ASHRAE CELEBRATING 125 YEARS

Volume X, Issue 6

February 14, 2020

STANDARDS ACTIONS

PUBLIC REVIEW—CALL FOR COMMENTS

Constructive comments are invited for the following Public Review Drafts, which can be accessed on ASHRAE's website at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts. All activity for reviewing and commenting on public review drafts can be accomplished completely online. To obtain a paper copy of any Public Review Draft contact ASHRAE, Inc. Attn: Standards Public Review, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305, or via email at: standards.section@ashrae.org. **Note: Paper copies are available for $35.00/copy if 100 pages or less and $45.00 if over 100 pages.**

30-day Public Review from February 14, 2020 – March 15, 2020

- **2nd Public Review ISC of BSR/ASHRAE/ICC/USGBC/IES Addendum *ab* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

This independent substantive change to Addendum *ab* modifies 8.3.7 to expand view requirements and the list of spaces to which they apply.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *ap* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *ap* to 189.1-2017 removes the portion of 5.3.6 that referred to 90.1 lighting requirements, which are already referenced in Section 7.4.6, then simplifies section numbering accordingly.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *aq* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *aq* to 189.1-2017 revises the definition of native plants, as well as the requirements for maintaining native plants on-site. The proposal includes multiple options for meeting the new requirements, in order to provide flexibility for cases in which successful alternatives to native plants have been identified.

PUBLIC REVIEW—CALL FOR COMMENTS

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *at* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *at* to 189.1-2017 consists of a structural change to Section 7 that separates interior and exterior lighting requirements and a technical change that requires subzone occupancy sensing control in large offices, based on C405.2.1.3 of the 2018 IECC.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *au* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *au* to 189.1-2017 introduces a new threshold for pump efficiency as measured by the Pump Energy Index (PEI). These requirements meet the DOE standard for commercial and industrial pumps issued in January 2016 (effective January 2020) and already incorporated into ASHRAE 90.1.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *av* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *av* to 189.1-2017 updates the Building Performance Factors (BPFs) listed in Table 7.5.1 based on an analysis performed by PNNL showing the energy savings incurred using 189.1-2017 versus 90.1-2016.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *aw* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *aw* to 189.1-2017 deletes Section 9.3.3, which contains requirements that have been considered obsolete since the prohibition of ozone-depleting substances. This section is now reserved to be used in the future as the committee considers best practices for the use of refrigerants in green buildings.

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- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *ax* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *ax* to 189.1-2017 adds a reference to Standard 62.1 Section 7, Construction and System Start-up, which includes new indoor air quality requirements. It also deletes some requirements from Section 10 of Standard 189.1 that are covered by reference to Standard 62.1, which is intended to avoid duplication and confusion.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *az* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *az* to 189.1-2017 removes the option to provide preferred parking for hybrid and low-emission vehicles as a means of meeting site vehicle provisions. As electric vehicles and charging stations become more prevalent, it is preferable to replace this option with additional requirements related to electric vehicle charging infrastructure.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *ba* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *ba* to 189.1-2017 revises the thermostat section to include an option to use EnergyStar requirements.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *bb* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *bb* to 189.1-2017 clarifies that minimum compliance with Standard 90.1-2019 is required without consideration of on-site or off-site renewable energy.

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- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *be* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *be* to 189.1-2017 updates the lighting quality section to include new requirements for dimming controls, color rendition, and flicker. It also clarifies the applicability of the requirements and adds relevant normative references.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *bh* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *bh* to 189.1-2017 makes similar changes proposed in addendum ap (removes the portion of 5.3.6 referring to 90.1 lighting requirements, simplifies section numbering) and additionally, combines Tables 5.3.6.2A and B to provide a holistic view of Section 5.3.6 lighting requirements. This proposal also removes one of the existing options for uplight compliance, maximum percent uplight, which is no longer considered an industry-standard metric.

45-day Public Review from
February 14, 2020 – March 30, 2020

- **1st Public Review of Addendum *h* to ASHRAE Guideline 36-2018, *High-Performance Sequences of Operation for HVAC Systems***

The purpose of this addendum is to update airflow setpoint tables in Sections 5.5 through 5.14; update control logic figures 5.5.5 through 5.14.5 to be consistent with updated airflow setpoint tables; correct Figure 5.13.5; update control logic descriptions in Sections 5.5 through 5.14 to match updated terms; remove hot duct static pressure reset requests based on airflow setpoint (5.13.8.4.1 and 5.13.8.4.2); and change the setpoint of the reverse-acting P-only maximum hot duct damper position limiting loop from Vheat-max to the heating maximum endpoint (5.13.1.3.b).

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- **1st Public Review of BSR/ASHRAE Standard 41.1-2013R, *Standard Methods for Temperature Measurement***

This revision of ANSI/ASHRAE Standard 41.1-2013 prescribes methods for measuring temperature under laboratory and field conditions

- **1st Public Review of BSR/ASHRAE Standard 41.10-2013R, *Standard Methods for Refrigerant Flow Measurement Using Flowmeters***

This revision of ANSI/ASHRAE Standard 41.10-2013 prescribes methods for refrigerant mass flow rate measurement in laboratory and field applications using flowmeters.

- **1st Public Review of BSR/ASHRAE Standard 193-2010R, *Method of Test for Determining the Airtightness of HVAC Equipment***

This standard prescribes a method of test to determine the airtightness of forced-air HVAC equipment prior to field installation

- **3rd Public Review ISC of BSR/ASHRAE/ICC/USGBC/IES Addendum *aa* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

This independent substantive change to Addendum *aa* modifies the definition of carbon dioxide equivalent (CO2e), deleting GWP values for methane and nitrous oxide which are no longer used. Various minor changes to clarify language are also suggested.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *ar* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *ar* to 189.1-2017 adds new definitions related to enforcing the 189.1/IgCC in a manner consistent with the other I-Codes. The new definitions include "approved," "approved agency," "approved source," "listed," and "labeled." Consequently, phrases such as "approved by the AHJ" that appear throughout the text can be replaced with "approved."

PUBLIC REVIEW—CALL FOR COMMENTS

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *as* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *as* to 189.1-2017 updates the Lighting Power Density (LPD) allowances so that values exceeding 91% of ASHRAE 90.1-2019 values (for most applications) will meet the IES-recommended illuminances, rather than exceeding them. Some exclusions were made when the adjusted value was not ideal for that application; these variations have been noted in the proposal.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *ay* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *ay* to 189.1-2017 primarily consists of formatting changes that will simplify numbering and better organize requirements in Section 10.

- **1st Public Review of BSR/ASHRAE/ICC/USGBC/IES Addendum *bd* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

Addendum *bd* to 189.1-2017 updates normative references in Chapter 11 to their most recent, relevant versions.

- **2nd Public Review ISC of BSR/ASHRAE/ICC/USGBC/IES Addendum *o* to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***

This independent substantive change to Addendum *o* comes in response to the first public review that received objections regarding the designation of walkways, bicycle paths, and greenfield sites as jurisdictional options. These sections have been reinstated as core requirements that jurisdictions are not given the option to exclude.

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PUBLICATION NOTICE

The standards and guideline documents listed below are now available for purchase on the ASHRAE website at: http://www.ashrae.org/published-standards, or by contacting the Sales Department at: ASHRAE, 1791 Tullie Circle, NE, Atlanta, GA 30329-2305. Email: orders@ashrae.org. Fax: 404-321-5479. Telephone: 404.636.8400 (worldwide) or toll free at 1.800.527.4723 for orders in the U.S. and Canada. Addenda may be downloaded for free on the ASHRAE website at: http://www.ashrae.org/standards-addenda.

- **ASHRAE addenda *f, g, i,* and *j* to ASHRAE Guideline 36-2018, *High Performance Sequences of Operation for HVAC Systems***
- **ASHRAE Guideline 41-2020, *Design, Installation and Commissioning of Variable Refrigerant Flow (VRF) Systems***
- **ANSI/ASHRAE Addenda *a* and *b* to ANSI/ASHRAE Standard 15-2019, *Safety Standard for Refrigeration Systems***
- **ANSI/ASHRAE Addendum *g* to ANSI/ASHRAE Standard 34-2019, *Designation and Safety Classification of Refrigerants***
- **ANSI/ASHRAE Addendum *p* to ANSI/*ASHRAE* Standard 62.1-2019, *Ventilation for Acceptable Indoor Air Quality***
- **ANSI/ASHRAE Addendum *c* to ANSI/ASHRAE Standard 185.1-2015, *Method of Testing UV-C Lights for Use in Air-Handling Units or Air Ducts to Inactivate Airborne Microorganisms***
- **ANSI/ASHRAE/ICC/USGBC/IES Addenda *ac, ae, aj,* and *ao* to ANSI/ASHRAE/ICC/ USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings***
- **ANSI/ASHRAE/NEMA Standard 201-2016 (RA2020), *Facility Smart Grid Information Model***

WITHDRAWAL NOTICE

The following standard has been withdrawn from publication.

- **ANSI/ASHRAE Standard 94.2-2010, *Method of Testing Thermal Storage Devices with Electrical Input and Thermal Output Based on Thermal Performance***

The purpose of this standard was to provide a standard procedure for determining the energy performance of electrically charged thermal energy storage devices used in heating systems. It is believed that this standard is no longer warranted as it has no reported use.

INTERIM MEETINGS

A complete listing of project committee interim meetings is provided on ASHRAE's website at: https://www.ashrae.org/technical-resources/standards-and-guidelines/project-committee-interim-meetings

- **GPC 22-2012R, *Instrumentation for Monitoring Central Chilled Water Plant Efficiency***, will hold conference calls on the following dates and times:
  - ⇨ Friday 3/27/20 from 8:00 – 9:30 am (Eastern)
  - ⇨ Friday 4/24/20 from 8:00 – 9:30 am (Eastern)
  - ⇨ Friday 5/29/20 from 8:00 – 9:30 am (Eastern)

  For additional information contact Phillip Johnson, Vice Chair of GPC 22 (phillip.johnson@daikinapplied.com).
- **SGPC 36P, *High Performance Sequences of Operation for HVAC Systems***, will hold a conference call Wednesday, April 8, 2020 from 1:00 pm to 3:00 pm (Eastern). For additional information contact Steven Taylor (staylor@taylor-engineering.com) Chair of SGPC 36.

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INTERIM MEETINGS

- **SPC 105-2014R, *Standard Methods of Determining, Expressing and Comparing Building Energy Performance and Greenhouse Gas Emissions,*** will hold conference calls from 4:00 pm to 6:00 pm (Eastern) on the following dates:
  - ⇨ February 20, 2020
  - ⇨ March 12, 2020
  - ⇨ April 9, 2020
  - ⇨ May 14, 2020

  For additional information contact Patrick Carpenter, Chair of SPC 105 (facperfeng@comcast.net).

- **SPC 228P, *Standard Method of Evaluating Zero Energy Building Performance,*** will hold conference calls Wednesdays from 3:00 pm to 5:00 pm (Eastern) on the following dates:
  - ⇨ March 11, 2020
  - ⇨ April 8, 2020
  - ⇨ May 13, 2020
  - ⇨ June 10, 2020

  For additional information, please contact Keith Emerson, Chair of SPC 228 (kemerson2002@yahoo.com).

- **SSPC 170, *Ventilation of Health Care Facilities,*** will hold a joint in-person meeting with FGI on Tuesday, March 31, 2020 from 8:00 am to 5:00 pm at the Frontenac Hotel in St. Louis, MO. SSPC 170 will hold webinars on the following dates and times:
  - ⇨ March 11, 2020 from 3:00 pm to 5:00 pm (Eastern)
  - ⇨ May 13, 2020 from 3:00 pm to 5:00 pm (Eastern)
  - ⇨ June 10, 2020 from 3:00 pm to 5:00 pm (Eastern)

  For additional information contact Michael Sheerin, Chair of SSPC 170 (michael.sheerin@tlc-eng.com).

- **SPC 514, *Minimizing Risk of Disease and Injury Associated with Building Water Systems*,** will hold an in-person meeting May 12 – 14, 2020 at ASHRAE Headquarters in Atlanta, GA. For additional information, please contact Ryan Shanley, Staff Liaison to SPC 514 (rshanley@ashrae.org).

JOIN A LISTSERVE

Click on the link below to learn more about ASHRAE Standards Activities!

- ⇨ SSPC 41 — Standard Methods for Measurement
- ⇨ SSPC 62.1 — Ventilation for Acceptable Indoor Air Quality
- ⇨ SSPC 62.2 — Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings
- ⇨ SSPC 90.1 — Energy Standard for Buildings Except Low-Rise Residential Buildings
- ⇨ SSPC 90.2 — Energy Efficient Design of Low-Rise Residential Buildings
- ⇨ SPC 90.4 — Energy Standard for Data Centers and Telecommunications Buildings
- ⇨ SSPC 161 — Air Quality within Commercial AirCraft
- ⇨ SSPC 188 — Legionellosis: Risk Management for Building Water Systems
- ⇨ SSPC 189.1 — Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings
- ⇨ Code Interaction Subcommittee (CIS) Listserve