

**MINUTES**  
**GBI Consensus Body for New Construction- Call #5**  
**Webinar/Teleconference**  
**March 6, 2024, from 1:00 to 3:00 p.m. ET**

**NOTE ALL TIMES ARE EASTERN TIME**

**Consensus Body Members in Attendance**

Full Name	Company	3/6/24	3/4/24	3/8/23	3/1/23	10/13/22
Senthil Arunachalam	BTU Engineers, LLC	N/A	N/A	N/A	N/A	X
Jeff Bradley	American Wood Council	X	X (left early)	X	X	X (arrived late)
Karen Butler	EPA, Office of Air and Radiation	X	X	X	X	X
Virgil Campaneria (Chair)	Gurri Matute PA	X	X	X	X	X
Michael Cudahy	PPFA - PPEF	X	Absent	X	X	X
Larry Eisenberg	Ovus Partners 360	X	X	X (Proxy Shymko)	X	X
Tehmina Husain	Merrick and Company	Absent	Absent	X	Absent	Absent
Josh Jacobs	WAP Sustainability	X	X	Absent	Absent	X
Ashley Langenfeld	Hoefler Welker	X	X	X	X	X (arrived late, left early)
Michael Lehman	ConTech Lighting	Absent	X	X	X	X
John Mullen	IAPMO	X	X	X	X	X
James O'Brien	Independent Environmental Consultant	X	X	X	X	X
Thomas Pape	BMP (representing AWE)	N/A	N/A	N/A	N/A	Absent
Max Puchtel	American Institute of Steel Construction	X	X	Absent	X (left early)	X
Jane Rohde	JSR Associates, Inc. (representing RFCI)	Absent	X	Absent	X	Absent
Gord Shymko	G. F. Shymko & Associates Inc.	N/A	N/A	X	X	X

Stephen Szoke	American Concrete Institute	X	X	X	X	X
Sumayyah Theron	Cyclone Energy Group	X	X (left early)	N/A	N/A	N/A
Angela Tin	American Lung Association	X	X	X	X (Proxy O'Brien)	X

### Voting Alternates in Attendance

Full Name	Organization	3/6/24	3/4/24	3/8/23	3/1/23	10/13/22
John Cross	American Institute of Steel Construction			X		X

### Interested Parties in Attendance

Full Name	Organization	3/6/24	3/4/24	3/8/23	3/1/23	10/13/22
Rob Brooks	Rob Brooks Associate					X
Ron Burke	Alliance for Water Efficiency			X		
Steve Kooy	BIFMA					X
Viken Koukounian	K.R. Moeller Associates Ltd.			X		
Matthew Lemay	NRMCA					X
Julian Mills – Beale	NRMCA			X		
Niklas Moeller	LogiSon Acoustic Network		X			

### Staff in Attendance

Full Name	Organization	3/6/24	3/4/24	3/8/23	3/1/23	10/13/22
Emily Marx	Secretariat, GBI	X	X	X	X	X
Sara Rademacher	Staff, GBI		X	X	X	X
Micah Thomas	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.

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 attending the meeting. 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.**

### **General Revision Review**

#### **NCPoints201**

**Reason:** Update numbers to start at 1 for first Assessment Area. Sections in Front pages will start at I.

#### **Discussion took place on the Editorial Revision:**

- There were no concerns about updating the numbering of the standard.

#### **NCCB201**

**Revision:** ~~MURB~~ Mixed Use Multi-Family Building

**Reason:** Replace MURB with a more familiar term in all instances

#### **Discussion took place on the Editorial Revision:**

- There were no concerns on the editorial revision.

#### **203-1**

**Public Comment:** 11. INDOOR ENVIRONMENT

**Reason:** Update numbers to start at 1 for first Assessment Area. Sections in Front pages will start at I.

**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 concerns about the editorial revision.

#### **203-2**

**Public Comment:** **global warming potential (GWP):** an index, describing the radiative characteristics of well-mixed greenhouse gases, that represents the combined effect of the differing times these gases remain in the atmosphere and their relative effectiveness in absorbing outgoing infrared radiation. This index approximates the time-integrated warming effect of a unit mass of a given greenhouse gas in today's atmosphere, relative to that of carbon dioxide. *(See ~~carbon dioxide equivalent~~).*

**Reason:** Deleted definition for carbon dioxide equivalent. Consider reinstating CO2e definition as it is the metric used in GWP and still maintained in 5.2 Abbreviations and Acronyms.

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

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

**Discussion took place on the Motion:**

- There was discussion that CO2e is an important topic and should be included in the standard.
- The standard was reviewed and CO2e was not found in the current version of the standard.

**VOTE: The Motion carries with 7 in favor, 2 opposed, 3 abstained.**

Opposed: Josh Jacobs, Ashley Langenfeld

Abstain: Jeff Bradley, Karen Butler, Steve Szoke

### 203-3

**Public Comment:** porous asphalt pavement(s): allows some or all water to penetrate the asphalt assembly.

**Reason:** Still being used in 7.3.4.2.3 Permeable Surfaces:

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

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

**Discussion took place on the Motion:**

- There was no discussion.

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

### 203-4 & 203-6

**203-4 Public Comment:** sand-based filtration: ...Sor**p**tive media

**203-4 Reason:** Spelling. (Commentary: seems like the intention of this recent update to the Standard is to encourage simple language (“utilize” to “use”) so maybe delete “sorb**t**ive”.

**203-4 Recommended Response:** Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

**203-6 Public Comment:** regenerative sor**p**tive media:

**203-6 Reason:** Spelling.

**203-6 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 Revisions:**

- There were no concerns making the editorial revisions.

### 203-5

**Public Comment:** Biophilia

**Reason:** Need to add definition as it is added in 6.1.1.1

**Recommended Response:** Thank you for your comment. Your comment has been rejected for the following reason: This is a common term used in the industry and no definition is needed.

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

**Discussion took place on the Motion:**

- A member volunteered to develop a definition.

- Another member asked if a definition was needed, and it was agreed that it is an established word/term.

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

Abstain: Josh Jacobs, Karen Butler

### 203-7

**Public Comment:** Building resilience:

**Reason:** Need to add definition as it is used in 6.1.1.1 and 6.1.3

**Recommended Response:** Thank you for your comment. Your comment has been rejected for the following reason: The term is already defined in the standard.

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

**Discussion took place on the Motion:**

- The standard was reviewed, and a definition was already found.

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

Abstain: Sumayyah Theron

There was agreement to review Site Subcommittee Proposal for a Bike Score definition before the next public comment.

### NCSite203

**Proposed Revision: Bike Score®:** measures whether a location is good for biking on a scale of 0-100 of any address using a patented system. For each address, Bike Score® analyzes four equally weighted components: bike lanes, hills destinations and road connectivity, and bike commuting mode share. Bike 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/>.

**Reason:** Should be added for consistency with EB23

**MOTION: The Motion was made to accept the proposed revision. With no second, the motion fails.**

**Discussion took place before the Motion:**

- A member argued that it should be left undefined because it is a Trademarked term.
- Another member argued that Bike Score is only maintained by Walk Score, the group that is referenced within the definition.
- It was argued that it shouldn't be part of the standard because it's a reference to a company.
- Another member stated that once someone looks up the website, they will see that it is a company's product.

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

**Discussion took place on the Motion:**

- It was asked where we will provide information on Bike Score, and it was stated that it could be part of the Technical Manual.

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

Opposed: James O'Brien

Abstain: Sumayyah Theron

### 203-8

**Public Comment:** Bike Score:

**Reason:** Need to add definition as it is added in 7.2.1.4

**Recommended Response:** Thank you for your comment. Your comment has been rejected for the following reason: This is a private certification program, and it should not be defined in the standard.

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

**Discussion took place on the Motion:**

- A reason to the commenter was developed.

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

Abstain: James O'Brien

Sumayyah Theron left the meeting.

### 203-9

**Public Comment:** Wildland-Urban Interface (WUI): an area within or adjacent to an "at-risk community" that is identified in recommendations to the Secretary of Agriculture in a Community Wildfire Protection Plan, or

A WUI is any area for which a Community Wildfire Protection Plan is not in effect but is within ½ mile of the boundary of an "at risk community".

Or

A WUI is also any area that is within 1 ½ miles of an "at risk community" AND has sustained steep slopes that may affect wildfire behavior or has a geographic feature that aids in creating an effective fuel break or is in fuel condition class 3.

And

"At risk communities" are areas where conditions are conducive to a large-scale wildland fire disturbance event, thereby posing a significant threat to human life or property.

**Reason:** Need to add one of these definitions as it is in 7.8

**Recommended Response:** Thank you for your comment. Your comment has been rejected for the following reason: A definition is not needed due to the criteria wording in the draft standard.

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

**Discussion took place on the Motion:**

- It was asked if a definition is needed because it is codified. However, it was argued that not everywhere has a WUI code.
- It was argued that the definition is too broad and doesn't help with clarification of the subject. He stated that certain parts of the definition are too confusing.
- It was noted that the definition submitted as part of the comment is the ICC definition. However, the ICC definition was reviewed and was seen as even more broad.
- There was agreement that there is certain confusion amongst other standards on what is WUI.

- It was argued that providing a definition would cause even more confusion for clients when using the New Construction standard.

**VOTE: The Motion fails with 4 in favor, 5 opposed, 2 abstained.**

Opposed: Angela Tin, James O'Brien, Jeff Bradley, Mike Cudahy, Steve Szoke

Abstaining: Max Puchtel, Karen Butler

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

**Discussion took place on the Motion:**

- A reason for the rejection was developed.

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

Abstain: Larry Eisenberg

### 203-10

**Public Comment:** ~~Smoking is defined as the inhalation of smoke from burning tobacco, use of electronic cigarettes, or other substance encased in items such as, but not limited to, cigarettes, pipes, and cigars for recreational or medical use.~~

**Reason:** Definition of smoking should be moved to 5.1 Definitions

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

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

**Discussion took place on the Motion:**

- A member asked if the definition will include the word cannabis. It was noted that it will because of a different proposed revision already approved by the Consensus Body.

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

Abstain: Ashley Langenfeld

### 203-11, 203-12, 203-13, 203-32, 203-33

**203-11 Public Comment:** See 12. References and Guidelines

**203-11 Reason:** Consider referencing ASTM E917-05 - Standard Practice for Measuring Life-Cycle Costs and/or ISO 15686 Buildings and constructed assets - Service life planning - Part 1: General principles and framework

**203-11 Recommended Response:** Thank you for your comment. Your comment has been accepted with modification. This reference has been added to the Technical Reference Manual.

**203-12 Public Comment:** See 12. References and Guidelines

**203-12 Reason:** Consider referencing CSA S4789-19: Guideline on Durability in Buildings.

**203-12 Recommended Response:** Thank you for your comment. Your comment has been accepted with modification. This reference has been added to the Technical Reference Manual.

**203-13 Public Comment:** See 12. References and Guidelines

**203-13 Reason:** Consider references to assist the development of Building Risk Assessments.

AIA Resilient Project Process Guide

[https://content.aia.org/sites/default/files/2022-06/AIA46\\_Resilient\\_Process\\_061422.pdf](https://content.aia.org/sites/default/files/2022-06/AIA46_Resilient_Process_061422.pdf)

UK GBC A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets

<https://ukgbc.org/wp-content/uploads/2022/02/UKGBC-Measuring-and-Reporting-Physical-risk-Report.pdf>

ASTM E3032 Standard Guide for Climate Resiliency Planning & Strategy. <https://www.astm.org/e3032-22.html>

US Resiliency Council <https://www.usrc.org/>

US Climate Resilience Toolkit

<https://toolkit.climate.gov/content/practitioners-guidance-implementing-steps-resilience>

FEMA Basic Preparedness

[www.fema.gov/pdf/areyouready/basic\\_preparedness.pdf](http://www.fema.gov/pdf/areyouready/basic_preparedness.pdf)

**203-13 Recommended Response:** Thank you for your comment. Your comment has been accepted with modification. This reference has been added to the Technical Reference Manual.

**203-32 Public Comment:** [ASTM E917-05 - Standard Practice for Measuring Life-Cycle Costs and/or ISO 15686 Buildings and constructed assets - Service life planning - Part 1: General principles and framework](#)

**203-32 Reason:** Great references for factors determining LCCA.

**203-32 Recommended Response:** Thank you for your comment. Your comment has been accepted with modification. This reference has been added to the Technical Reference Manual.

**203-33 Public Comment:** [CSA S4789-95 \(R2007\): Guideline on Durability in Buildings](#)

**203-33 Reason:** The CSA S478-2019 (latest edition) is a great reference for factors determining Service Life in 6.3.1B.1.

**203-33 Recommended Response:** Thank you for your comment. Your comment has been accepted with modification. This reference has been added to the Technical Reference Manual.

**MOTION: The Motion was made and seconded to accept with modification the proposed responses for public comments 203-11, 203-12, 203-13, 203-32, and 203-33.**

**Discussion took place on the Motion:**

- There was no discussion.

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

Opposed: Josh Jacobs

Abstain: Jeff Bradley

### **PM Public Comment Review**

The Secretariat reviewed each proposed revision before a motion was placed.

### **NCPM201**

**Proposed Revision:** 6.4.1.1 A moisture control design analysis is performed on walls and ceilings adjacent to spaces of added moisture AND/OR on above-grade portions of the building envelope in accordance with ASHRAE 160-~~2009~~ 2016 or a steady-state water vapor transmission analysis for the purpose of predicting, mitigating, or reducing moisture damage to the building envelope, materials, components, systems, and furnishings.



**Reason:** Update to newer version? 2016 or 2021?

Assessor Guidance: I do not have any guidance other than to consider the 2016 version. Keeping in mind this is not my greatest area of expertise, in my opinion the rigorous analysis for every building is a bit much.

Humidity control and envelope integrity rely on well-established standards of practice.

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

**Discussion took place on the Motion:**

- It was asked why the 2021 version was not going to be added to the standard instead and it was noted that it was thought to be too rigorous for many projects.

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

Opposed: Josh Jacobs

Abstain: Steve Szoke

## **NCPM202**

**Proposed Revision:** 6.2 ENVIRONMENTAL MANAGEMENT DURING CONSTRUCTION (8 POINTS)

6.2.1 ENVIRONMENTAL MANAGEMENT DURING CONSTRUCTION SYSTEM (EMS)

**Reason:** Make section head consistent with the only sub-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 10 in favor, 1 opposed, 0 abstained.**

Opposed: James O'Brien

Mike Cudahy left the meeting.

## **Site Public Comment Review**

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

## **NCSite201**

**Proposed Revision:** 7.2.1.2 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.

Maximum = 6 points or N/A

- ~~Six~~ Four points are earned for buildings when  $\geq 10\%$  of onsite parking spaces are equipped with the specified EV charging stations.
- ~~Three~~ Two points are earned for buildings when  $\geq 5\%$  ~~and to~~  $< 10\%$  of onsite parking spaces are equipped with the specified EV charging stations.

AND

- Two points are earned for buildings when  $\geq 30\%$  of onsite parking spaces are EV ready.
- Not applicable where the project will have no parking associated with the building.

**Reason:** Assessor/CB Member Comment: A member noted similar criteria in the New Construction Standard that it is more detailed, but limiting for assessors. He argued that the New Construction Standard criteria should be replicated to be more like this proposal for the Existing Buildings (EB) standard.

EB Standard Language

2.2.2.8 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  $\geq 5\%$  of onsite parking spaces are EV ready
- Not applicable if the building is regularly unoccupied or does not have onsite parking.

**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 9 in favor, 0 opposed, 1 abstained.**

Abstain: Max Puchtel

### **NCSite202**

**Proposed Revision: 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 Table B (*Hardscape Area Method*) AND Table F (*Maximum Vertical Illuminance on the Property Line*), 2011.

**Reason:** Table before B

**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 10 in favor, 0 opposed, 0 abstained.**

### **NCSite204**

**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.

- 2.2.1.5.2: 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.

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

OR

- 2.2.1.5.4: 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.

OR

7.2.1.5.5: A Gold or better ActiveScore certification rating.

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~~ and/or where there is a parking rack near the main entrance.

OR

- Five points are earned for a Gold or better ActiveScore Certification Rating.

**Reason:** Add Active Score certification for additional option.

**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 10 in favor, 0 opposed, 0 abstained.**

### **NCSite205**

**Proposed Revision:** 7.3.3.1 Non-invasive existing trees and woody shrubs are retained and protected during construction.

A certified arborist, a landscape architect, or a certified professional landscape designer provides plans and specifications that are used by the general contractor or construction manager to protect retained trees and shrubs from disturbance and soil compaction.

Assessment Guidance:

Base Calculations on the area of canopy coverage provided by trees and shrubs prior to clearing and construction activity.

Calculations exclude plants that will be removed because they are unhealthy, invasive or otherwise inappropriate for site conditions (e.g., have water, soil, light, or other requirements that are inconsistent with the site).

If an area is covered by overlapping layers of plants, it is not counted multiple times, (i.e., the maximum canopy coverage for any site is 100%).

Maximum = ~~6~~ 3 points or N/A

- ~~Six~~ Three points are earned when  $\geq 75\%$  to  $< 90\%$  of the canopy of existing trees and shrubs is retained and protected.
- ~~Four~~ Two points are earned when  $\geq 50\%$  to  $< 75\%$  of the canopy of existing trees and shrubs is retained and protected.
- No points are earned when  $< 50\%$  of the canopy of existing trees and shrubs is retained and protected.
- Not applicable where the site has no existing trees or shrubs or where existing plants do not qualify for calculation of canopy coverage, such as those that are invasive or in poor health.

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

**Discussion took place on the Motion:**

- It was argued that saving existing canopy is very important and should be rewarded.

**VOTE: The Motion fails with 5 in favor, 5 opposed, 0 abstained.**

Opposed: Ashley Langenfeld, Jeff Bradley, Josh Jacobs, Max Puchtel, Steven Szoke,

Chair Vote: Virgil Campaneria opposed the motion.

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

**Discussion took place on the Motion:**

- It was asked where the points would go to, which was reviewed. It was argued that other topics are also thought to be important and the idea of reducing points on this topic was to help boost another topic that is also important.
- It was argued that putting points on SRI is counter-intuitive, because saving the canopy would benefit SRI.
- There was discussion on the importance of canopy versus SRI and bird safety.

**VOTE: The Motion carries with 5 in favor, 3 opposed, 2 abstained.**

Opposed: Ashely Langenfeld, James O'Brien, Larry Eisenberg

Abstain: Karen Butler, John Mullen

## **NCSite206**

**Proposed Revision:** 7.3.4.1 Roof: The building has a vegetated roof, is shaded during summer months, AND/OR has a roof with a high Solar Reflectance Index (SRI) as prescribed based on the slope of the roof.

Where used to comply, shading trees are to be existing, non-invasive plants that are retained on site or newly, non-invasive planted trees that will provide shade within 10 years.

- For a roof slope less than or equal to 2:12, a minimum initial SRI of 78 or greater or a three-year aged SRI of 60 or greater;
- For a roof slope greater than 2:12, a minimum initial SRI of 29 or greater or a three-year-aged SRI of 25 or greater.

Maximum = ~~6~~ 8 points or N/A

The following number of points may be earned when using one or more of the listed heat island mitigation strategies on the roof:

- ~~Six~~ Eight points are earned where  $> 70\%$  of the roof complies

o ~~Three~~ Four points are earned where >70% of the roof has a high initial SRI, and ~~three~~four points are earned where >70% of the roof has a high three-year-aged SRI.

- ~~Four~~ Six points are earned where ≥56% to ≤70% percent of the roof complies.

o ~~Two~~ Three points are earned where ≥56% to ≤70% of the roof has a high initial SRI and ~~two~~ three points are earned where ≥56% to ≤70% of the roof has a high three-year-aged SRI.

- ~~Two~~ Four Points are earned if ≥40% to <56% percent of the roof complies.

o ~~One~~ Two points ~~is~~ are earned where ≥40% to <56% of the roof has a high initial SRI, and ~~one~~ two points ~~is~~ are earned where ≥40% to <56% of the roof has a high three-year-aged SRI.

- No points are earned if <40% of the roof complies AND/OR has a high initial or three-year-aged SRI.

- Not applicable for interior-only projects.

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

**Discussion took place on the Motion:**

- There was no discussion.

**VOTE: The Motion carries with 9 in favor, 1 opposed, 0 abstained.**

Opposed: Larry Eisenberg

## 201-1

**Public Comment:** 7.3.4.1 Roof: The building has a vegetated roof, is shaded during summer months, AND/OR has a roof with a high Solar Reflectance Index (SRI) as prescribed based on the slope of the roof. The solar reflectance and thermal emittance values that are used to obtain SRI shall be measured in accordance with ANSI/CRRC S100 or rated in accordance with the CRRC-1 Roof Program.

Where used to comply, shading trees are to be existing, non-invasive plants that are retained on site or newly, non-invasive planted trees that will provide shade within 10 years.

- For a roof slope less than or equal to 2:12, a minimum initial SRI of 78 or greater or a three-year aged SRI of 60 or greater;

- For a roof slope greater than 2:12, a minimum initial SRI of 29 or greater or a three-year-aged SRI of 25 or greater.

**Reason:** To help with compliance, we recommend adding a reference to the ANSI/CRRC S100 standard in Sections 2.3.4.1, 2.3.4.1.1, and 2.3.4.1.2 of the Technical Reference Manual for New Construction. The ANSI/CRRC S100 standard (<https://coolroofs.org/resources/ansi-crrc-s100>) is a commonly used technical resource for the radiative property testing and weathering of roofing materials. It is referenced in many national model codes and standards, including the International Energy Conservation Code, International Green Construction Code, RESNET Standard 301, and ASHRAE Standard 90.1. It provides a standard and uniform practice for testing and weathering.

To further aid with compliance, we also recommend adding a reference to the CRRC-1 Roof Program in Sections 2.3.4.1, 2.3.4.1.1, and 2.3.4.1.2. The CRRC-1 Roof Program is a third-party product rating program for roofing products that is administered by the Cool Roof Rating Council (CRRC). The program has been in existence since 2002 and was developed with input from a wide array of stakeholders. The ratings are based on a product's initial and three-year aged surface radiative properties (solar reflectance and thermal emittance) and range from 0 to 1, with 1 being the most reflective or emissive. The ratings inform consumers how efficient the product is at reducing building energy use, increasing occupant comfort, and mitigating the

urban heat island effect.

The rated products are published in the CRRC Rated Roof Products Directory (<https://coolroofs.org/directory/roof>), an online, publicly available database that policymakers, design professionals, building owners, and others have relied on for years for third-party data. The directory gives consumers the ability to search for and compare roofing products that comply with code requirements, green building certifications, and rebate programs. The ratings are also on CRRC labels found on product packaging

**MOTION: The Motion was made and seconded to send the public comment back to Subcommittee.**

**Discussion took place on the Motion:**

- There was no discussion.

**VOTE: The Motion carries with 9 in favor, 1 opposed, 0 abstained.**

Opposed: Jeff Bradley

## 201-2

**Public Comment:** 7.3.4.3 Walls: At least 75% of opaque wall surfaces (by area) on the east, west, and south have a solar reflectance index (SRI) of 29 X or greater and thermal emittance of X or greater, are covered by or are designed to be covered by non-invasive vegetation AND/OR a vegetative wall during the summer months. New concrete or concrete masonry without additional colored pigment is deemed to comply without additional testing. The solar reflectance and thermal emittance values should be obtained in accordance with the CRRC-2 Wall Program.

**Reason:** The CRRC recommends replacing “Solar Reflectance Index” (SRI) with “solar reflectance” and “thermal emittance” in Section 7.3.4.3 Walls in the ANSI/GBI-01 (2021) standard because SRI is not an appropriate metric for vertical surfaces, such as walls. The standard for calculating SRI is ASTM E1980, which is limited in scope to horizontal and low-sloped opaque surfaces, as suggested by the title of the standard: Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces. There is movement to correct the inappropriate use of SRI for wall reflectance provisions among various codes and standards developers, including ASHRAE. For example, SRI has been replaced with solar reflectance (SR) and thermal emittance (TE) in ASHRAE Standard 90.1-2022.

The CRRC cannot comment on or recommend any specific SR and TE values that should be incorporated into the ANSI/GBI-01 standard. However, there are standards that specify minimum SR and TE values for exterior walls that could be helpful references. For example, ASHRAE replaced a minimum SRI of 29 with a minimum SR of 0.30 and minimum TE of 0.75 in the 2022 version of the 90.1 standard. That standard also requires at least 75% of the opaque wall area to have a minimum area-weighted initial SR to account for mixed materials on the building’s facade.

We also recommend adding a reference to the CRRC-2 Wall Program, which covers the testing requirements for exterior wall materials in Chapter 3 and Appendix 1 in the CRRC-Wall Rating Program Manual, including the appropriate device settings for the accurate and proper reflectance measurements of vertical surfaces. Reason being that, although ASTM C1549 and C1371 are the appropriate test methods for many wall product types, the necessary device settings for vertical surfaces (walls) are not specified in those ASTM standards. The CRRC-2 details the necessary device settings, and also lists additional measurement device options (see S.2.2 Solar Reflectance Tests in CRRC-2, Appendix 1).

To aid compliance with the wall reflectance provisions in Section 2.3.4.3 of the Technical Manual, we recommend adding a reference to the CRRC-2 Wall Program (<https://coolroofs.org/programs/wall-rating-program>). The CRRC-2 Wall Program is a third-party product rating program for exterior wall materials that is administered by the CRRC. The program has been in existence since January 2022 and was developed with input from a wide array of stakeholders.

The rated products are published in the CRRC Rated Wall Products Directory (<https://coolroofs.org/directory/wall>).

The ratings are also on CRRC labels which may be found on product packaging (see below).

**MOTION: The Motion was made and seconded to send the public comment back to Subcommittee.**

**Discussion took place on the Motion:**

- There was no discussion.

**VOTE: The Motion carries with 9 in favor, 1 opposed, 0 abstained.**

Opposed: Jeff Bradley

### **NCSite207**

**Proposed Revision:** 2.3.5.1 Measures to address bird strikes include, but are not limited to the following:

Glass and Façade Treatments:

- Fritted and Frosted Glass
- Angled Glass
- Ultra-Violet Glass
- Film and Art Treatment of Glass
- External Screens
- Architectural Features
- Netting

Other Considerations:

- Wind generators
- Lighting Treatments
- Location-Related Hazard:
  - Buildings located inside of, or within a clear flight path of less than 300 feet from an Urban Bird Refuge (defined below) require treatment when:

o New buildings are constructed

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

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

Bird Collision Zone:

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

Maximum = 5 4-points

- Three points are earned for implementing measures identified in 2.3.5.1.
- ~~One~~ Two points are is earned for assessing and reporting on the design analysis for bird safety.

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

**Discussion took place on the Motion:**

- It was stated that members are also working on a wording change to this criterion.

**VOTE: The Motion carries with 9 in favor, 1 opposed, 0 abstained.**

Opposed: Larry Eisenberg

#### **203-14**

**Public Comment:** OR a Transit Score® is 70 or greater.

**Reason:** Since the Standard is using all the other WalkScore Index tools, this would be a good Option.

**MOTION: The Motion was made and seconded to send the public comment back to Subcommittee.**

**Discussion took place on the Motion:**

- There was no discussion.

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

#### **203-15**

**Public Comment:** ~~Hardscape surfaces with a solar reflectance index (SRI) of 29 or greater.~~ an initial SR of at least 0.28 as measured in accordance with ANSI/CRRC S100. New concrete and concrete masonry without additional colored pigment are deemed to comply without additional testing.

**Reason:** NRMCA is supportive of maintaining the Heat Island mitigation section. However, for hardscapes, Solar Reflectance (SR) is a better way to measure materials with more thermal mass, for nonroof materials than SRI. SR is the fraction of solar energy that is reflected by a surface on a scale of 0 to 1. It doesn't factor in emissions of thermal radiation the way SRI does. Emissivity is a material's ability to release absorbed energy.

[https://www.cement.org/docs/default-source/fc\\_concrete\\_technology/sn2982a-solar-reflectance-values-of-concrete.pdf](https://www.cement.org/docs/default-source/fc_concrete_technology/sn2982a-solar-reflectance-values-of-concrete.pdf)

**MOTION: The Motion was made and seconded to send the public comment back to Subcommittee.**

**Discussion took place on the Motion:**

- There was no discussion.

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

#### **203-16, 203-17, 203-19**

**203-16 Public Comment:** No change

**203-16 Reason:** NRMCA is supportive of maintaining the Permeable Surfaces: At least 50% of installed hardscape area (walkways, patios, driveways, etc.) uses permeable materials. As noted on earlier comment Porous asphalt is still and options so should maintain definition.

**203-16 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.

**203-17 Public Comment:** No change

**203-17 Reason:** NRMCA is supportive of maintaining the Stormwater management sections.



**203-17 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.

**203-19 Public Comment:** No change

**203-19 Reason:** NRMCA is supportive of appropriate lighting safety standards including reference to ANSI/IES RP-43-21, Recommended Practice: Lighting Exterior Applications, 2021.

**203-19 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 responses for 203-16, 203-17, and 203-19.**

**Discussion took place on the Motion:**

- There was no discussion.

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

Max Puchtel left the meeting.

### 203-20

**Public Comment:** ~~Not applicable where the building site is not located in a wildland-urban interface area.~~

**Reason:** Since the “fire protection engineer or certified fire marshal that the site wildland-urban interface hazard is moderate, high or extreme;” this applicability statement should not be relevant.

**Recommended Response:** Thank you for your comment. Your comment has been rejected for the following reason: Not applicable is necessary to identify buildings that are not in the wildlife area.

**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 7 in favor, 0 opposed, 2 abstained.**

Abstain: Josh Jacobs, Steve Szoke

### 203-21

**Public Comment:** ~~AND A fire protection engineer or certified fire marshal has inspected the completed site within 90 days prior to project certification or re-certification and found it compliant with the International Wildland-Urban Interface Code (2015).~~

**Reason:** Seems redundant to require that the site is “designed to comply with the most recent International Wildland-Urban Interface Code” and again have to be certified to 90 days prior to be compliant. What other requirement in this Standard has to “comply” and then “certify to comply” within 90 days of completion?

**Recommended Response:** Thank you for your comment. Your comment has been rejected for the following reason: The first reference to the code is to plan for the site to be compliant and this portion of the criteria is necessary that it complies with the plan.

**MOTION: The Motion was made and seconded to reject the comment.**

**Discussion took place on the Motion:**

- There was no discussion.

**VOTE: The Motion carries with 9 in favor, 0 opposed, 0 abstained.**

**MOTION: The Motion was made and seconded to reply with the proposed response for the rejection of comment, 203-21.**

**Discussion took place on the Motion:**

- A reason to reject the public comment was developed.

**VOTE: The Motion carries with 9 in favor, 0 opposed, 0 abstained.**

**203-22**

**Public Comment:** ...recent International Wildland-Urban Interface Code (~~2015~~).

**Reason:** The most recent edition is 2021.

**MOTION: The Motion was made and seconded to send the public comment back to Subcommittee.**

**Discussion took place on the Motion:**

- There was no discussion.

**VOTE: The Motion carries with 9 in favor, 0 opposed, 0 abstained.**

**New Business**

A member asked for a version of the changes in a word document to be sent ahead of the meeting to better

**Action Items**

GBI staff reminded members to completed meeting poll for late March/early April to determine the best date and time for the next meetings.

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

**Meeting adjourned at 2:50 PM EST.**