opposed, 0 abstained.

Site-103

Proposed Revision: Parking areas have Electric Vehicle charging infrastructure

that are either AC Level 2 (240V in single-phase or 208V in three-phase projects) or Direct Current Fast Charging (DCFC).

~~Parking areas have EV charging spaces and the electric infrastructure to support expansion of current EV charging stations (EV ready).~~



For example, EV ready includes conduits in place to support installation of charging stations.

Maximum = 8 points

- Four points are earned for buildings when $\geq 5\%$ of onsite parking spaces are equipped with electric charging stations.
- Two additional points are earned for buildings when $\geq 10\%$ of onsite parking spaces are equipped with electric charging stations.
- Two points are earned for buildings when $\geq 30\%$ of onsite parking spaces are EV ready.
- Not applicable if the building is regularly unoccupied or does not have onsite parking.

Reason: SME Email: Change this to 30% or more. We had a long discussion of this. We should probably go back and reconsider the EB language. The wording you have with 5% also begs the question of whether EV ready includes EV equipped. If you agree with this then we don't need to take back to subcommittee as it is just a wording clarification.

The EB standard should also be changed to specify Level 2 or DCFC.

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

Discussion took place on the Motion:

- A member argued that the criteria changes are to update the definition of what is fast charging.
- There was agreement to change "one-phase" to "single-phase" and place a hyphen between "three" and "phase".

VOTE: The Motion carries with 7 in favor, 0 opposed, 0 abstained.

Site-104, Site-105, Site-106, Site-107

Site-104 Proposed Revision: 2.2.2 Existing Sites

Two paths are available for assessing the existing site.

- 2.2.2A Path A: Mode Score: Up to 35 points

OR

- 2.2.2B Path B: Prescriptive: Up to 35 points

Points cannot be combined between paths. Select one of the paths below.

2.2.2A PATH A: MODE SCORE

2.2.2A.1 A Silver or better ModeScore certification rating has been achieved.

Maximum = 35 points

- Thirty-five points are earned when a Platinum certification is achieved.
- Thirty points are earned when a Gold certification is achieved.
- Twenty points are earned when a Silver certification is achieved.
- Not applicable if the building is unoccupied.

Site-104 Reason: Add More Score

Site-105 Proposed Revision: 2.2.22B PATH B: PRESCRIPTIVE EXISTING SITES



Site-105 Reason: All criteria is unchanged unless related to a different proposal. Criteria numbers are updated to include "B".

Site-106 Proposed Revision: 2.2.2.7 OCCUPANT ACCESS

Path A, B, C, or D

~~Four paths are available for assessing a site's occupant access.~~

~~• 2.2.2.7A Path A: Walk Score®: Up to 5 points~~

~~OR~~

~~• 2.2.2.7B Path B: State of Place Index: Up to 5 points~~

~~OR~~

~~• 2.2.2.7C Path C: AARP Livability Index: Up to 5 points~~

~~OR~~

~~• 2.2.2.7D Path D: Bike Score®: Up to 5 points~~

~~Points cannot be combined between paths. Select one of the paths below. If building is unoccupied, select a Path and select N/A.~~

~~2.2.2.7A PATH A: WALK SCORE®~~

~~2.2.2.7A.1 The site scores at least a 50 with Walk Score®, State of Place Index, AARP Livability Index and/or Bike Score is at least 50.~~

~~Maximum = 5 points~~

- ~~• Five points are earned for a score of ≥90 to ≤100 Walk Score®.~~
- ~~• Four points are earned for an score of ≥80 to ≤89 Walk Score®.~~
- ~~• Three points are earned for a score of ≥70 to ≤79 Walk Score®.~~
- ~~• Two points are earned for a score of ≥60 to ≤69 Walk Score®.~~
- ~~• One point is earned for a score of ≥50 to ≤59 Walk Score®.~~
- ~~• No points are earned for a score of Walk Score® <50.~~
- ~~• Not applicable if the building is unoccupied.~~

~~OR~~

~~2.2.2.7B PATH B: STATE OF PLACE INDEX~~

~~2.2.2.7B.1 The State of Place Index score is at least 40.~~

~~Maximum = 5 points~~

- ~~• Five points are earned for a ≥90 to ≤100 State of Place Index score.~~
- ~~• Four points are earned for an ≥80 to ≤89 State of Place Index score.~~
- ~~• Three points are earned for a ≥70 to ≤79 State of Place Index score.~~
- ~~• Two points are earned for a ≥60 to ≤69 State of Place Index score.~~
- ~~• One point is earned for a ≥40 to ≤59 State of Place Index score.~~
- ~~• No points are earned for a State of Place Index score <40.~~
- ~~• Not applicable if the building is unoccupied.~~

~~OR~~

~~2.2.2.7C PATH C: AARP LIVABILITY INDEX~~

~~2.2.2.7C.1 The Neighborhood category of the AARP Livability score is at least 50.~~



~~Of the seven categories that make up the index the Neighborhood category index is used for the scoring in this criterion.~~

~~Maximum = 5 points~~

- ~~• Five points are earned for a ≥ 90 to ≤ 100 Livability score.~~
- ~~• Four points are earned for an ≥ 80 to ≤ 89 Livability score.~~
- ~~• Three points are earned for a ≥ 70 to ≤ 79 Livability score.~~
- ~~• Two points are earned for a ≥ 60 to ≤ 69 Livability score.~~
- ~~• One point is earned for a ≥ 50 to ≤ 59 Livability score.~~
- ~~• No points are earned for a Livability score < 50 .~~
- ~~• Not applicable if the building is unoccupied.~~

~~OR~~

~~2.2.2.7D PATH D: BIKE SCORE®~~

~~2.2.2.7D.1 The Bike Score® is at least 50.~~

~~Maximum = 5 points~~

- ~~• Five points are earned for a ≥ 90 to ≤ 100 Bike Score®.~~
- ~~• Four points are earned for an ≥ 80 to ≤ 89 Bike Score®.~~
- ~~• Three points are earned for a ≥ 70 to ≤ 79 Bike Score®.~~
- ~~• Two points are earned for a ≥ 60 to ≤ 69 Bike Score®.~~
- ~~• One point is earned for a ≥ 50 to ≤ 59 Bike Score®.~~
- ~~• No points are earned for a Bike Score® < 50 .~~
- ~~• Not applicable if the building is unoccupied.~~

~~Complete regardless of the path chosen above.~~

Site-107 Proposed Revision: ~~2.2.2.9~~ 2.2.1.5 A management policy is in place to employ bird-safe measures. 5 points

Site-107 Reason: Move to Site Enhancement section.

Discussion took place on the Proposal:

- The Secretariat reviewed a proposal of adding ModeScore to the standard.

MOTION: The Motion was made and seconded to accept the proposed revisions, Site-104, Site-105, Site-106, & Site-107.

Discussion took place on the Motion:

- There was a question on whether points are changing as part of the proposal, and it was noted that the bird safety criteria moves to a different section, but no points are being added or removed.

VOTE: The Motion carries with 7 in favor, 0 opposed, 0 abstained.

Energy Revision Review

The Energy Subcommittee Chair reviewed each public comment or revision before placing a motion.

EB102-1

Public Comment: 3.2.1.5 The building has undergone a replacement with a roof with a high Solar Reflectance Index (SRI) as prescribed based on the slope of the roof, as specified in Section 7.3.4.1 of ANSI/GBI-01.

Reason: The CRRC recommends enhancing the provision for cool roofs and adding provisions for cool exterior walls in Sections 3.2 and 6.7 of the ANSI/GBI 02 standard since existing buildings—particularly older vintages that are not built to current code levels—benefit from the installation of these passive cooling strategies. Highly reflective building envelopes reduce solar heat gain, which helps increase occupant comfort during hotter weather, and occupant safety during heat waves and power outages (Baniassadi and Sailor, 2018 - <https://doi.org/10.1016/j.buildenv.2018.01.037>). The reduction in the building's solar heat gain also lowers the cooling demand and can produce annual HVAC energy savings in warmer climates (Rosado and Levinson, 2019 - <https://doi.org/10.1016/j.enbuild.2019.02.028>).

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The criteria with the accurate reference number and standard year. The revised criteria is below:

3.2.1.5 The building has undergone a replacement with a roof with a high Solar Reflectance Index (SRI) as prescribed based on the slope of the roof, as specified in Section 2.3.4.1 of ANSI/GBI-01 2024.

4 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 7 in favor, 0 opposed, 0 abstained.

EB102-2

Public Comment: 6.7.2.7 The building has a highly reflective envelope (roof and/or exterior walls), as specified in Sections 7.3.4.1 and 7.3.4.3 in ANSI/GBI 01.

Reason: The CRRC recommends adding provisions for cool roofs and cool exterior walls in Sections 3.2 and 6.7 of the ANSI/GBI 02 standard since existing buildings — particularly older vintages that are not built to current code levels — benefit from the installation of these passive cooling strategies. Highly reflective building envelopes reduce solar heat gain, which helps increase occupant comfort during hotter weather, and occupant safety during heat waves and power outages (Baniassadi and Sailor, 2018 - <https://doi.org/10.1016/j.buildenv.2018.01.037>). The reduction in the building's solar heat gain also lowers the cooling demand and can produce annual HVAC energy savings in warmer climates (Rosado and Levinson, 2019 - <https://doi.org/10.1016/j.enbuild.2019.02.028>).

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The proposal was revised to fit within the Envelope Section of the Energy Area. The revised criteria is below:

3.2.1.6 The building has a highly reflective exterior walls, as specified in Section 5.5.3.2.2 of ASHRAE



90.1 2022.

2 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 7 in favor, 0 opposed, 0 abstained.

Energy-112, Energy-108, Energy-109, Energy-110

Energy-112 Proposed Revision: 3.2.2 LIGHTING

Path A or B

Two paths are available for assessing lighting efficiency.

- 3.2.2A Path A: Commercial & Institutional: Up to ~~20~~ 14 points

OR

- 3.2.2B Path B: Residential & Hospitality Buildings: Up to ~~20~~ 14 points

Points cannot be combined between paths. Select one of the paths below.

Energy-112 Reason: Reallocate point for Line 2

Energy-108 Proposed Revision: 3.2.2A.1 At least 80 ~~10~~% of the building interior is installed with LED and/or OLED (quantified by floor area).

Maximum = ~~20~~ 14 points

- ~~Twenty~~ Fourteen points are earned when the building interior is 100% LED and/or OLED.
- ~~Eighteen points are earned when the building interior is ≥90% to <100% LED and/or OLED.~~
- ~~Sixteen~~ Fifteen Ten points are earned when the building interior is ≥80% to <~~100~~90% LED and/or OLED.
- ~~Fourteen points are earned when the building interior is ≥70% to <80% LED and/or OLED.~~
- ~~Twelve points are earned when the building interior is ≥60% to <70% LED and/or OLED.~~
- ~~Ten points are earned when the building interior is ≥50% to <60% LED and/or OLED.~~
- ~~Eight points are earned when the building interior is ≥40% to <50% LED and/or OLED.~~
- ~~Six points are earned when the building interior is ≥30% to <40% LED and/or OLED.~~
- ~~Four points are earned when the building interior is ≥20% to <30% LED and/or OLED.~~
- ~~Two points are earned when the building interior is ≥10% to <20% LED and/or OLED.~~
- No points are earned when the building interior is <~~80~~10% LED and/or OLED.

Energy-109 Proposed Revision: 3.2.2B.1 At least 80 ~~10~~% of the common and amenity areas are installed with LED and/or OLED (quantified by floor area).

Maximum = ~~10~~ 7 points

- ~~Ten~~ Seven points are earned when common and/or amenity areas are 100% LED and/or OLED.
- ~~Nine points are earned when common and/or amenity areas are ≥90% to <100% LED and/or OLED.~~
- ~~Eight~~ Five points are earned when common and/or amenity areas are ≥80% to <~~100~~90% LED and/or OLED.

- ~~Seven points are earned when common and/or amenity areas are $\geq 70\%$ to $< 80\%$ LED and/or OLED.~~
- ~~Six points are earned when common and/or amenity areas are $\geq 60\%$ to $< 70\%$ LED and/or OLED.~~
- ~~Five points are earned when common and/or amenity areas are $\geq 50\%$ to $< 60\%$ LED and/or OLED.~~
- ~~Four points are earned when common and/or amenity areas are $\geq 40\%$ to $< 50\%$ LED and/or OLED.~~
- ~~Three points are earned when common and/or amenity areas are $\geq 30\%$ to $< 40\%$ LED and/or OLED.~~
- ~~Two points are earned when common and/or amenity areas are $\geq 20\%$ to $< 30\%$ LED and/or OLED.~~
- ~~One point is earned when common and/or amenity areas are $\geq 10\%$ to $< 20\%$ LED and/or OLED.~~
- No points are earned when common and/or amenity areas are $< 80\%$ LED and/or OLED.

Energy-110 Proposed Revision: 3.2.2B.2 At least 80 ~~10~~% of the residential unit or hotel rooms is installed with LED and/or OLED (quantified by floor area).

Maximum = ~~10~~ 7 points

- ~~Ten~~ Seven points are earned when residential unit or hotel rooms are 100% LED and/or OLED.
- ~~Nine points are earned when residential unit or hotel rooms are $\geq 90\%$ to $< 100\%$ LED and/or OLED.~~
- ~~Eight~~ Five points are earned when residential unit or hotel rooms are $\geq 80\%$ to $< 100\%$ LED and/or OLED.
- ~~Seven points are earned when residential unit or hotel rooms are $\geq 70\%$ to $< 80\%$ LED and/or OLED.~~
- ~~Six points are earned when residential unit or hotel rooms are $\geq 60\%$ to $< 70\%$ LED and/or OLED.~~
- ~~Five points are earned when residential unit or hotel rooms are $\geq 50\%$ to $< 60\%$ LED and/or OLED.~~
- ~~Four points are earned when residential unit or hotel rooms are $\geq 40\%$ to $< 50\%$ LED and/or OLED.~~
- ~~Three points are earned when residential unit or hotel rooms are $\geq 30\%$ to $< 40\%$ LED and/or OLED.~~
- ~~Two points are earned when residential unit or hotel rooms are $\geq 20\%$ to $< 30\%$ LED and/or OLED.~~
- ~~One point is earned when residential unit or hotel rooms are $\geq 10\%$ to $< 20\%$ LED and/or OLED.~~
- No points are earned when residential unit or hotel rooms are $< 80\%$ LED and/or OLED.

MOTION: The Motion was made and seconded to accept the proposed revisions, Energy-112, Energy-108, Energy-109, & Energy-110.

Discussion took place on the Motion:

- It was noted that the point reduction to 3.2.2 is to accommodate the points in the new criteria for public comments, EB102-1 & EB102-2.

VOTE: The Motion carries with 6 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy

EB104-1

Public Comment: There is no definition or parameters I can see around what an energy-efficient window is.

Reason: Add a definition or some measurable value for windows.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The criteria has been modified to reflect performance.

3.2.1.2 There are energy-efficient windows in accordance with ASHRAE 90.1-2013.

Maximum = 4 points

- Four points are earned for 25% lower U or C value when double pane or low-e are present.
- Two points are earned for 10% lower U or C value when double pane or low-e are present.
- One point is earned when the project meets U or C value when double pane or low-e are present.

Discussion took place on the Public Comment:

- It was noted that which ASHRAE year to reference for the proposal was discussed during the Energy Subcommittee meeting.
- It was asked if a certain number of windows should meet the requirement. An assessor on the call noted that it would be nice to have a requirement where an equation is used to calculate the points, but that is not always how the assessment goes in the real world.
- There was discussion on the process of window retrofits that occur on existing buildings.

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 6 in favor, 1 opposed, 0 abstained.

Opposed: James O'Brien

EB104-2

Public Comment: There is no definition or parameters I can see around what an energy-efficient water heating is.

Reason: Add a definition or some measurable value for water heating.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The criteria has been modified to reflect performance and practicality.

~~3.2.6.1 The building has high efficiency water heating equipment.~~

All domestic water heaters meet the efficiency requirements of ANSI/ASHRAE/IES STANDARD 90.1-2013, Table 7.8, ENERGY STAR, or domestic water heaters are not provided.

Maximum = 4 points

- Four points are earned when 100% of equipment is energy efficient.
- Three points are earned when ≥ 75 to $< 100\%$ of equipment is energy efficient.
- Two points are earned when ≥ 50 to $< 75\%$ of equipment is energy efficient.
- One point is earned when ≥ 25 to $< 50\%$ of equipment is energy efficient.
- No points are earned when $< 25\%$ systems are energy efficient.

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 6 in favor, 0 opposed, 1 abstained.

Abstain: Sarah Puls

Energy-101

Reason: 3.2.2 Paths Should be 3.2.2.1A.1, 3.2.2.1B, etc

Discussion took place on the Editorial Revision:

- There were no concerns or comments on the editorial revision.

Energy-104

Proposed Revision: At least 10% of the residential units or hotel rooms are ~~is~~ installed with LED and/or OLED (quantified by floor area).

Reason: Editorial

Discussion took place on the Editorial Revision:

- There were no concerns or comments on the editorial revision.

Energy-105

Proposed Revision: Not applicable If the building does not use heating.

Reason: lowercase l in if

Discussion took place on the Editorial Revision:

- There were no concerns or comments on the editorial revision.

Energy-106

Proposed Revision: 3.2.7.1A.1 The HVAC design incorporates a configuration/strategy that eliminates reheat and re-cool by using thermal and ventilation compartmentalization, with heating, cooling, and ventilation provided independently for each zone.

3.2.7.1B.1 The HVAC design complies with Section 6.5.2 of the ANSI/ASHRAE/IES Standard 90.1-2010 (or more stringent).

Reason: Add Pathway letters and correct numbering.

Discussion took place on the Editorial Revision:

- There were no concerns or comments on the editorial revision.

Energy-103

Proposed Revision: 3.1 ENERGY PERFORMANCE (125 POINTS)

3.1.1 ~~ENERGY CONSUMPTION~~ PERFORMANCE

Reason: For consistency

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 7 in favor, 0 opposed, 0 abstained.

Energy-111

Proposed Revision: 3.2.5.3 The heating systems use hot water boilers that employ the following:

3.2.5.3.1 Modulating or multi-stage burners, or multiple staged boilers

3.2.5.3.2 Variable speed pumping

3.2.5.3.3 Supply water temperature reset

Maximum = 5 points

- Two points are earned for 3.2.5.3.1.
 - o Not applicable when there is no ~~hot~~ water heating.
- Two points are earned for 3.2.5.3.2.
 - o Not applicable when there is no ~~hot~~ water heating.
- One point is earned for 3.2.5.3.3.
 - o Not applicable when there is no ~~hot~~ water heating.

Reason: The adjustment would be: ~~Hot~~ Water Heater wherever it is needed throughout the GBI standards.

Sec note: The only instance is in Energy.

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 6 in favor, 0 opposed, 1 abstained.

Abstain: James O'Brien

Energy-113

Proposed Revision: There is a refrigerant maintenance plan that complies with EPA requirements and includes the following:

- An inventory of all refrigerant-containing equipment included in the project.
- Tracking and maintaining records of refrigerant re-charging and releases during maintenance and construction.
- Scheduled maintenance by a certified refrigerant professional.
- Checking and repairing leaks for pressure loss ~~zero Ozone Depleting Potential (ODP) of cooling refrigerants onsite.~~

~~Maximum = 5 points~~

- ~~• Five points are earned when there is zero ODP onsite.~~
- ~~• Three points are earned when there is a phase out plan being implemented that includes budget(s) and technical feasibility.~~
- Not applicable when there are no refrigerants or cooling systems where one would be expected.

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 6 in favor, 0 opposed, 1 abstained.



Abstain: Frank Sullivan

Jane Rohde left the meeting.

Energy-114

Proposed Revision: 3.1.1E.1 The project has achieved GBI's Green Globes Journey to Net Zero certification/recognition, or equivalent ~~a Net Zero Carbon or a Net Zero Energy certification~~ from a nationally or regionally recognized certification program within the last three years.

Maximum = 125 points

- One hundred twenty-five points is earned for a certification of 100% reduction.
- One hundred points are earned for a recognition of $\geq 90\%$ to $< 100\%$ reduction.
- Seventy-five points are earned for a recognition of $\geq 70\%$ to $< 90\%$ reduction.
- Fifty points are earned for a recognition of $\geq 50\%$ to $< 70\%$ reduction.
- No points are earned for a recognition of $< 50\%$ reduction.

Reason: Consistent with NC24.

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 4 in favor, 0 opposed, 2 abstained.

Abstain: Sarah Puls, Frank Sullivan

Water Revision Review

The Water Subcommittee Chair reviewed each revision before placing a motion.

Water-103

Proposed Revision: 4.2.4.3 All water leak detection devices are linked to the internet or a central Data Management System to store, monitor and report data.

Reason: Editorial (in red)

Discussion took place on the Editorial Revision:

- There were no comments or concerns about the Editorial Revision.

Water-102

Proposed Revision: 4.2.3.5 The building water systems conform~~s~~ with ASHRAE 188-2018, Legionellosis: Risk Management for Building Water Systems or equivalent or more stringent risk management building water system standards, as applicable.

Reason: Editorial (in red)

Discussion took place on the Editorial Revision:

- There were no comments or concerns about the Editorial Revision.

Water-104 & Water-105

Water-104 Proposed Revision: 4.2.3.5 The building water systems water management plan shall conform with ASHRAE 188-2018, Legionellosis: Risk Management for Building Water Systems or equivalent or more stringent risk management building water system standards, as applicable.

8 points or N/A

~~• Not applicable if there is no definitive risk of legionellosis.~~

Water-105 Proposed Revision: 4.2.3.5 The building water systems conforms with ASHRAE 514-2023 Risk Management for Building Water Systems: Physical, Chemical, and Microbial Hazards AND/OR ASHRAE 188-2018, Legionellosis: Risk Management for Building Water Systems or equivalent or more stringent risk management building water system standards, as applicable.

Maximum = 8 points or N/A

• Eight points are awarded for conforming with ASHRAE 514.

• Five points are awarded for confirming with ASHRAE 188.

~~• Not applicable if there is no definitive risk of legionellosis.~~

Water-105 Reason: As a note, the current N/A in NC24 is "Not applicable if both 5.1 and 5.2 in ASHRAE 188-2018 are satisfied."

MOTION: The Motion was made and seconded to accept the proposed revisions, Water-104 & Water-105.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

Materials Revision Review

The Site/Materials Subcommittee Chair reviewed the list of proposed revisions in the Assessment Area. The Secretariat noted that she received additional information on this topic from a Consensus Body member that had to leave the meeting early. There was agreement to hold off on discussion on this Assessment Area until the meeting next week when the member can be present.

IEQ Revision Review

The ESG/IEQ Subcommittee Chair reviewed each public comment or revision before placing a motion.

EB103-5

Public Comment: 6.1.2C.1 The filtration in place at the facility meets is meeting all Facility Guidelines Institute (FGI) Guidelines' requirements and applicable ANSI/ASHRAE/ASHE Standard 170 Ventilation for Health Care Facilities requirements.

Reason: With the update of ASHRAE 170 requirements and inclusion of the standard in all of the FGI Guidelines books would recommend referencing both for the Healthcare Facility / Settings section. Note that for settings not included in ASHRAE 170, FGI has referenced other standards including 62.1 and 62.2.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The ASHRAE 170 standard is also included in all three of the existing FGI Guidelines books therefore it is already referenced.

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 6 in favor, 0 opposed, 0 abstained.

IEQ-103

Proposed Revision: 6.1.3.6.4 There is a smoke-free policy for outdoor spaces that are part of the building site.

Discussion took place on the Editorial Revision:

- There were no comments or concerns about the Editorial Revision.

EB103-6

Public Comment: **6.1.3.6.1** Smoking is prohibited in any form within and outside of the building and grounds, ~~within 25 feet of all building entrances~~, operable windows, and building ventilation intake.

6.1.3.6.2 There is a building policy stating the building is smoke free.

6.1.3.6.3 There are permanent signs stating that the building is smoke-free at each entrance.

6.1.3.6.4 There is a smoke-free policy for outdoor spaces part of the building site.

Reason: In the evolution of not permitting smoking within or around any buildings, it is recommended that smoking is prohibited not only within the building but also outside of the building. 6.1.3.6.4 addresses the policy part of the existing building, but it would make sense to be completely smoke free. The “within 25 feet” was a stop gap used when smoking was still considered for buildings and now through state legislation and other means, smoking is simply prohibited.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The majority of jurisdictions aren't smoke free. Additional information will be added to the Technical Manual for assessors to take note of.

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 6 in favor, 0 opposed, 0 abstained.

EB103-7

Public Comment: 6.1.4.3.5 Operations and maintenance of UVGI, UV-C, or other technologies including ionization of particles to address potential infectious particles and impacted product service life.

Reason: The utilization of UV-C or UVGI is utilized in not only healthcare settings but hospitality and public spaces because of the increase of use during the pandemic. Other sustainability standards and product testing for certifications are looking at material resilience as an attribute that is impacted by cleaning, sanitizing, and disinfecting surfaces, materials, and products – with the added usage of UV-C and UVGI, hydrogen peroxide vapor, and other types of technologies and application methods, premature failure of products, equipment housings, and finish materials has been experienced. As a result, in using these technologies, the impacted product service life in conjunction with increasing infection control needs to be monitored from a sustainability perspective. Further, some of the degradation of materials has lead to additional particulate within operatories and other healthcare spaces that are being evaluated for concern (University of Ohio – Wexner).

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. UV-C is included in the definition of UVGI.

6.1.4.3.5 Operations and maintenance of UVGI system or other technologies including ionization of particles to address potential infectious particles and impacted product service life.

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 6 in favor, 0 opposed, 0 abstained.

EB103-8

Public Comment: 6.3.1.1 Contract(s) with cleaning contractors and/or direct building or facility staff policies and procedures specifically state that they are to use environmentally preferable cleaning and disinfecting ~~ion~~ agents that are listed by the USEPA as either Safer Choice Certified products or Design for Environment (DfE) Certified ~~registered~~ products. If certified chemicals are not used to meet efficacy requirements and applicable EPA list, these shall be noted in the contract(s), policy and procedures, and/or manifests. If cleaning and disinfection is provided directly by building management employees, then written policies and procedures specifically state that only the same products listed above be used.

Add the following resources in the Technical Manual.

Products that support the compliance of 6.3.1.1 criteria can be found on the following databases:

1. Design for the Environment (DfE) -Certified Disinfectants are available at <https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants>.
2. Safer Choice-Certified Products, an EPA Pollution Prevention (P2) Program: <https://www.epa.gov/saferchoice>
3. For healthcare and related settings, EPA provides lists of Registered Disinfectants that are utilized based on pathogens: <https://www.epa.gov/pesticide-registration/selected-epa-registered-disinfectants> and Emerging Viral Pathogens are specifically found in List Q:

<https://www.epa.gov/pesticide-registration/disinfectants-emerging-viral-pathogens-evps-list-g>. These lists can be cross referenced with DfE and Safer Choice chemicals and it is recommended to review with the Infection Control and/or Quality Assurance personnel when completing the Green Globes survey.

4. Certified products are available in the ecomedes database: <https://products.ecomedes.com/>

Reason: Although the goal is to always use Safer Choice Certified and/or DfE Certified products, there are some pathogens that require bleach solution (e.g., MRSA, etc.) or other types of sanitizing or disinfecting chemicals to meet the efficacy requirements. Note that EPA Lists of registered chemicals is based on the pathogen that is trying to be killed. Therefore, cross-referencing the EPA Lists with DfE is a good way to find the least caustic but still effective disinfection chemical. For example, List N for SARS-CoV-2 can be cross referenced on the DfE list to find effective chemicals that can kill the virus.

Note: Technical Manual requires updating for this section based on the version reviewed.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. Two additional programs were added that meet the requirements.

6.3.1.1 Contract(s) with cleaning contractors and/or direct building or facility staff policies and procedures specifically state that they are to use environmentally preferable cleaning and disinfecting agents that are listed by the USEPA as either Safer Choice Certified products or Design for Environment (DfE) Certified registered products, Green Seal Certified products, or Ecologo Certified products. If certified chemicals are not used to meet efficacy requirements and applicable EPA list, these shall be noted in the contract(s), policy and procedures, and/or manifests. ~~If cleaning and disinfection is provided directly by building management employees, then written policies and procedures specifically state that only the same products listed above be used.~~

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 6 in favor, 0 opposed, 0 abstained.

EB103-9

Public Comment: 6.3.3B.5 Current digital or hard copy SDSs, ~~slip~~ spill clean-up kits, and safety equipment such as eye-wash stations are accessibly located near chemical storage areas.

Reason: The correct term would be “spill clean-up kits”. This may be editorial and was transposed into “slip” instead of “spill”. Recommend using the correct terminology.

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 Editorial Revision:

- There were no comments or concerns about the editorial revision.

EB103-10

Public Comment: 6.3.3B.5 6.4.1.4 Lighting levels meet the following IES requirements based upon the building type:

- Offices and related workspaces: ANSI/IES RP-1-~~12~~, Table B1a: Office and Common Application Illuminance Values
- ~~Senior living~~ Residential health, care, and support facilities (including senior living settings): ANSI/IES RP-28-~~16~~ Lighting and the Visual Environment for Seniors and the Low Vision Population ~~including Errata 1 020118~~
- Hospital and healthcare facilities: ANSI/IES RP-29-~~16~~ Lighting for Hospital and Healthcare Facilities
- Educational facilities: ANSI/IES RP-3-~~13~~ American National Standard Practice on Lighting for Educational Facilities
- Retail establishments: ANSI/IES RP-2-~~17~~ Recommended Practice for Retail Lighting
- Multifamily housing: ANSI/IES/ALA RP-11-~~17~~ Lighting for Interior and Exterior Residential Environments
- Library buildings: ANSI/IES RP-4-~~13~~ Recommended Practice for Library Lighting
- Warehouses and industrial facilities: ANSI/IES RP-7-~~17~~ Recommended Practice for Lighting Industrial Facilities
- Museums and art galleries: ANSI/IES RP-30-~~17~~ Recommended Practice for Museum Lighting
- Hotels and hospitality settings: IES/DG-25-~~17~~ Design Guide for Hospitality Lighting

Reason: It is recommended to remove the version date of each of the ANSI/IES Standards – as these change on various cycles that are different from GBI/ANSI Standard Updates. In addition, aligned “Residential health, care, and support facilities” with the nomenclature used for the FGI Guidelines for correlation. Latest version of ANSI/IES RP-28 no longer requires the Errata and has been updated to include all relevant information.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. [The elimination of the reference years is not consistent with using referenced standards across the general standard set. The correction of the title for Residential health, care, and support facilities (including senior living settings) is accepted. The criteria is the following:

6.4.1.4 Lighting levels meet the following IES requirements based upon the building type:

- Offices and related workspaces: ANSI/IES RP-1-12, Table B1a: Office and Common Application Illuminance Values
- ~~Senior living~~ Residential health, care, and support facilities (including senior living settings): ANSI/IES RP-28-16 Lighting and the Visual Environment for Seniors and the Low Vision Population including Errata 1 020118
- Hospital and healthcare facilities: ANSI/IES RP-29-16 Lighting for Hospital and Healthcare Facilities
- Educational facilities: ANSI/IES RP-3-13 American National Standard Practice on Lighting for Educational Facilities
- Retail establishments: ANSI/IES RP-2-17 Recommended Practice for Retail Lighting
- Multifamily housing: ANSI/IES/ALA RP-11-17 Lighting for Interior and Exterior Residential Environments
- Library buildings: ANSI/IES RP-4-13 Recommended Practice for Library Lighting
- Warehouses and industrial facilities: ANSI/IES RP-7-17 Recommended Practice for Lighting Industrial Facilities
- Museums and art galleries: ANSI/IES RP-30-17 Recommended Practice for Museum Lighting
- Hotels and hospitality settings: IES/DG-25-17 Design Guide for Hospitality Lighting

Discussion took place on the Public Comment:

- The chair noted that he doesn't agree with removing the year designation because it isn't appropriate or consistent with other criteria in the standard.

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

FAILS: The motion failed to be seconded.

Discussion took place on the Public Comment:

- A member stated that he agreed that the standard's references should be designated with a year.

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

Discussion took place on the Motion:

- A member stated that he agreed that the standards referenced should be designated with a year.
- It was noted that the title change for ANSI/IES RP-28-16 should be accepted and that the motion would be to accept with modification.
- A reason to the commenter was agreed upon.

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

IEQ-116

Proposed Revision: The potable water has been tested onsite at least annually and if the water quality report indicates needs for improvement there is a remediation policy.

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 6 in favor, 0 opposed, 0 abstained.

IEQ-104

Proposed Revision: 6.7.2.4.2 A multi-purpose room that includes the scheduling of exercise classes, wellness appointments, nutritional educational classes, and other similar scheduled events that focus on health and wellness.

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

Discussion took place on the Motion:

- There was agreement that this change is not necessary because of the inclusion of "other similar scheduled events that focus on health and wellness."

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

IEQ-106

Proposed Revision: smoking: the inhalation of smoke of burning tobacco, use of electronic-cigarettes, cannabis, or other substances encased in items such as (but not limited to) cigarettes, pipes, and cigars for recreational or medical use.

Reason: Add hookahs, cigars?

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

Discussion took place on the Motion:



- There was discussion on the exact definition that would be added to the standard.

VOTE: The Motion carries with 5 in favor, 0 opposed, 1 abstained.

Abstain: James O'Brien

IEQ-107, IEQ-108, IEQ-109, IEQ-110, IEQ-111, IEQ-112, IEQ-113, IEQ-114, IEQ-115

IEQ-107 Proposed Revision: There is a document that includes provisions for designated spaces that support occupant needs for comfort, privacy, and communication, as well as other required specialized spaces (e.g., concentration, relaxation, collaboration). The acoustical program includes provisions for 'quiet' spaces for occupants; for purposes which include focus work, relaxation, and in-person, phone and teleconference meetings.

IEQ-108 Proposed Revision: The acoustical program performance plan establishes criteria for background noise and electronically generated noise limit criteria and masking sound levels for occupiable spaces.

IEQ-109 Proposed Revision: The acoustical program performance plan establishes expectations objectives for acoustical and speech privacy for spaces.

IEQ-110 Proposed Revision: The acoustical program performance plan establishes requirements for reverberation time for spaces.

IEQ-111 Proposed Revision: 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, and comply with criteria for noise criteria limits, as defined in the acoustical performance plan program.

IEQ-112 Proposed Revision: There is a sound masking system, and a report in accordance with ASTM E1573-2218 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 performance plan program.

IEQ-113 Proposed Revision: As defined in the acoustical performance plan acoustically, separated spaces (i.e., separating assemblies—walls, ceilings, floors, doors) have been measured and assessed in accordance with ASTM E336-20, ASTM E1130-16 and/or ASTM E2638-24, and comply with objectives for privacy,

OR

As defined in the acoustical performance plan acoustically, room separating assemblies have been measured and assessed in accordance with ASTM E336-20, and comply with objectives for sound insulation.

~~-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~~

~~• Two points are earned for 6.6.4.2.~~

~~OR~~

~~• One point is earned for 6.6.4.2.1.~~

~~• One point is earned for 6.6.4.2.2.~~

~~± 3 points~~

• Points are earned if ≥10% of enclosed room partitions spaces/assemblies are assessed.

IEQ-113 Reason: Sec Note: Edited in red for clarity 3/26/25

IEQ-114 Proposed Revision: ~~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, and comply with criteria for noise criteria limits, as defined in the acoustical performance plan program.~~

IEQ-115 Proposed Revision: 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~~ performance plan.

~~± 2 point~~

• ~~One~~ Two points are is earned if ≥10% of occupiable spaces are assessed.

MOTION: The Motion was made and seconded to accept the proposed revisions, IEQ-107, IEQ-108, IEQ-109, IEQ-110, IEQ-111, IEQ-112, IEQ-113, IEQ-114, & IEQ-115.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

EB101-1, EB101-2, & EB101-5

EB101-1 Public Comment: “Is there a sound masking system and a report in accordance with ASTM E1573-~~18~~22...”

EB101-1 Reason: The current revision of ASTM E1573 is E1573-22. Revisions in E1573-22 are editorial over the 2018 version, however it is best practice to refer to the most recent.

EB101-1 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

EB101-2 Public Comment: “There is a sound masking system that is commissioned and/or assessed in accordance with ASTM E1573-~~18~~22...”

EB101-2 Reason: The current revision of ASTM E1573 is E1573-22. Revisions in E1573-22 are editorial over the 2018 version, however it is best practice to refer to the most recent.

EB101-2 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

EB101-5 Public Comment: “References· ASTM E1573-~~18~~22...”

EB101-5 Reason: The current revision of ASTM E1573 is E1573-22. Revisions in E1573-22 are editorial over the 2018 version, however it is best practice to refer to the most recent.

EB101-5 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 public comments, EB101-1, EB101-2, & EB101-5.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

EB101-3

Public Comment: “The masking sound spectrum conforms to the ~~n~~National Research Council of Canada’s...”

Reason: The organization name includes ‘national’ and is capitalized. Ignore if EB101-4 is accepted.

Recommended Response: Thank you for your comment. Your comment has been acknowledged and while the Consensus Body has discussed your comment no changes have been implemented in the draft Standard.

Discussion took place on the Editorial Revision:

- There were no concerns or comments on the editorial revision.

EB101-4

Public Comment: “The masking sound spectrum conforms to the ~~national Research Council of Canada’s Optimum Maskin Spectrum~~ Optimum Masking Spectrum from National Research Council of Canada Research Report (RR-266) or...”

Reason: This identifies the published source of the Optimum Masking Spectrum, reducing potential confusion. The source was previously unstated.

Recommended Response: Thank you for your comment. Your comment has been acknowledged and while the Consensus Body has discussed your comment no changes have been implemented in the draft Standard.

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

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

EB103-11, EB103-13, EB103-14, EB103-15, EB103-16, EB103-12

EB103-11 Public Comment: 6.6.1 ACOUSTICAL PROGRAM PRIVACY AND COMFORT

6.6.1.1 The acoustical program includes provisions for 'quiet' spaces for occupants; for purposes which include focus work, relaxation, and in-person, phone and teleconference meetings.

6.6.1.2 The acoustical program establishes noise limit criteria and masking sound levels for occupiable spaces.

6.6.1.3 The acoustical program establishes expectations for acoustical and speech privacy for spaces.

6.6.1.4 The acoustical program establishes requirements for reverberation time for spaces.

6.6.1.1 Noise limits for building systems, services, and utilities have been documented.

Recommend 2 points for 6.6.1.1.

Technical Manual Assessment Guidance:

Documentation includes verification of building-related systems', services', and utilities' noise levels generated by a particular source in dBA or equivalent sound level dBA. Measuring devices include a sound level meter (SLM) or integrating sound level meter (ISLM). Smart phone applications may be used for measurement. Depending on the activity within the existing setting, noise levels may vary throughout the time of usage of a space. Therefore, measuring for peak activity and related systems noise to glean measures over a period of time is recommended. If equipment is cycling on and off, measuring when off and on is relevant in order to identify the noise due to the source (system, services, utilities, etc.) versus background/operational noise. The U.S. Environmental Protection Agency (EPA) and the World Health Organization (WHO) recommend maintaining environmental noises below 70 dBA over 24-hours (75 dBA over 8-hours) to prevent noise-induced hearing loss. Space with building systems cycling on to meet or be below these recommendations.

6.6.1.2 An acoustical policy has been developed to address acoustical privacy and comfort.

Recommend 2 points for 6.6.1.2.

Technical Manual Assessment Guidance:

Acoustical policy to include acoustic objectives, based on applicable space functions and a process for filing and addressing complaints by building occupants.

Typical strategies for increasing acoustical comfort include acoustically separating areas producing atypical levels of noise (such as dance studios, music rooms, cafeterias, indoor swimming pools, mechanical rooms, toilets, gymnasias, etc.). Acoustic policy to include a list of functional spaces and requirements for acoustical privacy based on applicable functions within the building type, specific STC ratings to be maintained for renovations between specific space types, user activity within spaces, etc. In addition, acoustic policy to include the process for a building occupant to file a complaint and the resolution process for addressing an acoustical/noise issue.

6.6.1.3 The existing setting includes a sound masking system.

Recommend 2 points for 6.6.1.3.

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

Technical Manual Assessment Guidance:

Provide the specification of the sound masking system including all active electronic components and provide documentation that the active electronic components are conveniently accessible for service. If available, also provide project drawings of the sound masking system for review.

If there is no need for a sound masking system, and there is no sound masking system, mark N/A.

6.6.1.4 There are a variety of workspaces available to building occupants to support speech privacy and engage in a private conversation, make telephone calls, complete focused work, and hold in-person, telephone, and teleconference meetings.

Recommend 4 points for 6.6.1.4.

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

Technical Manual Assessment Guidance:

Visual confirmation that there are a variety of workspaces available to building occupants for private conversations and focused work. In open offices, speech should be heard but not generally understood in adjacent workstations. Providing a variety of types of flexible workspaces allows the level of acoustic privacy to be adjusted based upon space required by building occupant.

To measure sound levels, use an integrated sound-level meter with 'A' weighting or a similar type of meter application available on-line to spot check room dBA levels. The reading should be no more than 45dBA (NC: 40) as maximum design criteria for noise caused by building systems in interior office spaces and 40dBA (NC: 35) in conference or private rooms used for focused work or virtual/in-person meetings. Measurement to be completed in empty room and documented and/or demonstrated during assessment. The goal is to reduce acoustic disruptions and increase speech privacy by creating spaces that minimize noise in interior spaces and provide building occupants options when speech privacy is needed for focused work.

Resources for Acoustical Privacy and Comfort Section

Reference ANSI/ASA S12.2 Standard "Criteria for Evaluating Room Noise". Airborne sound power levels from HVAC unit do not exceed the Room Criteria detailed in 2015 ASHRAE HVAC Application Handbook, Chapter 8, Table 1 for listed spaces when HVAC unit are in operation; and Chapter 48:
1) Table 1: Achieve maximum background noise levels from heating, ventilating, and air conditioning (HVAC) systems.

2) Table 6: Comply with design criteria for HVAC noise levels resulting from the sound transmission paths listed.

Reference AHRI Standard 885-2008,5/10/2019: Table 15.

For healthcare spaces, reference minimum requirements provided by the Facility Guidelines Institute (FGI) Design and Construction Guidelines:

1) The following references the minimum requirements for Maximum Design Criteria for Noise in Interior Spaces Caused by Building Systems:

- Guidelines for Design and Construction of Hospitals: Table 1.2-5: Maximum Design Criteria for Noise in Interior Spaces Caused By Building Systems
- Guidelines for Design and Construction of Outpatient Facilities: Table 1.2-5: Maximum Design Criteria for Noise in Interior Spaces Caused By Building Systems
- Guidelines for Design and Construction of Residential Health, Care, and Support Facilities: Table 2.5-

2: Maximum Design Criteria for Noise in Interior Spaces Caused By Building Systems

2) The following references the minimum requirements for Sound Isolation and Speech Privacy:

- Guidelines for Design and Construction of Hospitals: Table 1.2-6 Design Minimum Sound Isolation Performance Between Enclosed Rooms and 1.207 Design Criteria for Speech Privacy for Enclosed Rooms and Open-Plan Spaces
- Guidelines for Design and Construction of Outpatient Facilities: Table 1.2-6 Design Minimum Sound Isolation Performance Between Enclosed Rooms and 1.207 Design Criteria for Speech Privacy for Enclosed Rooms and Open-Plan Spaces
- Guidelines for Design and Construction of Residential Health, Care, and Support Facilities: Table 2.5-4 Minimum Design Room - Average Sound Absorption Coefficients

References

- Green Globes for Existing Buildings 2021: Approach to Healthy Buildings
- 2022 Guidelines for Design and Construction - Facility Guidelines Institute (FGI)
- U.S. General Services Administration (GSA), Sustainable Facilities Tool – System Impacts
- GSA, Sound Matters, 2012
- “Workspace satisfaction: The privacy-communication trade-off in open-plan offices.”
- U.S. General Services Administration (GSA), Sound Matters: How to achieve acoustic comfort in the contemporary office (PDF)
- “Workspace satisfaction: The privacy-communication trade-off in open-plan offices.”

EB103-11 Reason: The current acoustical requirements include establishment of an acoustical program, which is geared toward New Construction versus Existing Buildings. When assessing an existing building, a program is not in development, as the space, building, or facility is already built. Therefore, the evaluation and assessment would be based on what is in the existing building versus developing a program with requirements that are commissioned and re-assessed as would be the case in New Construction. The additional criteria of Background Noise Limits, Sound Masking Systems, and Reverberation Time are all based on being able to create a functional or operational program for the building being assessed – which would not be the process for evaluating an Existing Building, but the process for reviewing documentation for a New Construction project. Therefore the criteria proposed provides an opportunity for an assessor to evaluate compliance during the assessment and documentation review. Recommendations have been provided for updates in the Technical Manual to assist assessors as well as building owners / operators to comply with the criteria provided. Point allocations are recommended including N/As as appropriate.

The Sound Insulation section has been addressed in a different way, by recommending additional criteria in the Materials Section that can be part of the evaluation when completing Cycle Renovations. This provides criteria to be included in policies and procedures that identify where sound insulation would be appropriate when completing cycle renovations or improvement based on the building type and the space use identified. See EB103-12 Proposal for details on adding section 5.1.1.6

EB103-11 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Criteria in EB23 builds off the accepted industry best practices and standards that are relevant to existing buildings. Insights from your public comments were incorporated for a proposal for an updated acoustic section.

EB103-13 Public Comment: ~~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.~~

EB103-13 Reason: N/A

EB103-13 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Criteria in EB23 builds off the accepted industry best practices and standards that are relevant to existing buildings. Insights from your public comments were incorporated for a proposal for an updated acoustic section.

EB103-14 Public Comment: ~~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.~~

EB103-14 Reason: Replace 6.6.3 SOUND MASKING SYSTEMS with 6.6.1.3 above, EB103-11.

EB103-14 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Criteria in EB23 builds off the accepted industry best practices and standards that are relevant to existing buildings. Insights from your public comments were incorporated for a proposal for an updated acoustic section.

EB103-15 Public Comment: ~~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.~~

~~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.~~

EB103-15 Reason: Remove 6.6.4 SOUND INSULATION section in entirety and Add 5.1.1.6 (EB103-12 Comment) in Materials Section to address Sound Insulation as part of Cycle Renovations:

EB103-15 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Criteria in EB23 builds off the accepted industry best practices and standards that are relevant to existing buildings. Insights from your public comments were incorporated for a proposal for an updated acoustic section.

EB103-16 Public Comment: ~~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.~~

EB103-16 Reason: Remove 6.6.5 REVERBERATION TIME

EB103-16 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Criteria in EB23 builds off the accepted industry best practices and standards that are relevant to existing buildings. Insights from your public comments were incorporated for a proposal for an updated acoustic section.

EB103-12 Public Comment: Add

5.1.1.6 Identify rooms that require sound insulation between different room uses or types in the building or facility as part of cycle renovations. This includes identifying acoustical insulation for walls, ceilings, and floors.

Technical Manual

Assessment Guidance:

The Cycle Renovation policies and procedures identify rooms that would require sound insulation based on their use and adjacency to other spaces. Examples of documentation include 1) providing a standard wall detail for walls between dwelling units or apartments, 2) sound insulation requirements between spaces such as gymnasiums, cafeterias, or other gatherings spaces and spaces that require acoustics for focused work, such as classrooms or offices, 3) inclusion of acoustic material specifications, etc.

References

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

ASTM E2638-10(2017) Standard Test Method for Objective Measurement of the Speech Privacy Provided by a Closed Room

EB103-12 Reason: This is recommended to be placed in the Cycle Renovations section versus located in the IEQ Acoustical section as this would provide guidance for cycle renovation processes and product selection based on the built environment application for areas that would receive sound insulation to mitigate acoustical issues and support acoustical comfort. Recommend 2 points for completion of this criteria.



EB103-12 Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Criteria in EB23 builds off the accepted industry best practices and standards that are relevant to existing buildings. Insights from your public comments were incorporated for a proposal for an updated acoustic section.

MOTION: The Motion was made and seconded to reject the comments, EB103-11, EB103-13, EB103-14, EB103-15, EB103-16, & EB103-12, and reply with the proposed response.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 6 in favor, 0 opposed, 0 abstained.

Public Participation

There was no discussion.

New Business

There was no discussion.

Review Schedule

Marx reminded attendees about the scheduled meetings occurring on April 7 and April 9.

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

Meeting adjourned at 1:50 PM EST.