



MINUTES

GBI Consensus Body for New Construction- Call #2 Webinar/Teleconference March 1, 2023, from 3:00 to 5:00 p.m. ET

NOTE ALL TIMES ARE EASTERN TIME

Consensus Body Members in Attendance

Full Name	Company	3/1/23	10/13/22
Senthil	BTU Engineers, LLC	N/A	X
Arunachalam			
Jeff Bradley	American Wood Council	Χ	X (arrived late)
Karen Butler	EPA, Office of Air and	Χ	Х
	Radiation		
Virgil	Gurri Matute PA	Χ	X
Campaneria			
(Chair)			
Michael	PPFA - PPEF	Χ	X
Cudahy			
Larry	Ovus Partners 360	Х	Х
Eisenberg			
Ashley Eusey	Hoefer Welker	Х	X (arrived late,
			left early)
Tehmina	Merrick and Company	Absent	Absent
Husain			
Josh Jacobs	WAP Sustainability	Absent	Х
Michael	ConTech Lighting	Χ	X
Lehman			
John Mullen	IAPMO	Х	Х
James O'Brien	Independent	X	X
	Environmental Consultant		
Thomas Pape	BMP (representing AWE)	N/A	Absent
Max Puchtel	American Institute of Steel	X (left early)	X
	Construction		
Jane Rohde	JSR Associates, Inc.	Χ	Absent
	(representing RFCI)		
Gord Shymko	G. F. Shymko & Associates	Χ	X
	Inc.		
Stephen Szoke	American Concrete	Χ	X
	Institute		







Angela Tin	American Lung Association	X (Proxy	Х
		O'Brien)	

Interested Parties in Attendance

Full Name	Organization	3/1/23	10/13/22
Rob Brooks	Rob Brooks Associate		X
Steve Kooy	BIFMA		X
Matthew	NRMCA		X
Lemay			

Staff in Attendance

Full Name	Organization	3/1/23	10/13/22
Emily Marx	Secretariat, GBI	X	X
Sara	Staff, GBI	Х	X
Rademacher			

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. She noted that there are no guests on the call at this time.

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

Administrative Items

Chair Virgil Campaneria thanked everyone for joining the meeting today. Marx informed the group of Thomas Pape's recent passing and noted that he was a volunteer for GBI's Standards' development since 2016. A moment of silence took place followed by a few members sharing memories and thoughts on Thomas.

Campaneria 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.

Campaneria reviewed the #1 minutes from October 13, 2022, and asked if anyone had any comments or concerns. There were no comments or concerns.







MOTION: A Motion was made and seconded to approve the #1 minutes from October 13, 2022, as presented.

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy

Materials Public Comment Review

The Materials Subcommittee Chair presented each proposal for change before placing a motion.

NCMaterials102, NCMaterials103

NCMaterials102 Proposed Revision: Not applicable where a building didn't previously exist.

NCMaterials102 Reason: Assessor Feedback

NCMaterials103 Proposed Revision: Not applicable where a building didn't previously exist.

NCMaterials103 Reason: Assessor Feedback

MOTION: The Motion was made and seconded to accept the proposed revisions for 10.5.1.1 and

10.5.1.2.

Discussion took place on the Motion:

There was no discussion.

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

NCMaterials107

Proposed Revision: • Six Seven points are earned for ≥75%.

- Four Five points are earned for ≥50% to <75%.
- Two Three points are earned for ≥25% to <50%

PLUS

• One additional point is earned for facilities that have verified their annual average recycling rate from an independent third-party organization.

Reason: Suggested SME Edit:

It seems to me that this would be applicable for an existing building in understanding the landfill diversion, versus having "annual average recycling rate" – as you wouldn't have an annual average recycling rate for a new construction project. I would agree eliminating the criteria would make sense for NC. This could be something that is added into commissioning, but you would have to have at least one year+ of data that is recorded from the hauler – and to my knowledge I have not found third-party verification of recycled waste from a facility or building, only for recycled content in products and/or supply chain. The manifests from the hauler would be adequate documentation for an existing building project and annual commissioning for 1 year minimum for data collection for new construction projects, if the criteria remains in place.







Note that in the Technical Manual: 10.6.1.4 includes the following reference criteria. I think the points from 5.6.1.5 can be moved up to 5.6.1.4 and eliminate 5.6.1.5.

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 13 in favor, 0 opposed, 0 abstained.

Indoor Environment Public Comment Review

The Indoor Environment Subcommittee Chair presented each proposal for change before placing a motion.

NCIE108

Proposed Revision: 11.2.2A.1 To determine that the indoor air quality is acceptable upon Substantial Completion but prior to occupancy, the buildings indoor environments are tested using the U.S. EPA's Compendium of Methods for the Determination of Toxic Organic Pollutants in Ambient Air, TO-1, TO-11, TO-15, TO-17, and ASTM D 5197-16 Standard Test Method for Determination of Formaldehyde and Other Carbonyl Compounds in Air (Active Sampler Methodology). The testing takes place after construction ends and prior to occupancy.

• The VOC and Particulate Matter sampling and averaging times and measurement methods achieve the detection limits <u>at or below the maximum concentrations</u> of the contaminant levels listed in Table 11.2.2A.1 below.

Reason: Client Question/Feedback: To earn the 6 points it states a TO-17 test must be taken. This is a pretty expensive test from our research and the lab we use does not even offer it. LEED v4.0 required the TO-17 test originally, but they backtracked to the TO-15 test in V4.1 since teams were struggling to find compliant testing providers and due to the cost.

Our question is can we get the 6 points if we test for VOCs and Particulate matter using the TO-15 and not the more expensive TO-17? We are trying to keep the costs reasonable for these tests since the free flushout is no longer an option.

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

Discussion took place on the Motion:

• An Indoor Environment Subcommittee member noted that he researched this topic extensively and he supports this proposal.

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

NCIE112

Proposed Revision: 11.2.6.1 An occupancy policy prohibits smoking <u>within the building</u>. Signage is posted at every building entrance prohibiting smoking and the use of electronic cigarettes within 25 ft. (7.6 m) of the <u>any</u> building <u>entrance</u>, <u>operable window</u>, <u>or outdoor air intake when within the</u> prerogative of the building owner and/or the authority having jurisdiction.







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

1 point

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

Discussion took place on the Motion:

- There was a question on how cannabis would be considered under the criteria, and it was asked if the text should be updated to revise 'tobacco' to be more generic.
- It was noted that this could be changed through an amendment to the motion.
- A member of the Indoor Environment Subcommittee stated that the subcommittee discussed this topic at length, and it was agreed that the inclusion of 'other substances' covered cannabis.
- There was some agreement to add 'or cannabis' after tobacco to ensure there is no confusion.
- There was discussion on smoke free campuses where there would be no need to put signage on a building. The inclusion of 'operable windows' was also discussed, and it was noted that this revision needs to be further explored by the subcommittee.

WITHDRAWN: The motion and second to accept was withdrawn.

MOTION: The Motion was made and seconded to send the proposal back to the Indoor **Environment Subcommittee for further review.**

Discussion took place on the Motion:

- It was argued that there should be additional consideration of approved smoking areas.
- It was asked how this could be assessed in the real world, and an assessor explained how he would award for this revision.

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

NCIE121

Proposed Revision: 11.2.6.2 The following measures are taken to address radon:

■ 11.2.6.2.1: A site-specified assessment of radon potential is conducted and radon prevention and mitigation measures are implemented if indicated by the assessment.

2 points or N/A

 Two points are earned where radon potential is assessed and prevention and mitigation measures are implemented if indicated by the radon potential assessment.

Reason: Clean up of Text. N/A already voted to be removed with NCIE109

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 13 in favor, 0 opposed, 0 abstained.







NCIE109

Proposed Revision: Maximum = 2 points or N/A

• Two points are earned where radon potential is assessed and prevention and mitigation measures are implemented if indicated by the radon potential assessment.

o Not applicable when there is a documented absence of risk.

Reason: Assessor Feedback. There is no N/A for EB21.

Note: Strikeout all approved revisions.

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

Discussion took place on the Motion:

• There was some confusion on two proposals (NCIE121 and NCIE109) for the same criteria but it was noted that this proposal is to remove the N/A.

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

NCIE113

Proposed Revision: 11.2.6.3 <u>Hazardous materials are safely stored, secured, and HCS labeled per ANSI/ASHRAE Standard 62.1-2019 Ventilation for Acceptable Indoor Air Quality 1 Standard based on the space type. Spaces housing specialized activities that generate hazardous pollutants are:</u>

- provided with separate ventilation AND/OR exhaust systems capable of maintaining the space at a negative pressure of at least 5.0 Pascals (0.02 in. water gauge) on average relative to adjacent spaces (with doors closed) to prevent the spread of air-borne contaminants to other spaces;
- physically isolated by doors and deck-to-deck partitions or hard lid ceilings.

Maximum = 2 points or N/A

- One point is earned when hazardous materials are safely stored, secured, and labeled.
- One point is earned when spaces are properly ventilated and isolated.
- Not applicable where there are no spaces housing specialized activities.

Reason: Secretariat Note: Added Maximum = on 1/17/23 for consistency

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

Discussion took place on the Motion:

• There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 1 abstained.

Abstain: Jeff Bradley

NCIE105

Proposed Revision: 11.4.1.1 One or more of the listed thermal zoning strategies is used for continuously occupied areas:

• 11.4.1.1: Office Occupancies/Areas: Includes offices and conference rooms, among others. For open areas, thermal control zones are designed to be between 500 ft2 (46.5 m2) and ≤1000 ft2 (92.9







m2) for open areas. For single rooms, thermal control zones are designed to be between 750 ft2 (69.7 m2) and \leq 1200 ft2 (111.5 m2)

Circulation and support areas are excluded.

- 11.4.1.1.2: Educational Occupancies/Areas: Includes classrooms, teaching labs, etc. Classrooms AND/OR teaching labs are designed thermal control zones are designed under to be <1500 ft. 2 (139.4 m2).
- 11.4.1.1.3: Healthcare Occupancies/Areas: Includes patient wards, diagnostic and treatment areas. Thermal control zones are designed to be between 500 ft.2 (46.5m2) and ≤1000 ft. 2 (92.9m2).
- 11.4.1.1.4: Open-Area Mercantile and Assembly Occupancies/Areas: Includes retail, food service, convention halls, etc. For spaces exceeding 464.5 m2 (5000 ft. 2) thermal control zones are designed to be less than ≤2500 ft.2 (232.3 m2). For spaces between 2500 ft.2 (232.3 m2) and ≤5000 ft.2 (464.5 m2) thermal control zones are designed to be less than ≤1500 ft.2 (139.4 m2).

For multiple occupancy types <u>and/or spaces with varying thermal zone size within a building type</u>, score each occupancy area and prorate score by floor area (rounding upward to nearest integer to the maximum available total points).

Maximum = 14 points or N/A

- Office Occupancies/Areas
- o Fourteen points are earned where thermal control zones are designed to be ≤ 500 ft.2 (46.5 m2) for open areas or ≤ 750 ft2 (69.7 m2) for a single room.
- o Ten points are earned where thermal control zones are designed to be ≤ 1000 ft2 (92.9 m2) for open areas or ≤ 1200 ft2 (111.5 m2) for single rooms.
- o Not applicable where there are no office occupancies/areas.
- Educational Occupancies/Areas:
- o Fourteen points are earned where classrooms AND/OR teaching labs are designed thermal control zones are designed under to be <1500 ft.2 (139.4 m2).
- o Not applicable where there are no educational occupancies/areas.
- Healthcare Occupancies/Areas:
- o Fourteen points are earned where thermal control zones are designed to be <≤500 ft.2 (46.5 m2).
- o Ten points are earned where thermal control zones are designed to be <≤1000 ft.2 (92.9 m2).
- o Not applicable where there are no healthcare occupancies/areas.
- Open-Area Mercantile and Assembly Occupancies/Areas:
- o Fourteen points are earned where thermal control zones <u>are designed to be in spaces between</u> \leq 2500 ft.2 (232.3 m2) and <u>for spaces exceeding</u> 5000 ft.2 (464.5 m2) <u>and are designed to be \leq 1500 ft.2 (139.4 m2) for spaces \leq 5000 ft. 2 (464.5 m2).</u>
- o Ten points are earned where thermal control zones in spaces exceeding 5000 ft. 2 (464.5 m2) are designed to be <2500 ft.2 (232.3 m2).







o Not applicable where there are no open-area mercantile and assembly occupancies/areas.

• Not applicable for other occupancies/areas.

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

Discussion took place on the Motion:

There was a question on why the 'below 500 square feet' was removed and how it will affect
projects. It was noted that this change is largely on consistency and really doesn't change the
criteria's requirements.

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

Site Public Comment Review

The Site Subcommittee Chair presented each proposal for change before placing a motion.

NCSite133

Proposed Revision: 7.1.2.3 Floodplains:

7.1.2.3.1: No construction or site disturbance takes place in the 100-year floodplain.

OR

7.1.2.3.2: Buildings that have completed a Waterfront Edge Design Guidelines (WEDG) Certification.

OR

7.1.2.3.23: Elevate Buildings and additions in the floodplain to a minimum of 3 ft. (.9 m) above the 100-year floodplain or are built to allow water to flow through or under the lowest floor.

AND

The facility also earns points for 7.2.1.1 or 7.2.1.7 or is within 0.25 mi (0.4 km) walking distance of developed residential land of at least 8 dwelling units per acre.

AND

Buildings and structures assigned a risk category of III or IV in Table 1604.5 of the 2012 International Building Code will not be located within a 500-year floodplain. (Not required if the entire jurisdiction is located within the 100-year floodplain. If the entire jurisdiction is located within the 500-year floodplain, then the facility is built outside the 100-year floodplain. Not applicable where no areas in the local jurisdiction fall within the 500-year floodplain.)

Maximum = 9 points

- Nine points are earned for 7.1.2.3.1.
- o Not applicable where no areas in the local jurisdiction fall within the 100-year floodplain.
- Nine points are earned for 7.1.2.3.2.
- Six points are earned for 7.1.2.3.32.

MOTION: The Motion was made and seconded to accept the proposed revisions: <u>7.1.2.3.2:</u> Buildings that constructed on waterfront have completed a Waterfront Edge Design Guidelines (WEDG).

Discussion took place on the Motion:







There was a discussion on the need for a definition of waterfront. Different language revisions
were suggested before there was general agreement to add a simple second sentence.

AMENDMENT: There was a motion and second to amend the proposal to include ""Waterfront as defined by WEDG."

Discussion took place on the Amendment:

The WEDG was displayed for members, and it was noted that it is currently available online. A
member argued that a definition should be added to the standard but that it should be consistent
with WEDG.

AMENDMENT VOTE: The Motion carries with 8 in favor, 2 opposed, 3 abstained.

Opposed: Jane Rohde, Jeff Bradley

Abstain: Jim O'Brien, Angela Tin, Mike Cudahy

Max Puchtel left the meeting.

Discussion took place on the Original Motion to accept:

• It was noted that the new text should say "Waterfront Edge" because that is consistent with WEDG.

AMENDMENT: There was a motion and second to amend the text to "Waterfront Edge Design as defined by WEDG."

Discussion took place on the Amendment:

• It was asked why Waterfront Edge Design needs to be added when it's already in the first sentence. There was agreement that this is unneeded.

WITHDRAWN: The motion and second for the amendment was withdrawn.

Discussion took place on the Original Motion:

- It was noted that in the guidelines they use the language, 'Waterfront Edge' and that's why edge needs to be added. It was argued that this would need to be consistent in both sentences.
- Alternate wording was discussed for the proposal and different scenarios of waterfront landscapes and projects were given.
- There was agreement to generalize the entire proposal

AMENDMENT: There was a motion and second to amend the proposed language to 7.1.2.3.2: Buildings that constructed on waterfront have completed a Waterfront Edge Design Guidelines (WEDG) Certification. Waterfront as defined by WEDG.

OR

Discussion took place on the Amendment:

There was no discussion.

AMENDMENT VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Larry Eisenberg

Discussion took place on the Original Motion:

• There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.







NCSite126, NCSite127, NCSite128, NCSite129, NCSite130, NCSite131 NCSite126 Proposed Revision: 40 7 points

NCSite127 Proposed Revision: 7.2.1.2 Designated preferred parking for car/van pooling, and shelter from weather exists for persons waiting for transportation serving carpools or transit listed in 7.2.1.1. 1 point

NCSite128 Proposed Revision: 7.2.1.32 Parking areas have Electric Vehicle charging infrastructure that are either AC Level 2 (240V in one-phase or 208V in three-phase projects) or Direct Current Fast Charging (DCFC).

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

Alternative refueling facilities or electric charging stations are located on site or within 0.25 mi (0.4 km) of the site.

Maximum = 6.2 points or N/A

- Six points are earned for buildings when ≥10% of onsite parking spaces are equipped with the specified EV charging stations.
- Three points are earned for buildings when ≥5% and<10% of onsite parking spaces are equipped with the specified EV charging stations.
- Two points are earned for buildings when ≥30% of onsite parking spaces are EV ready.
- Not applicable where this strategy is not possible or where the project will have no parking associated with the building.

NCSite129 Proposed Revision: 7.2.1.3 1% or more of onsite parking spaces are equipped with electric charging stations designated for vanpools and carpools.

1 point or N/A

• Not applicable where the project will have no parking associated with the building or when employee van/carpool is not offered.

NCSite130 Proposed Revision: 7.2.1.5 A bicycle parking rack is located within 50 ft. (15.24 m) of an entrance, and is either readily visible from a main entrance, or signage indicating the location is posted at main entrances. 1 point

NCSite131 Proposed Revision: 7.2.1.5 Facilities for Bicycle Commuting and Long-Term Bicycle Parking:

• 7.2.1.5.1: Sheltered bicycle parking is:

o provided for at least 10% of building occupants, where the building occupant load is established in accordance with the International Building Code AND shower and changing facilities are provided within the building project;

OR

o provided for at least 50% of units in a multifamily residential building.

• 7.2.1.5.2: At least 50% of the sheltered bicycle parking is located inside the building or within







storage lockers or another area that provides security of a locked room or cage secured by a keyed, cipher, or electronic lock and the ability to lock the bicycle to a rack within that space.

• 7.2.1.5.3: The building is located within 0.25 mi (0.4 km) walking distance of a bike share facility. OR

7.2.1.5.4: A bicycle parking rack is located within 50 ft. (15.24 m) of an entrance, and is either readily visible from a main entrance, or signage indicating the location is posted at main entrances.

Maximum = 5 points

- Two points are earned where sheltered bicycle parking facilities are provided (and showers and changing facilities as applicable).
- Two points where the sheltered bicycle parking is secure. (Only applicable where the above two points are achieved.)
- One point is earned where the building is located near a bike share facility.
- One point is earned where there is a parking rack near the main entrance.

NCSite131 Reason: Update numbering

Discussion took place before the Motion:

• The chair reviewed the movement of points within the section to weigh certain criteria more heavily.

MOTION: The Motion was made and seconded to accept the proposed revisions to the Transportation section (NCSite126, NCSite127, NCSite128, NCSite129, NCSite130, NCSite131). Discussion took place on the Motion:

• A member noted that points should not be taken away from bicycling criteria because it will reduce the encouragement of projects installing those items. He noted that there are many more benefits of bicycling in comparison to electric vehicles.

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

Opposed: Jeff Bradley Abstain: Steve Szoke

CB103, NCSite104, NCSite105, NCSite106

CB103 Proposed Revision: ● 7.6.1A Path A: Lighting Design Performance <u>Method</u>: 5 points OR

• 7.6.1B Path B: Prescriptive Method Lighting Requirements: 5 points

NCSite104 Proposed Revision: 7.6.1A Path A: Lighting Design Performance Method
7.6.1A.1 An engineer or lighting professional creates a lighting design that meets all the performance requirements of the IDA - IES Model Lighting Ordinance (MLO), Tables A and B D (Initial Lumens), AND Table E (Additional Lumen Allowances) AND Table F (Maximum Vertical Illuminance on the Property Line), 2011.

NCSite105 Proposed Revision: 7.6.1B Path B: Prescriptive <u>Method</u> Lighting Requirements 7.6.1B.1 Exterior lighting does not exceed prescribed values for the amount of light per unit of area







per IDA – IES Model Lighting Ordinance (MLO), Tables A (Parking Space Method) or and B Hardscape Area Method) AND Table F (Maximum Vertical Illuminance on the Property Line), 2011.

NCSite106 Proposed Revision: Exterior lighting trespass does not exceed prescribed Backlight, Uplight and Glare (BUG) ratings as per IDA – IES Model Lighting Ordinance (MLO), Table C (_-C_1, C_2, and C_3), 2011 for the following:

- Backlight trespass;
- Uplight trespass; and
- Glare.

Discussion took place before the Motion:

• The chair noted that these comments are on exterior light pollution. He noted that a lot of discussion went into the lighting criteria.

MOTION: The Motion was made and seconded to accept the proposed revisions to 7.6.1 (CB103, NCSite104, NCSite105, NCSite106).

Discussion took place on the Motion:

• There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy

NC102-14

Public Comment: 8.1.1C.2.6 Exterior Luminaires and Controls

Suggest adding at least one point for having <u>outdoor lighting that is energy efficient (i.e., LED) and</u> complies with dark sky best practices (https://www.darksky.org/our-work/lighting/).

Reason: Elements 8.1.1C.2.6.1 and 8.1.1C.2.6.2 discuss outdoor lighting but have no requirement that they comply with dark sky best practices.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification for the following reason: The Dark Sky elements have been dealt with in Section 7.6.1's modification. Lighting efficiency is addressed in the Energy Assessment Area.

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

Discussion took place on the Motion:

- It was argued that the topic has already been answered with the accepted changes to 7.6.1.
- It was argued that this should be rejected because lighting efficiency is already existing in the Energy Assessment Area. However, it was noted that the comment is on two different topics, efficiency and dark sky and they should both be answered in the response to the commenter.
- The exact reason to the commenter was developed and agreed on.

VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Jeff Bradley

NCSite107, NCSite108, NCSite109, NCSite110, NCSite111







NCSite107 Proposed Revision: 7.7 SAFETY (5 POINTS)

7.7.1 EXTERIOR LIGHTING SAFETY

Reason: Updated 7.7 Wildland numbers to 7.8.

NCSite108 Proposed Revision: 7.7.1.1 Orientation and Wayfinding, all exterior vertical and horizontal illuminances fall within the specified range per Table A-1 in Annex A of ANSI/IES RP-43-21, Recommended Practice: Lighting Exterior Applications, 2021.

2 points or N/A

Not applicable where there is no site lighting.

NCSite109 Proposed Revision: 7.7.1.2 Glare Reduction, exterior luminaires provide 55° cutoff above the horizontal plane. Exception for luminaires installed for the purpose of illuminating art, buildings, or trees.

1 points or N/A

• Not applicable when luminaires are installed for the purpose of illuminating art, buildings, or trees or where there is no site lighting.

NCSite110 Proposed Revision: 7.7.1.3 Color Rendering, exterior luminaires provide 80 or greater Color Rendering Index OR IES TM-30 Rf (Fidelity) of 80 and Rg (Gamut) of 85. Exception for luminaires installed for the purpose of illuminating art, buildings, or trees.

1 points or N/A

• Not applicable when luminaires are installed for the purpose of illuminating art, buildings, or trees or where there is no site lighting.

NCSite111 Proposed Revision: 7.7.1.4 For the safety and reassurance of pedestrians, uniformity is critical to ensure appropriate lighting of all contents within the same field of view. Exterior uniformity shall be 4:1 (Max:Avg) or greater for LZ0 or 20:5:1 (Max:Avg:Min) or greater for LZ1, LZ2, LZ3, and LZ4.

1 points or N/A

• Not applicable where there is no site lighting.

MOTION: The Motion was made and seconded to accept the proposed revision to add the Safety Section (NCSite107, NCSite108, NCSite109, NCSite110, NCSite111). Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

NCSite120-B, NCSite121, NCSite122, NCSite123, NCSite124, NCSite125 NCSite120-B Proposed Revision: 7.5 LANDSCAPING (21-16 POINTS)

NCSite121 Proposed Revision: Maximum = 6 5 points or N/A

• Three points are earned where the landscape plan is developed and shows natural light conditions







and structural limitations.

- Three Two points are earned where the plan identifies existing soil types, and the installed landscape incorporates soil preparation and drainage as stated.
- Not applicable where there is no room for landscaping.

NCSite122 Proposed Revision: Maximum = $\frac{3}{2}$ points or N/A

- Three Two points are earned if >75% of the plants are drought tolerant and non-invasive.
- Two One points are is earned if between ≥50% to ≤75% of the plants are drought tolerant and non-invasive;
- One point is earned if between ≥25% to <50% of the plants are drought tolerant and non-invasive.</p>
- No points are earned if <2550% of the plants are drought tolerant and non-invasive.
- Not applicable where there is no room for landscaping.

NCSite123 Proposed Revision: Maximum = 4-3 points or N/A

- Four Three points are earned if >75% of plants are native.
- Three Two points are earned if between >50 to ≤75% of plants are native.
- Two-One points are is earned if between >32 to ≤50% of the plants are native.
- One point is earned if between ≥20 to ≤32% of plants are native.
- No points are earned if <20≤32% of the plants are native.
- Not applicable where there is no room for landscaping.

NCSite124 Proposed Revision: 2-1 points or N/A

- Two-One points are is earned if plants are grouped according to water requirements.
- Not applicable where all of the landscaping is a preserved natural area or where there is no room for landscaping.

NCSite125 Proposed Revision: Maximum = $\frac{6}{5}$ points or N/A

- Two points are earned where there is an on-site rooftop garden, edible landscape, food forest, or community garden.
- Two points are earned where there is an apiary or pollinator garden on-site.
- Two One points are is earned where there is an on-site chicken coop, aquaponics farm, AND/OR greenhouse.
- Not applicable for interior-only projects.

Discussion took place before the Motion:

• It was noted that this was a result of reshuffling points in the Assessment Area to come up with 5 points for the new Safety Section.

MOTION: The Motion was made and seconded to accept the proposed revisions to the Landscaping section (NCSite120-B, NCSite121, NCSite122, NCSite123, NCSite124, NCSite125).

Discussion took place on the Motion:

 There was discussion on exactly what topics in the Transportation section that were being affected by the revisions.







VOTE: The Motion carries with 8 in favor, 2 opposed, 2 abstained.

Opposed: Jim O'Brien, Angela Tin Abstain: Gord Shymko, Jane Rohde

NCSite113

Proposed Revision: 7.2.1.7 WALKABILITY

Path A, B, or C

Three paths are available for assessing a site's walkability.

• 7.2.1.7A Path A: Walk Score®: Up to 10 points

<u>OR</u>

• 7.2.1.7B Path B: State of Place Index: Up to 10 points

OR

• 7.2.1.7C Path C: AARP Livability Index: Up to 10 points

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

7.2.1.7A PATH A: WALK SCORE®

7.2.1.7A.1 The Walk Score® is at least 50.

Maximum = 10 points

- Ten points are earned for a ≥90 to ≤100 Walk Score[®].
- Eight points are earned for an ≥80 to ≤89 Walk Score®.
- Six points are earned for a ≥70 to ≤79 Walk Score[®].
- Four points are earned for a ≥60 to ≤69 Walk Score[®].
- Two points are earned for a ≥50 to ≤59 Walk Score®.
- No points are earned for a Walk Score® <50.
- Not applicable if the building is unoccupied.

OR

7.2.1.7B PATH B: STATE OF PLACE INDEX

7.2.1.7B.1 The State of Place Index score is at least 40.

Maximum = 10 points

- Ten points are earned for a ≥90 to ≤100 State of Place Index score.
- Eight points are earned for an ≥80 to ≤89 State of Place Index score.
- Six points are earned for a ≥70 to ≤79 State of Place Index score.
- Four points are earned for a ≥60 to ≤69 State of Place Index score.
- Two points are 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

7.2.1.7C PATH C: AARP LIVABILITY INDEX

7.2.1.7C.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 the criterion.

Maximum = 10 points

- Ten points are earned for a ≥90 to ≤100 Livability score.
- Eight points are earned for an ≥80 to ≤89 Livability score.
- Six points are earned for a ≥70 to ≤79 Livability score.
- Four points are earned for a ≥60 to ≤69 Livability score.
- Two points are earned for a ≥50 to ≤59 Livability score.
- No points are earned for a Livability score <50.
- Not applicable if the building is unoccupied.

7.2.1.7 The building's Walkscore® is

• 90 or greater;

OR

• 75 89:

OR

• A building entrance is within 0.5 mi (0.8 km) walking distance of a grocery store and a minimum of three other neighborhood assets.

OR

• A building entrance is within 0.5 mi (0.8 km) walking distance of a minimum of six neighborhood assets.

Neighborhood assets are open to the public, in operation, and as a group have NAICS codes that start with a minimum of three different numbers.

Maximum = 10 points

- Ten points are earned where the building has a Walkscore of ≥90.
- Seven points are earned where:
- o the building has a Walkscore of ≥75 to ≤89; OR

o is located within 0.5 mi (0.8 km) of a grocery store and three other assets;

OR

o within 0.5 mi (0.8 km) of six assets.

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

Discussion took place on the Motion:

• There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

NCSite114, NCSite115, NCSite116

NCSite114 Proposed Revision: Walk Score®: measures the walkability on a scale of 0-100 of any address using a patented system. For each address, Walk Score® analyzes hundreds of walking routes to nearby amenities. Points are awarded based on the distance to amenities in each category. Walk Score® is maintained by Walk Score® Management, LLC part of Redfin Corporation. The score can be publicly accessed for a site at https://www.walkscore.com/.







NCSite115 Proposed Revision: State of Place Index: a walkability and quality of place score from 0-100. It is based on 290 features of the built environment – like sidewalks, benches, street trees, and land uses – data that is collected block by block. It indicates how walkable – convenient, safe, pleasurable, and livable – a block, group of blocks, or neighborhood is. The index value for a site is determined by a proprietary algorithm maintained by State of Place, Inc. who can be contacted at https://www.stateofplace.co/.

NCSite116 Proposed Revision: AARP Livability Index (Neighborhood category): a measure of community livability on a scale of 0-100. The American Association of Retired Persons (AARP) is a nonprofit, nonpartisan organization that empowers people to choose how they live as they age. The livability index for a site can be publicly accessed at https://livabilityindex.aarp.org/.

MOTION: The Motion was made and seconded to accept the new definitions (NCSite114, NCSite115, NCSite116).

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

NCSite132

Proposed Revision: Dark Sky Luminaire: A Dark Sky compliant luminaire directs all illumination down, with no light that projects at an angle greater than 90 degrees above nadir and does not facilitate light trespass beyond the property border.

<u>Dark Sky Facade Lighting: Electrical lighting intended to illuminate the exterior of a building that does</u> not deliver any direct light beyond the edge of the building rooftop.

<u>Light Trespass (ref. les.org): The encroachment of light, typically across property boundaries, causing</u> annoyance, loss of privacy, or other nuisance.

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

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Jeff Bradley

Standard-Wide Editorial Revision

CB104

Proposed Revision: Update text from 'utilize' to 'use' **Discussion took place on the Editorial Revision**:

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

Energy Public Comment Review







Marx stated that there are some revisions occurring still on the Energy Performance Pathways proposal. The Energy Subcommittee Chair presented each public comment or proposal for change before placing a motion.

NC102-13

Public Comment: We propose a new section or possibly an addition to 8.1. Energy Performance that gives points for energy efficiency practices/building technologies that also allow the building to maintain habitable conditions for a certain period of time if external power is disrupted. Can include additional insulation, operable windows to allow ventilation, window shading designed to allow more sun in the winter and block it in the summer, onsite energy generation and storage. Can also include water-related technologies such as cisterns to gather rainwater that can be used for non-potable uses if external water is disrupted.

Reason: These technologies will become more important as climate change causes more power outages (both from extreme weather and from planned outages to prevent wildfires).

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: Issues of resilience are already addressed in the Project Management Assessment Area of the draft standard.

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

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

NCEnergy102

Proposed Revision: Numbering on Energy Prescriptive. Too Many numbers. **Discussion took place on the Editorial Revision**:

There were no comments or concerns on the editorial revision.

NCEnergy103, NCPoints101, NCEnergy114

NCEnergy103 Proposed Revision: 8.1.1C.2.3.1 In all regularly occupied spaces that use at least 0.5 W/ft2 (5.4 W/m2) of lighting power, more than 90% or more of light fixtures have lighting controls that can reduce the lighting load by at least 50% from full lighting power using any of the following technologies:

NCPoints101 Proposed Revision: 8.1.1C1E.2.3.1 In all regularly occupied spaces, that use at least 0.5 W/ft2 (5.4 W/m2) of lighting power, more than 90% or more of light fixtures have lighting controls that can reduce the lighting load by at least 50% from full lighting power using any of the following technologies:

- Dimming: Continuous dimming of the lamps or luminaires from 100% to at least 10% of full light output:
- Multi-level Lighting: Lighting with at least 5 control steps including ON and OFF; or







• Bi-level lighting: Dual switching of alternate rows or luminaires; Switching of individual lamps independently of adjacent lamps within a luminaire.

NCEnergy114 Proposed Revision: Maximum = 3 points-or N/A Not applicable where spaces use <0.5 W/ft2 (5.4W/m2).

MOTION: The Motion was made and seconded to accept the proposed revisions to 8.1.1C.2.3.1 (NCEnergy103, NCPoints101, NCEnergy114).

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy

NCEnergy104

Proposed Revision: 8.1.1C.2.4.2 A minimum of 2% of the roof area consists of skylights that comply with the requirements of Sections 5 and 9 of ASHRAE Standard 90.1-2013. Base this percentage upon the horizontal projected area of the skylight and roof, without overhangs Earning this credit is contingent on compliance with the daylight control credit 8.1.1C.2.5.1 8.3.2.5.

Reason: Updated number due to new numbering system

Discussion took place on the Editorial Revision:

There were no comments or concerns on the editorial revision.

NCEnergy115

Proposed Revision: 8.1.1C.2.6.1 Exterior LPDs comply with or improve upon ANSI/ASHRAE/IES

Standard 90.1-2013 Section 9.4.3 9.4.2 for exterior lighting power density.

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

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Mike Lehman

NCEnergy105

Proposed Revision: Maximum = 1 point

Reason: Not necessary

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

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 11 in favor, 0 opposed, 1 abstained.

Abstain: Mike Cudahy







NCEnergy106

Proposed Revision: 8.1.1C.3.6.1 The HVAC design minimizes or eliminates simultaneous heating and cooling through one of the following strategies:

- HVAC design complies with Section 6.5.2 of the ANSI/ASHRAE/IES Standard 90.1 2013. OR
- 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, e.g., fan coil systems, distributed heat pumps, single-zone systems. OR
- HVAC design complies with Section 6.5.2 of the ANSI/ASHRAE/IES Standard 90.1-2013. Maximum = 6 points or N/A
- Six points are earned where HVAC design uses ventilation compartmentalization.
- Four points are earned where HVAC design complies with Section 6.5.2.
- Not applicable for projects that meet the exemptions of Section 6.5.2.

Reason: Flip flop bullets to match point hierarchy.

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

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

NCEnergy107

Proposed Revision: 8.3.2.1 A Resource Management Plan addresses all energy consuming areas of a building or project and includes the following monitoring protocols (i.e., hourly, daily, monthly, seasonal, by floor, etc.):

- Electricity;
- Heating fuels;
- Steam; and
- Other (e.g., chilled or hot water for campus/district systems) Note: This may reflect new technology that uses other energy sources as long as they are measurable.

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

Discussion took place on the Motion:

• There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

NC102-15

Public Comment: 8.4.1 Renewable energy

Suggest adding at least one point (maybe as a subset of 8.4.1) for having some form of <u>energy storage</u> to allow onsite renewable energy to operate more effectively (e.g., having battery storage to complement a photovoltaic system so it can provide energy at night and on cloudy days).

Reason: N/A







Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The prescriptive aspects of the renewable energy system design is not relevant. Points are awarded on the overall performance of the system.

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

Discussion took place on the Motion:

There was no discussion.

VOTE: The Motion carries with 12 in favor, 0 opposed, 0 abstained.

Public Participation

There was no new business.

New Business

There was no new business.

Review Schedule

GBI staff reminded everyone that the next meeting is on March 8, 2023.

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

Meeting adjourned at 4:53 PM EST.

