



MINUTES

GBI Consensus Body for New Construction - Call #1

Webinar/Teleconference

July 7, 2025, from 11:00 a.m. to 1:00 p.m. ET

NOTE ALL TIMES ARE EASTERN TIME

Consensus Body Members in Attendance

Full Name	Company	7/7/25
Jeff Bradley	American Wood Council	Absent
Virgil Campaneria (Chair)	GURRIMATUTE	X
Michael Cudahy	PPFA	X
Larry Eisenberg	Ovus Partners 360	X
Michael Lehman	ConTech Lighting	Absent
John Mullen	IAPMO	X
James O'Brien	Independent Environmental Consultant	Absent
Darren Post	STYROPEK	X (Proxy Puchtel)
Max Puchtel	American Institute of Steel Construction	X
Miranda Rickerson	Above Green, LLC	Absent
Jane Rohde	JSR Associates, Inc.	X
Sumayyah Theron	Avant-garde Sustainable Solutions	X

Alternates in Attendance

Full Name	Organization	7/7/25
Sarah Puls	American Wood Council	X

Staff in Attendance

Full Name	Organization	7/7/25
Emily Marx	Secretariat, GBI	X
Katy Johnson	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 displayed the Roster and noted that the Consensus Body for New Construction has balance between the three categories, General Interest, Producer, and User.

Administrative Items

Chair Virgil Campaneria thanked everyone for participating in the meetings that have taken place thus far. 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.

Introductions

Consensus Body members and GBI staff gave a brief introduction of themselves.

Editorial Revisions

The Secretariat reviewed the editorial revisions for rebranding GBI's tools cited in the NC Standard.

CB-107

Editorial Proposed Revision: ~~Green Globes~~GBI Energy Baseline Calculator™

~~Green Globes~~ Journey to Net Zero™

~~Green Globes~~GBI Materials and VOC Emissions Tracker™

~~Green Globes~~GBI Water Consumption Reduction Calculator™

Discussion took place on the Editorial Revisions:

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

Project Management Revision Review

The Secretariat reviewed each public comment or revision before placing a motion

NC24-302-1

Public Comment: "Environmental preferable products" is vague and should be defined.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The purpose of 1.1.1.1 is for the design team to evaluate a design plan and establish performance and green design goals. We intend for the design team to use resources including, but not limited to the NC Standard and Technical Manual to determine environmentally preferable products and to not be overly prescriptive.

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 8 in favor, 0 opposed, 0 abstained.

CB-101, CB-102, CB-103

CB-101 Proposed Revision: 1.1.2.1 Employ an Integrated Design Process (IDP) with evidence of comprehensive pre-design, design phase, and construction phase planning and coordination.

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

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

CB-102 Proposed Revision: 1.1.2.1 Employ an Integrated Design Process (IDP) with evidence of comprehensive pre-design, design phase, and construction phase planning and coordination.

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

- Architect;
- Building Envelope Specialist;
- Civil Engineer;
- Commissioning Agent;
- Community Representative;
- Electrical Engineer;

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

CB-103 Proposed Revision: 1.1.2.1 Employ an Integrated Design Process (IDP) with evidence of comprehensive pre-design, design phase, and construction phase planning and coordination.

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

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

MOTION: The Motion was made and seconded to accept the proposed revisions, CB-101, CB-102, CB-103.

Discussion took place on the Motion:

- It was noted that there are many people that could or should be involved in the IDP meetings.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

CB-104

Proposed Revision: 1.1.1.1 Performance and green design goals (qualitative AND/OR quantitative) are established in collaboration with the owner in writing and are regularly assessed from pre-design through to completion of construction and occupancy for the following listed items:

- Site design;
- Environmentally responsible construction activities;
- Biophilia and occupant enrichment;
- Carbon Greenhouse Gas Emissions;
- Water conservation, efficiency, alternate water sources, and reuse;
- Building envelope and moisture control;
- Energy efficiency;

Net Zero Energy

- Materials including:
 - o Efficiency;
 - o Environmentally preferable products; and
 - o Storage of hazardous materials;
- Indoor environment including:
 - o Acoustic comfort;
 - o Thermal comfort;
 - o Lighting;
 - o Air quality; and
- Building resilience.

Reason: Reorder to be alphabetic

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

Discussion took place on the Motion:

- There was a question on whether it was site or project specific.
- There was agreement to change “carbon” to “Greenhouse Gas.”
- It was argued that the list should also include goals to be net zero energy.

AMENDMENT: The amendment was made and seconded to add “Net Zero Energy” to the list.

Discussion that took place on the Amendment:

- There was discussion that Net Zero Energy is too specific, and the list is intended to be generic and not too limiting.
- It was discussed whether it could be added under Energy Efficiency, similar to those listed under Materials, or if it should be listed as “Energy Efficiency or Net Zero Energy”.



- It was argued that the standard should be aspirational, and projects should be forced to review their project against goals for net zero energy.

AMENDMENT VOTE: The amendment fails with 2 in favor, 6 opposed, 0 abstained.

Opposed: Sumayyah, Jane, Max, Mike, Sarah, Darren

Discussion that took place on the Original Motion:

- There was no further discussion.

MOTION VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

The Secretariat noted that there are now 10 goals and asked whether an additional point should be added to 1.1.1.1 so one point is awarded for each goal. Members agreed that how the standard is currently written, clients can get a maximum of 9 points for the 10 goal options listed.

CB-105

Proposed Revision: 1.1.3.3 Project Specific Design Parameters: Document that the findings of both the risk and building function assessments have been integrated into the building and site design parameters and are reflected in the final design and construction of the building.

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 8 in favor, 0 opposed, 0 abstained.

Energy Revision Review

The Secretariat reviewed each public comment or revision before placing a motion.

NC24-303-1, NC24-304-1, NC24-302-6

NC24-303-1 Public Comment: Update all referenced standards to their most recent editions.

NC24-303-1 Reason: Many of the standards that are listed in the reference table are obsolete and have since been replaced by updated versions. The updated versions of these standards often contain critical updates to requirements and safety information.

NC24-303-1 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

NC24-304-1 Public Comment: As a green building program which aims to support progression toward net zero energy and carbon buildings it would be best to reset the energy code baselines used throughout with references to the 2021 or 2024 IECC and 2019 or 2022 ASHRAE 90.1 standard.

NC24-304-1 Reason: Referencing codes/standards that are several cycles out of date does not encourage good behavior nor does it set GBI up as a program that is current and helping to meet our goals. While I understand that there are percentage improvements above the outdated reference codes for points I believe these could and should be reset to be based on updated codes and standards. Failure to do so will result in a new GBI program that is out of touch and behind the ball.



NC24-304-1 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

NC24-302-6 Public Comment: It may be too soon to reach to the 2024 IECC and ASHRAE 90.1-2022 as baseline for points, but these newer codes do bring in important envelope considerations for commercial buildings, such as addressing thermal bridging – which can have large impacts on actual building energy efficiency and envelope performance. As a green commercial building code, this would seem to be appropriate as a minimum requirement, above which points are then granted. Also, the older versions of ASHRAE 90.1 and IECC do not reference the latest minimum HVAC equipment efficiency requirements and this would be a major shortfall in the new GBI standard, aside from not aligning with other energy efficiency improvements for minimum code new construction (which includes some modest improvements to envelope).

NC24-302-6 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, NC24-303-1, NC24-304-1, NC24-302-6 .

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 7 in favor, 0 opposed, 1 abstained.

Abstain: John Mullen

NC24-302-2

Public Comment: Several different options/paths are provided but it is unclear if they are really equivalent methods (e.g. ASHRAE 90.1 vs. IECC vs. EnergyStar Score vs. ASHRAE EQ vs. net zero energy) and that the points assigned for different levels of exceeding minimum requirements result in equivalent performance with the different metrics or programs used. For example, EnergyStar Scores (and potential ASHRAE EQ scores) are based on a metric relative to existing building stock energy performance – which is substantially different than newer versions of ASHRAE 90.1 or IECC.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The Pathways give opportunities for clients to pursue the option/method that works best for them. The various pathways achieve a similar outcome in terms of energy conservation and making the building compliant with a Net Zero standard.

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 8 in favor, 0 opposed, 0 abstained.

NC24-302-3, NC24-302-4, NC24-302-5



NC24-302-3 Public Comment: The proposed building demonstrates compliance with and/or improvement over the ANSI/ASHRAE/IES Standard 90.1-~~2016~~ 2019 Appendix G baseline through the use of whole-building energy modeling in accordance with Appendix G.

NC24-302-3 Reason: The references to ASHRAE 90.1 and IECC should at least address the 2019 and 2021 versions (not 2016), respectively (which are listed in the reference section but not used in the body of the standard for baselining points). However, even though GBI assigns points baselined from older 2013 and 2015 versions of ASHRAE 90.1 and IECC, respectively, the points given are low for minimal improvement of 0-2% over these older codes. The max points available required 30% or greater improvement over these older codes (which would put them potentially ahead of the current 2021 and later editions). Even so, GBI should be baselining points using a recent version of ASHRAE 90.1-2019 and IECC 2021 (which references ASHRAE 90.1-2019 as an alternate path).

NC24-302-3 Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The Standard has been updated to reflect on current industry standards for energy and was updated to reference ASHRAE 90.1-2022.

The proposed building demonstrates compliance with and/or improvement over the ANSI/ASHRAE/IES Standard 90.1-~~2016~~ 2022 Appendix G baseline through the use of whole-building energy modeling in accordance with Appendix G. To use other versions of ANSI/ASHRAE/IES Standard 90.1, use the Green Globes Energy Baseline Calculator.

NC24-302-4 Public Comment: The proposed building demonstrates compliance with and/or improvement over the ANSI/ASHRAE/IES Standard 90.1-~~2016~~ 2019 Appendix G baseline through the use of whole-building energy modeling in accordance with Appendix G.

NC24-302-4 Reason: The references to ASHRAE 90.1 and IECC should at least address the 2019 and 2021 versions (not 2016), respectively (which are listed in the reference section but not used in the body of the standard for baselining points). However, even though GBI assigns points baselined from older 2013 and 2015 versions of ASHRAE 90.1 and IECC, respectively, the points given are low for minimal improvement of 0-2% over these older codes. The max points available required 30% or greater improvement over these older codes (which would put them potentially ahead of the current 2021 and later editions). Even so, GBI should be baselining points using a recent version of ASHRAE 90.1-2019 and IECC 2021 (which references ASHRAE 90.1-2019 as an alternate path).

NC24-302-4 Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The Standard has been updated to reflect on current industry standards for energy and was updated to reference ASHRAE 90.1-2022.

The building demonstrates compliance with or an improvement over an estimated ANSI/ASHRAE/IES Standard 90.1-~~2016~~ 2022, Appendix G (as per 3.1.1A Path A) through the use of a whole-building energy modeling and as translated from the IECC Baseline using the Green Globes Energy Baseline Calculator.



NC24-302-5 Public Comment: The proposed building demonstrates compliance with and/or improvement over the ANSI/ASHRAE/IES Standard 90.1-~~2016~~ 2019 Appendix G baseline through the use of whole-building energy modeling in accordance with Appendix G.

NC24-302-5 Reason: The references to ASHRAE 90.1 and IECC should at least address the 2019 and 2021 versions (not 2016), respectively (which are listed in the reference section but not used in the body of the standard for baselining points). However, even though GBI assigns points baselined from older 2013 and 2015 versions of ASHRAE 90.1 and IECC, respectively, the points given are low for minimal improvement of 0-2% over these older codes. The max points available required 30% or greater improvement over these older codes (which would put them potentially ahead of the current 2021 and later editions). Even so, GBI should be baselining points using a recent version of ASHRAE 90.1-2019 and IECC 2021 (which references ASHRAE 90.1-2019 as an alternate path).

NC24-302-5 Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The Standard has been updated to reflect on current industry standards for energy and was updated to reference ASHRAE 90.1-2022.

The ENERGY STAR® score of the proposed design is 80 or greater for a mixed use multi-family and multi-family building benchmarked in Target Finder determined by whole building energy modeling in accordance with the modeling guidelines prescribed in ANSI/ASHRAE/IES Standard 90.1-~~2016~~ 2022 Appendix G.

MOTION: The Motion was made and seconded to accept with modification the proposed responses, NC24-302-3, NC24-302-4, NC24-302-5.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

NC24-302-9 & Energy-302

NC24-302-9 Public Comment: All of the opaque and fenestration elements of the building envelope have a window-to-wall ratio less than or equal to 40% and comply with at least one of the following:

- The thermal transmittance (U-factor), thermal conductance (C-factor), F-factor, and SHGC are less than those in the ~~2015~~ 2021 IECC, Section C402, or ANSI/ASHRAE/IES Standard 90.1-~~2013~~ 2019, Section 5, by 10%, except for these items where the factors must meet the ~~2015~~ 2021 IECC or ANSI/ASHRAE/IES Standard 90.1-~~2013~~ 2019:

- o Opaque elements in Climate Zones 1 through 3
- o SHGC for north and south-oriented fenestration
- o In cases where the R-value or SHGC are NR (no requirement).

- Demonstrate that the U-factor, C-factor, F-factor, and SHGC are less than those in the ~~2015~~ 2021 IECC, Section C402, or ANSI/ASHRAE/IES Standard 90.1-~~2013~~ 2019, Section 5, by 5%, except for these items where the factors must meet the ~~2015~~ 2021 IECC or ANSI/ASHRAE/IES Standard 90.1-~~2013~~ 2019:

- o Opaque elements in Climate Zones 1-3
- o SHGC for north and south-oriented fenestration

- o In cases where the R-value or SHGC are NR (no requirement).
- The thermal resistance (R-value/RSI-value) or the thermal transmittance (U-factor), thermal conductance (C-factor), and F-factor; and for fenestration, the U-factor and SHGC meet or exceed the prescriptive requirements of the ~~2015 2021~~ IECC, section C402, or ANSI/ASHRAE/IES Standard 90.1-~~2013~~²⁰¹⁹, section 5.5.

Note: A project must choose either the IECC or ANSI/ASHRAE/IES Standard 90.1 for all factors.

NC24-302-9 Reason: The prescriptive energy performance option references ASHRAE 90.1-2013 and 2015 IECC as the baseline. These are outdated for prescriptive building requirements including envelope, HVAC, ventilation/economizers, etc. These need to be updated to at least ASHRAE 90.1-2019 and 2021 IECC, or better (the 2022 and 2024 editions which use the latest energy efficiency requirements for minimum code new construction). For existing buildings, it is reasonable to allow perhaps a code that is older to be used, provided the existing building undergoing renovation is at least 20 years older than the edition of the energy code being used to upgrade it. But, for existing buildings, the 2024 IECC should be preferred as a baseline because it includes new and expanding requirements and flexibility for application to existing buildings in its Chapter 5 requirements. This should be the minimum baseline for assessing points with increasing points for meeting or exceeding the new building requirements.

NC24-302-9 Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The Standard has been updated to reflect on current industry standards for energy and was updated to reference ASHRAE 90.1-2022.

Energy-302 Proposed Revision 3.1.1F.1.1.1 All of the opaque and fenestration elements of the building envelope have a window-to-wall ratio less than or equal to 40% and comply with at least one of the following:

- The thermal transmittance (U-factor), thermal conductance (C-factor), F-factor, and SHGC are less than those in the ~~2024 2015~~ IECC, Section C402, or ANSI/ASHRAE/IES Standard 90.1-~~2022 2013~~, Section 5, by 10%, except for these items where the factors must meet the ~~2015 2024~~ IECC or ANSI/ASHRAE/IES Standard 90.1-~~2013~~²⁰²²:
- o Opaque elements in Climate Zones 1 through 3
- o SHGC for north and south-oriented fenestration
- o In cases where the R-value or SHGC are NR (no requirement).
- Demonstrate that the U-factor, C-factor, F-factor, and SHGC are less than those in the ~~2015 2024~~ IECC, Section C402, or ANSI/ASHRAE/IES Standard 90.1-~~2013 2022~~, Section 5, by 5%, except for these items where the factors must meet the ~~2015 2024~~ IECC or ANSI/ASHRAE/IES Standard 90.1-~~2022 2013~~:
- o Opaque elements in Climate Zones 1-3
- o SHGC for north and south-oriented fenestration
- o In cases where the R-value or SHGC are NR (no requirement).
- The thermal resistance (R-value/RSI-value) or the thermal transmittance (U-factor), thermal conductance (C-factor), and F-factor; and for fenestration, the U-factor and SHGC meet or exceed the prescriptive requirements of the ~~2015 2024~~ IECC, section C402, or ANSI/ASHRAE/IES Standard 90.1-

2013 2022, section 5.5.

Note: A project must choose either the IECC or ANSI/ASHRAE/IES Standard 90.1 for all factors. Maximum = 10 points

- Ten points are earned where there is a 10% decrease in U-factor, C-factor, F-factor and SHGC from prescriptive requirements of the 2015 2024 IECC, section C402, or ANSI/ASHRAE/IES Standard 90.1-2013 2022, section 5.
- Eight points are earned where there is a 5% decrease in U-factor, C-factor, F-factor, and SHGC from prescriptive requirements of the 2015 2024 IECC, section C402, or ANSI/ASHRAE/IES Standard 90.1-2013 2022, section 5.
- Five points are earned where R-value/RSI-value or U-factor, C-factor, and F-factor; and fenestration, U-factor, and SHGC meet or exceed prescriptive requirements of the 2015 2024 IECC, section C402, or ANSI/ASHRAE/IES Standard 90.1-2022 2013, section 5.5.

MOTION: The Motion was made and seconded to accept with modification the proposed response for NC24-302-9 and accept the proposed responses for Energy-302.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 7 in favor, 0 opposed, 1 abstained.

Abstain: John Mullen

Energy-304

Proposed Revision: Update all references of 90.1 to 2022 and all references of IECC to 2024

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, 1 abstained.

Abstain: John Mullen

NC24-302-7

Public Comment: The EnergyStar Score and ASHRAE EQ would seem to be pathways more appropriate to assigning points for major renovations, not new buildings. These scores are based on a score relative to the performance of the existing building stock, not new construction built to the latest codes.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The Pathways give opportunities for clients to pursue the option/method that works best for them. The various pathways achieve a similar outcome in terms of energy conservation and making the building compliant with a Net Zero standard.

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 8 in favor, 0 opposed, 0 abstained.

NC24-302-8

Public Comment: The project has achieved GBI's Green Globes Journey to Net Zero certification/recognition, or equivalent from a nationally or regionally recognized certification program within the last three years.

AND

The proposed building demonstrates compliance with and/or improvement over the ASHRAE Standard 90.1-2019.

Reason: This should include a backstop to at least comply with the minimum provisions of ASHRAE 90.1-2019 or 2021 IECC. Purchased renewable energy credits do not guarantee new renewable energy sources will be created to offset the building energy use. On-site renewable energy production does not guarantee that it will be maintained and replaced after its limited-service life (perhaps 1/4th of the building's service life). Thus, it is important that the building itself is energy efficient and that renewable energy is not used in a wasteful way that simply trades off permanent building energy efficiency for the short term or potentially unreliable gain of renewable power production.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The Pathways give opportunities for clients to pursue the option/method that works best for them. The various pathways achieve a similar outcome in terms of energy conservation and making the building compliant with a Net Zero standard.

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 8 in favor, 0 opposed, 0 abstained.

Energy-308 & Energy-309

Energy-308 Proposed Revision: 3.1.1A.1 The proposed building complies with all minimum energy performance requirements of the authority having jurisdiction.

AND

The proposed building demonstrates compliance with and/or improvement over the ANSI/ASHRAE/IES Standard 90.1-2022 2016 Appendix G baseline through the use of whole-building energy modeling in accordance with Appendix G. To use other versions of ANSI/ASHRAE/IES Standard 90.1, use the Green Globes Energy Baseline Calculator.

Maximum = 180 points

- ~~One hundred and eighty points are earned for a >32% improvement over the baseline.~~
- ~~One hundred and seventy six points are earned for a >30% to <32% improvement over the baseline.~~
- ~~One hundred and sixty eight points are earned for a >28% to <30% improvement over the baseline.~~

- One hundred eighty and sixty points are earned for a $\geq 26\%$ to $<28\%$ improvement over the baseline.
- One hundred seventy-six and fifty two points are earned for a $\geq 24\%$ to $<26\%$ improvement over the baseline.
- One hundred seventy and forty four points are earned for a $\geq 22\%$ to $<24\%$ improvement over the baseline.
- One hundred sixty-four and thirty six points are earned for a $\geq 20\%$ to $<22\%$ improvement over the baseline.
- One hundred fifty-eight and twenty eight points are earned for a $\geq 18\%$ to $<20\%$ improvement over the baseline.
- One hundred fifty-two and twenty points are earned for a $\geq 16\%$ to $<18\%$ improvement over the baseline.
- One hundred forty-six and twelve points are earned for a $\geq 14\%$ to $<16\%$ improvement over the baseline.
- One hundred forty and four points are earned for a $\geq 12\%$ to $<14\%$ improvement over the baseline.
- One hundred thirty-four Ninety six points are earned for a $\geq 10\%$ to $<12\%$ improvement over the baseline.
- One hundred twenty-eight Eighty eight points are earned for a $\geq 8\%$ to $<10\%$ improvement over the baseline.
- One hundred twenty-two Eighty points are earned for a $\geq 6\%$ to $<8\%$ improvement over the baseline.
- One hundred sixteen Seventy two points are earned for a $\geq 4\%$ to $<6\%$ improvement over the baseline.
- One hundred ten Sixty four points are earned for a $\geq 2\%$ to $<4\%$ improvement over the baseline.
- One hundred four Fifty six points are earned for compliance with 90.1-2022²⁰¹⁶ Appendix G or up to 2% improvement over the baseline.

Energy-309 Proposed Revision: 3.1.1B.1 The proposed building complies with all minimum energy performance requirements of the authority having jurisdiction.

AND

The building demonstrates compliance with or an improvement over an estimated ANSI/ASHRAE/IES Standard 90.1-2016²⁰²², Appendix G (as per 3.1.1A Path A) through the use of a whole-building energy modeling and as translated from the IECC Baseline using the Green Globes Energy Baseline Calculator. Maximum = 180 points

- One hundred and eighty points are earned for a $\geq 32\%$ improvement over the baseline.
- One hundred and seventy six points are earned for a $\geq 30\%$ to $<32\%$ improvement over the baseline.
- One hundred and sixty eight points are earned for a $\geq 28\%$ to $<30\%$ improvement over the baseline.
- One hundred eighty and sixty points are earned for a $\geq 26\%$ to $<28\%$ improvement over the baseline.
- One hundred seventy-six and fifty two points are earned for a $\geq 24\%$ to $<26\%$ improvement over the baseline.

- ~~One hundred seventy and forty-four~~ points are earned for a $\geq 22\%$ to $< 24\%$ improvement over the baseline.
- ~~One hundred sixty-four and thirty-six~~ points are earned for a $\geq 20\%$ to $< 22\%$ improvement over the baseline.
- ~~One hundred fifty-eight and twenty-eight~~ points are earned for a $\geq 18\%$ to $< 20\%$ improvement over the baseline.
- ~~One hundred fifty-two and twenty~~ points are earned for a $\geq 16\%$ to $< 18\%$ improvement over the baseline.
- ~~One hundred forty-six and twelve~~ points are earned for a $\geq 14\%$ to $< 16\%$ improvement over the baseline.
- ~~One hundred forty and four~~ points are earned for a $\geq 12\%$ to $< 14\%$ improvement over the baseline.
- ~~One hundred thirty-four Ninety-six~~ points are earned for a $\geq 10\%$ to $< 12\%$ improvement over the baseline.
- ~~One hundred twenty-eight Eighty-eight~~ points are earned for a $\geq 8\%$ to $< 10\%$ improvement over the baseline.
- ~~One hundred twenty-two Eighty~~ points are earned for a $\geq 6\%$ to $< 8\%$ improvement over the baseline.
- ~~One hundred sixteen Seventy-two~~ points are earned for a $\geq 4\%$ to $< 6\%$ improvement over the baseline.
- ~~One hundred ten Sixty-four~~ points are earned for a $\geq 2\%$ to $< 4\%$ improvement over the baseline.
- ~~One hundred four Fifty-six~~ points are earned for compliance with 90.1-~~2022~~²⁰¹⁶ Appendix G or up to 2% improvement over the baseline.

MOTION: The Motion was made and seconded to accept the proposed revisions, Energy-308 & Energy-309 .

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

Energy-305 & Energy-306

Energy-305 Proposed Revision: 3.1.1A.1 The proposed building complies with all minimum energy performance requirements of the authority having jurisdiction.

AND

The proposed building demonstrates compliance with and/or improvement over the ANSI/ASHRAE/IES Standard 90.1-2016 Appendix G baseline through the use of whole-building energy modeling in accordance with Appendix G. To use other versions of ANSI/ASHRAE/IES Standard 90.1, use the Green Globes Energy Baseline Calculator.

See the GBI Compliance Interpretation ASHRAE 90.4 Data Centers for data center requirements.

Energy-306 Proposed Revision: 3.1.1C.1 The ENERGY STAR® score of the proposed design is 80 or greater for a mixed use multi-family, ~~and multi-family, or data center~~ building benchmarked in Target



Finder determined by whole building energy modeling in accordance with the modeling guidelines prescribed in ANSI/ASHRAE/IES Standard 90.1-2016 Appendix G.

See the GBI Compliance Interpretation ENERGY STAR for Data Centers for data center requirements.

MOTION: The Motion was made and seconded to accept the proposed revisions, Energy-305 & Energy-306 .

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

Energy-310

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

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 8 in favor, 0 opposed, 0 abstained.

Energy-307

Proposed Revision: 3.1.1F.3.4 DOMESTIC HOT WATER HEATERS

3.1.1F.3.4.1 All domestic ~~hot~~ water heaters meet the efficiency requirements of ANSI/ASHRAE/IES STANDARD 90.1-2013, Table 7.8, or ~~hot~~ domestic water heaters are not provided.

1 point

- One point is earned where performance is 10% better than the requirements of ANSI/ASHRAE/IES Standard 90.1-2013.
- No points are earned where there is electric resistance heat unless the source of electricity was documented as 100% onsite renewable electricity [1 point].

Reason: SME Feedback: It is recommended to remove the word "hot" and to use the proper term used in the industry.

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 8 in favor, 0 opposed, 0 abstained.

CB108, CB109, CB110, CB111

CB108 Proposed Revision: 90.1-2013 2022 Table Equipment

Table 6.8.1-1 Unitary A/C and condensing units

Table 6.8.1-2 Unitary ~~and applied~~ heat pumps

Table 6.8.1-3 ~~Water~~ Liquid-chilling packages

Table 6.8.1-4 PTAC, PTHP, single-package vertical A/C and heat pumps, room air-conditioners, and

room A/C heat pumps

Table 6.8.1-9 Variable refrigerant flow A/C (~~multisplit~~) systems and applied heat pumps

Table 6.8.1-10 Computer room A/C and condensing units ~~Variable refrigerant flow air-to-air and applied heat pumps~~

Table 6.8.1-11 Variable refrigerant flow air-to-air and applied heat pumps ~~Computer room A/C and condensing units~~

CB108 Reason: Update table to new 2022 citations

CB109 Proposed Revision: 90.1-~~2013~~ 2022 Table Equipment

Table 6.8.1-2 Unitary ~~and applied~~ heat pumps (heating mode)

Table 6.8.1-4 PTHP, single-package vertical heat pumps, and room A/C heat pumps (heating mode)

Table 6.8.1-5 Warm-air furnaces and unit heaters

Table 6.8.1-6 Gas and oil-fired boilers

Table 6.8.1-~~1011~~ Variable refrigerant flow air-to-air and applied heat pumps

CB109 Reason: Update table to new 2022 citation

CB110 Proposed Revision: 3.1.1F.2.1.1 The total interior lighting power density (LPD) of the building is less than the referenced standard. Base calculations for LPD on either the whole-building method or space-by-space method.

• ANSI/ASHRAE/IES Standard 90.1-~~2013~~ 2022 or 2015-~~2024~~ 2024 IECC baseline

The control factors from Table ~~9.5.2.3~~ 9.6.3 in 90.1-~~2013~~ 2022 are used to achieve or exceed LPD targets.

Account for high-end trim or Institutional tuning in all spaces where it is present by using a control factor of 0.15 for the purposes of scoring this item.

CB111 Proposed Revision: 3.1.1F.3.4.1 All domestic water heaters meet the efficiency requirements of ANSI/ASHRAE/IES STANDARD 90.1-~~2013~~ 2022, Table 7.8.7.4-1, or domestic water heaters are not provided.

MOTION: The Motion was made and seconded to accept the proposed revisions, CB108, CB109, CB110, CB111.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 6 in favor, 0 opposed, 2 abstained.

Abstain: Max Puchtel and Darren Post

Water Revision Review

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

Water-101



Proposed Revision: 6.2.4.1 The building water systems conform 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.

Maximum = 6 points or N/A

- Six points are awarded for conforming with ASHRAE 514.
- Four points are awarded for confirming with ASHAE 188.
- Not applicable if both 5.1 and 5.2 in ASHRAE 188-2018 are satisfied.

Reason: Consistent with next version of EB.

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, 1 abstained.

Abstain: Sarah Puls

Materials Revision Review

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

NC24-302-10

Public Comment: The project team conducts a whole building life cycle assessment.

The life cycle assessment shall conform to ASTM E2921-22 Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems.

The life cycle assessment minimally reports the following life cycle impact indicators:

- Global warming potential (GWP);
- Acidification potential;
- Eutrophication potential;
- Ozone depletion potential (ODP); and
- Smog potential.

Operating energy consumption, operational carbon savings, and MEP systems can be included in the life cycle assessment.

Reason: This section only gives permission to consider building operational carbon, but if insulation materials GWP are to be considered in a whole building embodied carbon life-cycle assessment, it must require that operational carbon savings are considered based on the energy and carbon emissions avoidance that the buildings insulation package provides. To do otherwise misses the whole point of insulation materials – to save operational energy and emissions! (Reference - <https://www.continuousinsulation.org/sites/default/files/uploads/attachments/node/210/ci-factssheetdecarbfinal.pdf>). This comment applies to all three of the WBLCA options listed. It should also consider the multi-functional attributes of some insulation materials that allow design

efficiencies for the building envelope (i.e., all-in-one WRB, continuous insulation, and vapor control) and even for the structure (e.g., reducing foundation depth and concrete usage in colder climates).

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 8 in favor, 0 opposed, 0 abstained.

NC24-302-11

Public Comment: The project team evaluates two different building designs of similar size and function comparing global warming potential (GWP) to select the building with the lower GWP impact through either of the following methods:

Method 1: Conduct a Whole Building Life Cycle Assessment (LCA) that conforms to ASTM E2921-22 Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes, Standards, and Rating Systems.

Method 2: Conduct a GWP comparison assessment using an embodied carbon calculator.

The life cycle assessment or GWP assessment report includes the following life cycle impact indicators:

- Global warming potential (GWP)
- Operational carbon savings

Reason: This section only gives permission to consider building operational carbon, but if insulation materials GWP are to be considered in a whole building embodied carbon life-cycle assessment, it must require that operational carbon savings are considered based on the energy and carbon emissions avoidance that the buildings insulation package provides. To do otherwise misses the whole point of insulation materials – to save operational energy and emissions! (Reference - <https://www.continuousinsulation.org/sites/default/files/uploads/attachments/node/210/ci-factssheetdecarbfinal.pdf>). This comment applies to all three of the WBLCA options listed. It should also consider the multi-functional attributes of some insulation materials that allow design efficiencies for the building envelope (i.e., all-in-one WRB, continuous insulation, and vapor control) and even for the structure (e.g., reducing foundation depth and concrete usage in colder climates).

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: We agree with the intent of the comment; however, this criterion is misplaced as focused on embodied carbon and not operational carbon savings. The Subcommittee is currently reviewing this topic to determine the best place and criteria to include it 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:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

NC24-302-12

Public Comment: This section requires study of the reference ASTM standard. This is an issue with the document as a whole – it often relies on reference standards or documents or reports or programs that require study/familiarity to determine the significance or implications.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: This is a common practice of the industry.

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 8 in favor, 0 opposed, 0 abstained.

NC24-302-13

Public Comment: Appears to favor bio-based materials. A fair assessment of the sustainability benefits of materials that are not bio-based also should be considered.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: There was no specific suggestion of change.

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 8 in favor, 0 opposed, 0 abstained.

NC24-305-1

Public Comment: Remove GWP from the calculations of Whole Building Life Cycle Analysis.

Reason: GWP should not be a part of the whole building life cycle analysis. With more tighter systems, leak detection and mitigation systems, circularity with Refrigerant Recovery, Recycling and reclamation, there would be a very less to negligible impact of the GWP in the whole building life cycle analysis. Also, the section is referring to awarding points based on methods like GWP comparison assessment using an embodied carbon calculator which is no where to be found as a reference in the document.

Recommended Response: Thank you for your comment. Your comment has been rejected for the following reason: The GWP of building materials is a significant contributor to the overall building environmental impacts and is the focus of this section. This criterion is not targeted to the refrigerant emissions.

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 8 in favor, 0 opposed, 0 abstained.

Materials-301

Public Comment: 5.4.1.1 Points are earned based on the Sustainable Materials Index (SMI), the percentage of the total value of the products that have sustainable materials attributes. The sustainable materials attributes considered in calculating the SMI are third-party certified pre-consumer recycled content, post-consumer recycled content, biobased content, sustainable forestry certification content and materials or that meet the requirements of the Eco-Certified Composite sustainability standard. The SMI is the sum of the value of these attributes divided by the Total Project Materials Cost expressed as a percentage.

Sustainable Materials Index (%) =

100 x

(\$ value of pre-consumer recycled content

+

\$ value of post-consumer recycled content

+

\$ value of biobased content

+

\$ value of third-party sustainable forestry certification content

+

\$ value of Eco-Certified Composite)

÷

Total Project Materials Cost

See the Green Globes Materials and VOC Emissions Tracker in the Technical Reference Manual. Only the portion of products that has the identified attribute should be included. For example, if a product has 40% pre-consumer recycled content, only 40% of the value of that product is included. Mass balanced attributable biobased content percentage may be calculated by weight using third-party certifications.

Products that are claimed for credit under Third-Party Sustainable Forestry Certification are not included as biobased content

Biobased physical content percentage may be calculated by weight or in accordance with ASTM D6866-16 Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis. Mass balanced attributable biobased content percentage may be calculated by weight using third-party certifications.

The following certification systems and standards are recognized:

-Forest Stewardship Council (FSC): <https://us.fsc.org/en-us> (last accessed 2/28/24)

-Sustainable Forestry Initiative, Inc. (SFI): <https://www.forests.org/> (last accessed 2/28/24)

-American Tree Farm System (ATFS): <https://www.treefarmsystem.org/> (last access 2/28/24)

-Canadian Standards Association Sustainable Forestry Management (CSA):

<https://www.pefccanada.org/> (last accessed 2/28/24)

-Programme for the Endorsement of Forest Certification (PEFC): <https://www.pefc.org/> (last accessed

2/28/24)

-UL 2809 Environmental Claim Validation Procedure for Defined Recycled Content
-UL 9798 Environmental Claim Validation Procedure for Biobased Content
-Products categorized as Responsible or Certified Sources in accordance with ASTM D7612-21
Standard Practice for Categorizing Wood and Wood-Based Products According to Their Fiber Sources.
-ISCC+
-Redcert

Reason: Change is in red. Percentage not reviewed by Subcommittee.

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

Discussion took place on the Motion:

- It was asked if percentage should be added in both instances.
- It was argued that the Subcommittee would like to make other changes to this criterion and any changes to the topic should be held until the next Consensus Body meeting.

MOTION WITHDRAWN: The Motion and second was withdrawn.

MOTION: The Motion was made and seconded to send this criterion back to the Materials Subcommittee for further review.

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

Materials-302

Public Comment: The calculated construction waste per unit area for the project (see 405.6.1.3 below);

Reason: Correct reference number

Discussion took place on the Editorial Revision:

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

Indoor Environment (IE) Revision Review

The Secretariat reviewed each public comment or revision before placing a motion.

NC24-301-1

Public Comment: Design incorporates a sound masking system to provide the specified minimum spectrum and A-weighted Overall Sound Level (dBA) for all occupiable spaces where a sound masking system is to achieve the acoustical goals of the identified space.

Reason: Masking systems are implemented to achieve a specified spectrum of sound, not just an overall level. An overall level can be met with any type of sound and is an insufficient requirement on its own. This addition also aligns with the requirement in 6.5.1.2.1 to measure and meet the specified spectrum.

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 8 in favor, 0 opposed, 0 abstained.

NC24-301-2

Public Comment: Design incorporates a sound masking system to provide the specified minimum A-weighted Overall Sound Level (dBA) for all occupiable spaces where a sound masking system is to achieve the acoustical goals of the identified space.

Reason: There is no reason to capitalize 'overall sound level'.

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 8 in favor, 0 opposed, 0 abstained.

NC24-301-3

Public Comment: Design incorporates a sound masking system to provide the specified minimum A-weighted Overall Sound Level (dBA) for all occupiable spaces where a sound masking system is to achieve not contrary to the acoustical goals of the identified space.

Reason: (Note, this is one of two related alternative proposals. This is the preferred of the two. If NC24-301-3 is not accepted, then recommend NC24-301-4.)

The current wording is unclear. This modification clarifies that sound masking should be used in all occupiable spaces, except those where masking would work against the acoustical goals of the space.

Recommended Response: Thank you for your comment. Your comment has been accepted with modification. The wording was revised to increase clarification.

Design incorporates a sound masking system to provide the specified minimum A-weighted Overall Sound Level (dBA) for all occupiable spaces where a sound masking system is contributes to achieve the acoustical goals of the identified space.

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 8 in favor, 0 opposed, 0 abstained.

NC24-301-4

Public Comment: Design incorporates a sound masking system to provide the specified minimum A-weighted Overall Sound Level (dBA) for all occupiable spaces where a sound masking system is contributes to achieve the acoustical goals of the identified space.

Reason: (Note, this is one of two related alternative proposals. If the preferred proposal NC24-301-3 is not accepted, then recommend this modification.)

The current wording is unclear. This modification clarifies that sound masking should be used in all occupiable spaces where masking contributes to the acoustical goals of the space.

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 8 in favor, 0 opposed, 0 abstained.

NC24-301-5

Public Comment: Design incorporates a sound masking system, with control zones not exceeding ASTM E1573-22 test area sizes, to provide the specified minimum A-weighted Overall Sound Level (dBA) for all occupiable spaces where a sound masking system is to achieve the acoustical goals of the identified space.

Reason: As currently worded, the credit provides up to half the total points for masking if a project includes even an ineffective or inadequately engineered system. Points are awarded based solely on the physical presence of any system in a percentage of the facility.

The proposed change adds a control performance requirement that coordinates with the testing requirements stated in 6.5.1.2.1. A system's output control performance – largely driven by the size of zones – determines its flexibility and capacity to be adjusted to conform to specifications. Systems lacking sufficient control performance (typically due to overly large adjustment zones) simply cannot meet the specified tolerances in the credit when tested as per 6.5.1.2.1. The recommended wording ensures that points are only awarded in 6.5.1.2 when project teams implement systems that are realistically able to be adjusted to meet specifications. Further, this change permits systems to be fixed to meet specifications if the testing conducted per 6.5.1.2.1 finds deficiencies. With the current wording, if testing in 6.5.1.2.1 finds deficiencies, the system will likely be unable to be adjusted to correct them – not only leaving the acoustical performance of the space compromised, but preventing project teams from earning the planned points in 6.5.1.2.1.

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 8 in favor, 0 opposed, 0 abstained.

NC24-301-6 & NC24-301-7

NC24-301-6 Public Comment: The installed sound masking system is measured and reported 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 to determine compliance with specified performance requirements, as follows:

- The measured overall level is within +/-0.5dBA of that specified.
- The measured spectrum conforms to the National Research Council's SPMSoft Optimum Masking frequency range and 1/3 octave band levels, or the project acoustician's specified 1/3 octave band levels, within +/-2.0dB.

NC24-301-6 Reason: Test results must be reported. The report permits the project team to ensure the system conforms to the stated requirements.

NC24-301-6 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

NC24-301-7 Public Comment: The installed sound masking system is measured in accordance with ASTM E1573-~~18~~²² Standard Test Method for Measurement and Reporting of Masking Sound Levels Using A-Weighted and One-Third-Octave-Band Sound Pressure Levels to determine compliance with specified performance requirements, as follows:

- The measured overall level is within +/-0.5dBA of that specified.
- The measured spectrum conforms to the National Research Council's SPMSoft Optimum Masking frequency range and 1/3 octave band levels, or the project acoustician's specified 1/3 octave band levels, within +/-2.0dB.

NC24-301-7 Reason: The current edition of the standard is ASTM E1573-22.

NC24-301-7 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, NC24-301-6 & NC24-301-7 .

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

NC24-301-8

Public Comment: The installed sound masking system is measured 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 to determine compliance with specified performance requirements, as follows:

- The measured overall level is within +/-0.5dBA of that specified.
- The measured spectrum conforms to the National Research Council's SPMSoft Optimum Masking frequency range and 1/3 octave band levels (Report RR-262), or the project acoustician's specified 1/3 octave band levels, within +/-2.0dB.

Reason: This provides the source reference document for the Optimum Masking spectrum. It is a clearer source reference and also accessible online should users wish to review it.



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 8 in favor, 0 opposed, 0 abstained.

NC24-301-9 & NC24-301-10

NC24-301-9 Public Comment: ASTM E1573-1822

NC24-301-9 Reason: Refers to the current edition of the standard.

NC24-301-9 Recommended Response: Thank you for your comment. Your comment has been accepted and the changes have been implemented in the draft Standard.

NC24-301-10 Public Comment: National Research Council

~~SPMSoft Optimum Masking Research Report (National Research Council of Canada. Institute for Research in Construction); no. RR-262, 2008-08-01 Development and evaluation of speech privacy measurement software: SPMSoft Bradley, J. S.; Gover, B. N.~~

NC24-301-10 Reason: The direct source reference for the SPMSoft Optimum Masking spectrum.

NC24-301-10 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 8 in favor, 0 opposed, 0 abstained.

NC24-302-14

Public Comment: Appears to introduce a lot of uncertainty that cannot be completely controlled in the design and construction phases, such that one would not rely on these points to get a rating. It seems this will also vary based on ventilation design of the building and also time after construction is completed (e.g., off gassing rate decreases over time for most materials).

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. No changes are required at this time as the criteria are clear.

Discussion took place on the Public Comment:

- The current standard was reviewed.

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

Discussion took place on the Motion:

- There was agreement to add an additional line to the Response to the commenter to give greater context on the Consensus Body's actions.



VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

NC24-307-1

Public Comment: Active automated shading devices, (e.g., including automated ~~widow~~ window shades certified to AERC 1, or electrochromic glazing) that automatically adjust based on sky conditions for all listed exposures; OR

Reason: • Removing the non-mandatory parenthetical statement and revising as mandatory.
• Correcting spelling error (widow)
• Adding a requirement that automated window shades be certified to AERC 1. That standard has been approved as a condition of acceptance for ASHRAE Standard 90.1 and the IECC-C. It is important to ensure that points awarded under GBI 01 are based on certified systems.

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 8 in favor, 0 opposed, 0 abstained.

IE102

Proposed Revision: AERC 1

Reason: Spell out? Attachments Energy Rating Council

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

Discussion took place on the Motion:

- It was noted that most people won't know what AERC stands for.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

IE103

Proposed Revision: Remove PM2.5 and PM10 from Table 6.2.2A.1, and update NC Table Reference to ASHRAE 189.1 2020 Table 10.7.2.

Reason: The 24-hr period is from an outdoor standard and the industry uses 4 hours as an indoor standard.

It appears the EPA document doesn't address the indoor testing hours and it stems from department of health reports/recommendations that local jurisdictions codified.

ASHRAE 189.1 2020 does not include PM.

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 8 in favor, 0 opposed, 0 abstained.

CB-105



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: Consistent with EB25 Standard

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

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

Site Revision Review

The Secretariat reviewed each revision before placing a motion.

CB-106

Proposed Revision: shared use [multi-use] path: a form of infrastructure that supports multiple ~~non-motorized~~ transportation

opportunities, such as walking, bicycling and inline skating. A multi-use path is physically separated from

~~motor vehicular traffic with an open space or barrier.~~

Reason: Consistent with EB25 Standard

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

Discussion took place on the Motion:

- There was no discussion.

VOTE: The Motion carries with 8 in favor, 0 opposed, 0 abstained.

Site-101

Proposed Revision: 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 (2025~~4~~) or rated in accordance with the Cool Roof Rating Council, CRRC-1 Roof Product Rating Program Manual CRRC-1 (2025~~4~~).

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: Source can be accessed here: https://coolroofs.org/documents/ANSICRRC-S100-2025_Final.pdf



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 8 in favor, 0 opposed, 0 abstained.

Site-102

Proposed Revision: The building design addresses hardscape using one or more of the following strategies:

- 2.3.4.2.1 Solar Reflectance Index: Hardscape surfaces with an initial Solar Reflectance (SR) of at least 0.28 as measured in accordance with ASTM C1549 (2022) or ASTM E903 (2020) ANSI/CRRC S100 (2021). New concrete and concrete masonry without additional colored pigment are deemed to comply without additional testing.

o Not applicable for interior-only projects.

Reason: ANSI/CRRC S100 doesn't apply to pavements (the standard only covers roofing and exterior wall materials)

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 8 in favor, 0 opposed, 0 abstained.

Site-103

Proposed Revision: 2.3.4.3 Walls: At least 75% of opaque wall surfaces (by area) on the east, west, and south have a solar reflectance of 0.60 or greater and thermal emittance of 0.75 or greater, or 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 ANSI/CRRC S100 (2025) or rated in accordance with the Cool Roof Rating Council, CRRC-2 Wall Product Rating Program Manual (2025).

Reason: The ANSI/CRRC S100 standard (2025) was recently revised to include testing of exterior wall materials. The proposed language is consistent with the language in Section 2.3.4.1 (Roofs).

Add CRRC to acronym list

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 8 in favor, 0 opposed, 0 abstained.

Site-106

Proposed Revision: 2.4.1.1 A qualified professional makes a stormwater management report that shows the following:

- 2.4.1.1.1: The project meets a minimum of 80% Total Suspended Solids (TSS) removal or complies with municipal AND/OR local watershed water quality control targets, whichever is more stringent; and
- 2.4.1.1.2: 50% annual average total phosphorus (TP) removal assuming typical pollutant concentrations in urban runoff.
- 2.4.1.1.3: Additional target pollutant removals are as follows:
 - Nitrate + nitrite reduction of 40%
AND/OR
◦ pH below 6.5
AND/OR
◦ Alkalinity below 10 mg CaCO₃/L.

Note: Infiltration is not to be used as a treatment method if the site is located within 0.25 mi (0.4 km) of a lake or wetland.

OR

- 2.4.1.1.4: ~~The water is re~~ site ~~retains~~ At least ~~the 95~~-75th percentile storm volume ~~is retained on site~~ as per a site water balance assessment, to be included in the stormwater management (hydrology) report.

Maximum = 17 points or N/A

- Three points are earned for compliance with 2.4.1.1.1.
- One point is earned for compliance with 2.4.1.1.2.
- One point is earned for compliance with each item in 2.4.1.1.3. for a maximum of three points.

OR

- Seventeen points are earned for ~~a ≥95th percentile of retention on site in compliance with~~ 2.4.1.1.4.
- ~~Fifteen points are earned for a ≥90 th to <95th percentile of retention on site in 2.4.1.1.4.~~
- ~~Thirteen points are earned for a ≥85 th to <90th percentile of retention on site in 2.4.1.1.4.~~
- ~~Eleven points are earned for a ≥80 th to <85th percentile of retention on site in 2.4.1.1.4.~~
- ~~Nine points are earned for a ≥75 th to <80th percentile of retention on site in 2.4.1.1.4.~~
- ~~No points are earned for a <75th percentile of retention on site in 2.4.1.1.4.~~

• Not applicable for interior-only projects ~~or for jurisdictions when retention on site is not permitted.~~
Reason: "retains" in 2.4.1.1.4 is not new text, but it is requested that it be underlined or bolded in the Standard to get it greater emphasis

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 8 in favor, 0 opposed, 0 abstained.

Public Participation

There was no discussion.



New Business

There was no discussion.

Review Schedule

Staff stated that a meeting for the NC Materials Subcommittee will be planned and take place before the next Consensus Body meeting in late summer. Marx noted that the meeting scheduled for July 10 will be cancelled since all items were reviewed today.

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

Meeting adjourned at 12:48 PM EST.