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American National Standards

Call for comment on proposals listed

This section solicits public comments on proposed draft new American National Standards, including the national adoption of ISO and IEC standards as American National Standards, and on proposals to revise, reaffirm or withdraw approval of existing American National Standards. A draft standard is listed in this section under the ANSI-accredited standards developer (ASD) that sponsors it and from whom a copy may be obtained. Comments in connection with a draft American National Standard must be submitted in writing to the ASD no later than the last day of the comment period specified herein. Such comments shall be specific to the section(s) of the standard under review and include sufficient detail so as to enable the reader to understand the commenter's position, concerns and suggested alternative language, if appropriate. Please note that the ANSI Executive Standards Council (ExSC) has determined that an ASD has the right to require that interested parties submit public review comments electronically, in accordance with the developer's procedures.

Ordering Instructions for "Call-for-Comment" Listings

1. **Order from the organization indicated for the specific proposal.**
2. **Use the full identification in your order, including the BSR prefix; for example, Electric Fuses BSR/SAE J554.**
3. **Include remittance with all orders.**
4. **BSR proposals will not be available after the deadline of call for comment.**

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Fax: 212-840-2298; e-mail: psa@ansi.org

* Standard for consumer products

Comment Deadline: September 29, 2019

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Addenda

BSR/ASHRAE Addendum g to ANSI/ASHRAE Standard 147-2013, Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems (addenda to ANSI/ASHRAE Standard 147-2013)

This addendum adds Section 8.6, Decommissioning. This section clarifies the post-consumer handling of refrigerants.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASHRAE Addendum h to ANSI/ASHRAE Standard 147-2013, Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems (addenda to ANSI/ASHRAE Standard 147-2013)

This addendum adds Section 9.1.1, Recovery Equipment.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASHRAE Addendum i to ANSI/ASHRAE Standard 147-2013, Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems (addenda to ANSI/ASHRAE Standard 147-2013)

This addendum changes Section 4.3.2, Vibration, to consistently refer to “endurance limits” rather than “endurance testing,” to broaden the scope referring to all tubing rather than only copper tubing, and to offer examples of small diameter tubing that is to be constructed with vibration loops.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 147-2013, Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems (addenda to ANSI/ASHRAE Standard 147-2013)

This addendum changes Section 4.5.1 by including the descriptive phrase saturated suction temperature.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASHRAE Addendum k to ANSI/ASHRAE Standard 147-2013, Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems (addenda to ANSI/ASHRAE Standard 147-2013)

This addendum changes Section 4.3.3 to clarify the content by changing the word “bolts” to “fasteners.”

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

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 (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum aa to Standard 189.1-2017 underwent independent substantive changes based on comments received during the first public review period. The CO₂e emissions factors were moved to a separate table, the table headings were revised, and one row (“other fuels not specified in this table”) was relocated and assigned the same emissions factor as coal.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASHRAE/ICC/USGBC/IES Addendum ad to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum ad to 189.1-2017 aligns solar heat gain coefficient (SHGC) requirements with 90.1-2016 with limited exceptions as described for Climate Zones 4C and 5 through 8 with glazing oriented within 22.5 degrees of true north. This addendum also deletes the duct insulation requirements specific to 189.1 in favor of the default values from 90.1-2016, which have been found to be more energy efficient.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum ag to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum ag defines a new metric called the fan efficiency index (FEI) developed by AMCA International and recommended by the DOE. FEI is the ratio of the electrical input power required by the subject fan compared to a reference fan. FEI provides designers with a simpler means of making optimal fan selections without the added complexity of sizing/selection windows. A similar provision has already been approved for ASHRAE 90.1; however, addendum ag to 189.1-2017 proposes a 10% increase to the FEI requirements that will appear in 90.1-2019.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum ah to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum ah increases the efficacy requirements for light sources and the percentage of light sources in dwelling units that must meet the higher requirements. This addendum reflects the availability of highly efficient lighting products on the market and ASHRAE's effort to continue developing 189.1 as a high-performance standard. The new requirements were determined with consideration of published averages for both directional and omnidirectional lamps and include an exception for appliance lighting.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum ai to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum ai to 189.1-2017 raises the efficiency requirements for gas-fired hot-water equipment and adds efficiency requirements for electric equipment. The new gas efficiency requirements (0.92 Et) could be met without making major technology shifts since achieving the 0.90 Et already required in 189.1-2017 typically involved the use of condensing technology. The required COP of 2.0 for electric water heaters is based on a Washington state proposal. Exceptions are provided for water heaters installed in individual dwelling units and for buildings that use renewable energy and/or waste recovery systems to meet 25% or more of the hot-water demand.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum al to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum al to 189.1-2017 replaces references to "acceptance testing" with its defined equivalent "functional and performance testing (FPT)."

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum am to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum am modifies the current definition of on-site renewable energy system, which references building project (which in turn, references site). These references have been eliminated and additional details have been provided to improve the clarity of the definition.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum k to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum k underwent independent substantive changes based on comments received during the first public review period. The changes include: new renewable energy requirements to create better alignment between Chapter 7 performance and prescriptive paths, new requirements for the treatment of off-site renewable energy sources, and new language to describe off-site renewable energy supplies based on industry standards.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum p to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

This independent substantive change to Addendum p modifies the selection of requirements that are appropriate for local jurisdictions to consider excluding from their adopted ordinances. Previously, Section 7.4.3.6 (Fan System Power and Efficiency) and Section 7.4.3.10 (Automatic Control of HVAC and Lights in Hotel/Motel Guest Rooms) were listed as jurisdictional options; they have been restored as core requirements of 189.1.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum y to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum y to 189.1-2017 addresses situations where wall-mounted mechanical equipment defined in ASHRAE 90.1, Table 6.8.1-4, can account for a significant portion of the wall area. For example, Packaged Terminal Air Conditioners (PTACs) can cover as much as 20% of the wall area, having a significant impact on the thermal performance of the wall. This independent substantive change (ISC) to Addendum y clarifies how to calculate penetration area in accordance with ASHRAE 90.1, Section 5.5.3. It also increases the threshold for triggering the proposed requirements.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASRHAE/ICC/USGBC/IES Addendum z to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum z to Standard 189.1-2017 underwent independent substantive changes based on comments received during the first public review period. The table was renamed "Source Energy Conversion Factors", the table headings were revised, and one row ("other fuels not specified in this table") was relocated and assigned the same value as coal. NOTE: Similar changes were made to addendum aa.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 94-201X, Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances (revision of ANSI/UL 94-2018)

This proposal covers a Clarification of Requirements in Sections 8 and 11.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: Derrick Martin, (510) 319-4271, Derrick.L.Martin@ul.org

BSR/UL 1203-201x, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations (revision of ANSI/UL 1203-2019)

This proposal for UL 1203 covers: Revisions to include +60°C and -60°C explosion testing with test factors using precompression explosion testing equipment.

[Click here to view these changes in full](#)

Send comments (with optional copy to psa@ansi.org) to: Vickie Hinton, (919) 549-1851, Vickie.T.Hinton@ul.org

Comment Deadline: October 14, 2019

AAFS (American Academy of Forensic Sciences)

New Standard

BSR/ASB BPR 089-201x, Best Practice Recommendation for Facial Approximation in Forensic Anthropology (new standard)

This best practice recommendation sets forth guidance for facial approximation from skeletal remains. The production and assessment of facial approximations using skeletal remains represents a combination of varied methods of art and anatomical science that continue to evolve. Therefore, recommendations for specific techniques are not addressed. Facial imaging procedures such as composite drawings and postmortem imaging from photographs are not addressed.

Single copy price: Free

Obtain an electronic copy from: <http://www.asbstandardsboard.org/>

Order from: Document will be provided electronically on AAFS Standards Board website free of charge

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org. This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/>.

BSR/ASB Std 038-201x, Standards for Internal Validation of Forensic DNA Testing Methods (new standard)

This document details general requirements for performing an internal validation of all forensic DNA testing methods within a forensic DNA laboratory.

Single copy price: Free

Obtain an electronic copy from: <http://www.asbstandardsboard.org/>

Order from: Document will be provided electronically on AAFS Standards Board website free of charge.

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org. This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/>.

BSR/ASB Std 077-201x, Standard for the Developmental and Internal Validation of Forensic Serological Methods (new standard)

This standard provides requirements for developmental and internal validations of forensic serological methods to evaluate body fluids, stains, or residues related to forensic investigations. This standard does not address validation of forensic DNA analysis procedures.

Single copy price: Free

Obtain an electronic copy from: <http://www.asbstandardsboard.org/>

Order from: Document will be provided electronically on AAFS Standards Board website free of charge

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org. This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/>.

BSR/ASB Std 105-201x, Minimum Education Requirements for Firearm and Toolmark Examiner Trainees (new standard)

This document provides the minimum education requirements for forensic laboratory applicants and employees entering a training program in firearm and toolmark examination. This document does not apply to previously trained and qualified firearm and toolmark examiners who may be temporarily referred to as trainees when they change employment.

Single copy price: Free

Obtain an electronic copy from: Document will be provided electronically on ASB website: www.asbstandardsboard.org/notice-of-standard-development-and-coordination

Order from: All ASB Documents available on the Published Documents portion of the ASB website: www.asbstandardsboard.org

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org. Document and comments template can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination//>

ADA (American Dental Association)

New National Adoption

BSR/ADA Standard No. 116-201x, Oral Rinses (national adoption of ISO 16408:2015 with modifications and revision of ANSI/ADA Standard No. 116-2010)

This standard specifies physical and chemical requirements and test methods for oral rinses. It also specifies the accompanying information such as the manufacturer's instructions for use, marking, and/or labeling requirements. It is not applicable to other delivery systems (e.g., mouth sprays, foams, powders), or to products available by prescription only

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 130-201x, Dentifrices - Requirements, Test methods and Markin (identical national adoption of ISO 11609 -2017 and revision of ANSI/ADA Standard No. 130-2013)

This standard specifies requirements for the physical and chemical properties of dentifrices and provides guidelines for suitable test methods. It also specifies requirements for the marking, labeling and packaging of dentifrices. This document applies to dentifrices, including toothpastes, destined to be used by the consumers on a daily basis with a toothbrush to promote oral hygiene.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 139-201x, Dental Base Polymers (national adoption of ISO 20795-1:2013 & ISO 20795-2:2013 with modifications and revision of ANSI/ADA Standard No. 139-2012)

Part 1 of this standard classifies denture-base polymers and copolymers and specifies their requirements. It also specifies the test methods to be used in determining compliance with these requirements. It further specifies requirements with respect to packaging and marking the products and to the instructions to be supplied for use of these materials. Part 2 of this standard is applicable to orthodontic-base polymers and copolymers used in the construction of both active and passive orthodontic appliances and specifies their requirements. It also specifies test methods to be used in determining compliance with these requirements. It further specifies requirements with respect to packaging and marking the products and to the instructions to be supplied for use of these materials.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 157-201x, Powered Dental Scaler Handpieces and Tips (national adoption with modifications of ISO 18397:2016)

This standard specifies requirements and test methods for air-powered and electrical-powered scaler handpieces and scaler tips, including piezo-, ferrostrictive-, and magnetostrictive-type ultrasonic scalers, operated as stand-alone items or connected to dental units, for use on patients. It also contains specifications on manufacturers' instructions, marking, and packaging.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 158-201x, Coupling Dimensions for Dental Handpiece Connectors (national adoption with modifications of ISO 3964:2016 & ISO 3964:2016/Amd 1:2018)

This standard specifies the coupling between handpieces and motors connected to dental units. It specifies the nominal dimensions, tolerances and the extraction force of coupling systems for use between handpiece and motor which supply the handpiece with water, air, and light, and rotation energy.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 177-201x, Central Suction Source Equipment (identical national adoption of ISO 10637:2018)

This standard specifies requirements and test methods for stationary, electrically powered central suction source equipment, including centrally located amalgam separators and air water separators. It also specifies requirements for information to be supplied by the manufacturer on the performance, installation, operation, and maintenance of the central suction source equipment as part of the complete dental suction system. This standard specifies requirements for central suction source equipment used to provide vacuum pressure and flow at the facility pipeline connection point.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 179-201x, Shanks for Rotary and Oscillating Instruments (identical national adoption of ISO 1797:2017)

This standard specifies the requirements for dimensions and material properties of shanks used in dentistry for rotary or oscillating instruments. It describes the measurement methods for the verification of the requirements.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 39-201x, Pit and Fissure Sealants (national adoption of ISO 6874:2015 with modifications and revision of ANSI/ADA Standard No. 39-2006 (R2011))

This standard specifies requirements and test methods for polymer-based materials intended for sealing pits and fissures in teeth.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 53-201x, Polymer-Based Crown and Veneering Materials (identical national adoption of ISO 10477:2018 and revision of ANSI/ADA Standard No. 53-2008 (R2013))

This standard classifies polymer-based crown and veneering materials used in dentistry and specifies their requirements. It also specifies the test methods to be used to determine conformance to these requirements.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 96-201x, Dental Water-Based Cements (national adoption of ISO 9917-1:2007 & ISO 9917-2:2017 with modifications and revision of ANSI/ADA Standard No. 96:2012)

Part 1 of ADA Standard No. 96 specifies requirements and test methods for powder/liquid acid-base dental cements intended for permanent cementation, lining, and restoration. Limits for each of the properties according to whether the cement is intended for use as a luting agent, a base or liner or as a restorative material are specified. Part 2 of this standard specifies requirements and test methods for water-based dental cements in which setting is achieved by a combination of an acid-base reaction and polymerization. The materials are intended for luting, base or lining, restoration, and tooth core build-up purposes.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

ADA (American Dental Association)**Reaffirmation**

BSR/ADA Standard No. 73-2008 (R201x), Dental Absorbent Points (reaffirm a national adoption ANSI/ADA Standard No. 73-2008 (R2013))

This standard specifies requirements and test methods for nonmedicated absorbent points used in endodontic procedures.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 78-2013 (R201x), Dental Obturating Cones (reaffirm a national adoption ANSI/ADA Standard No. 78-2013)

This standard specifies the dimensions and requirements for prefabricated metallic or polymeric-based cones suitable for use in the obturation of a root canal system restoration. It also specifies the numerical and color-coding systems for designating sizes.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

BSR/ADA Standard No. 80-2001 (R201x), Dental Materials - Determination of Color Stability (reaffirm a national adoption ANSI/ADA Standard No. 80-2001 (R2013))

This standard specifies a procedure for determining the color stability of dental materials after exposure to light or water.

Single copy price: \$25.00

Obtain an electronic copy from: wardm@ada.org

Order from: wardm@ada.org

Send comments (with optional copy to psa@ansi.org) to: bralowerp@ada.org

AGMA (American Gear Manufacturers Association)**Reaffirmation**

BSR/AGMA 2011-B14-2014 (R201x), Cylindrical Wormgearing Tolerance and Inspection Methods (reaffirmation of ANSI/AGMA 2011-B14-2014)

This standard establishes a classification system which may be used to communicate geometrical accuracy specifications of unassembled cylindrical wormgearing with axes at right angles.

Single copy price: \$98.00

Obtain an electronic copy from: tech@agma.org

Order from: Amir Aboutaleb, (703) 684-0211, tech@agma.org

Send comments (with optional copy to psa@ansi.org) to: Same

ASA (ASC S1) (Acoustical Society of America)**Reaffirmation**

BSR/ASA S1.26-2014 (R201x), Methods for Calculation of the Absorption of Sound by the Atmosphere (reaffirmation of ANSI/ASA S1.26-2014)

Required 5-year maintenance of this standard which provides the means to calculate atmospheric absorption losses of sound from any source, moving or stationary, for a wide range of meteorological conditions. The atmosphere is assumed to be still, homogeneous, moist air of normal composition. Non-homogeneous atmospheres can be divided into horizontal layers within which homogeneous conditions can be assumed. Attenuation coefficients for pure-tone sounds are calculated by means of equations (or a table) over ranges of frequency, and the humidity, pressure, and temperature of the atmosphere. For sounds analyzed by fractional-octave-band filters (e.g., one-third-octave-band filters), alternative methods are provided in annexes to calculate the attenuation caused by atmospheric absorption from that specified for pure-tone sounds.

Single copy price: \$145.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Caryn Mennigke, (631) 390-0215, asastds@acousticalsociety.org

Send comments (with optional copy to psa@ansi.org) to: Same

ASA (ASC S12) (Acoustical Society of America)**Reaffirmation**

BSR/ASA S12.60-2009/Part 2 (R201x), Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 2: Relocatable Classroom Factors (reaffirmation of ANSI/ASA S12.60-2009/Part 2 (R2014))

Required 5-year maintenance of this standard which is applicable to relocatable classrooms and other relocatable modular core learning spaces of small to moderate size. Includes siting requirements, acoustical performance criteria, and design requirements for relocatable classrooms. Annex A (informative) provides commentary information on this standard and Annex B (normative) provides procedures for determining compliance with the background sound requirements. Seeks to provide design flexibility without compromising the goal of obtaining adequate speech intelligibility for all students and teachers in classrooms and learning spaces within the scope of this standard.

Single copy price: \$10.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Caryn Mennigke, (631) 390-0215, asastds@acousticalsociety.org

Send comments (with optional copy to psa@ansi.org) to: Same

BSR/ASA S12.64-2009/Part 1 (R201x), Quantities and Procedures for Description and Measurement of Underwater Sound from Ships - Part 1: General Requirements (reaffirmation of ANSI/ASA S12.64-2009/Part 1 (R201x))

Required 5-year maintenance of this standard which describes measurement systems, procedures, and methodologies used for beam aspect measurement of underwater sound-pressure levels from ships for a given operating condition. The resulting quantities are reported as nominal source level values in 1/3 octave bands. Does not require the use of a specific ocean location, but the requirements for an ocean test site are provided. Underwater sound-pressure level measurements are performed in the far-field and then corrected to a reference distance of 1 m. Applicable to any and all surface vessels manned or unmanned. Not applicable to submerged vessels or to aircraft. Measurement systems are described for measurement of underwater sound-pressure levels and also the distance or range between the underwater transducers and the subject vessel. Processing and reporting of the data are described, and informational guidance is provided. Does not specify or provide guidance on underwater noise criteria.

Single copy price: \$120.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Caryn Mennigke

Send comments (with optional copy to psa@ansi.org) to: Same

ASA (ASC S3) (Acoustical Society of America)**Reaffirmation**

BSR/ASA S3.25-2009 (R201x), Standard for an Occluded Ear Simulator (reaffirmation of ANSI/ASA S3.25-2009 (R2014))

Required 5-year maintenance of this standard which specifies acoustical performance of an occluded ear simulator. This device is designed to simulate the acoustical behavior of the ear canal between the tip of an ear mold and the eardrum, including the acoustic impedance at the eardrum of a median adult human ear. The occluded ear simulator is intended for transducers that are sensitive to acoustic load. It is also suitable as the basis for extensions intended to simulate the complete ear canal and the outer ear (e.g., head and torso simulators). Specific physical realizations of the ear simulator are described.

Single copy price: \$110.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Caryn Mennigke, (631) 390-0215, asastds@acousticalsociety.org

Send comments (with optional copy to psa@ansi.org) to: Same

ASABE (American Society of Agricultural and Biological Engineers)**New Standard**

BSR/ASAE S583.2 MONYEAR-201x, Safety of Agricultural Front End Loaders (new standard)

This standard specifies safety requirements for the design and construction of agricultural front-end loaders (front loaders) designed to be mounted on standard agricultural tractors, specifically two-wheeled drive tractors and four-wheel drive tractors with unequal sized wheels, as defined in ANSI/ASAE S390.6 (ISO 12934:2013). The purpose of this standard is to provide a reasonable degree of personal safety for operators and other persons during normal operation and servicing of front loaders on agricultural tractors.

Single copy price: \$44.00 (ASABE members); \$65.00 (non-members)

Obtain an electronic copy from: vangilder@asabe.org

Order from: Carla VanGilder, (269) 932-7015, vangilder@asabe.org

Send comments (with optional copy to psa@ansi.org) to: Same

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum ak to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum ak adds an informative appendix that documents how the source energy conversion factors and the CO₂e emission factors in Table 7.5.2 were developed. This information is intended to provide guidance on how the values may be modified for other countries to suit the mix of generator types used to make electricity.

Single copy price: \$35.00

Obtain an electronic copy from: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

Order from: standards.section@ashrae.org

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

BSR/ASHRAE/ICC/USGBC/IES Addendum al to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017)

Addendum al to 189.1-2017 replaces references to “acceptance testing” with its defined equivalent “functional and performance testing (FPT).”

Single copy price: \$35.00

Obtain an electronic copy from: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

Order from: standards.section@ashrae.org

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

New Standard

BSR/ASHRAE Standard 207-201x, Laboratory Method of Test of Fault Detection and Diagnosis for Air Economizers (new standard)

The purpose of ASHRAE Standard 207P is to provide methods for laboratory testing of Fault Detection and Diagnosis (FDD) systems to determine whether they perform as specified.

Single copy price: \$35.00

Obtain an electronic copy from: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

Order from: standards.section@ashrae.org

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Revision

BSR/ASHRAE Standard 64-201x, Methods of Laboratory Testing Remote Mechanical-Draft Evaporative Refrigerant Condensers (revision of ANSI/ASHRAE Standard 64-2011)

This revision of Standard 64 prescribes methods of laboratory testing remote mechanical-draft evaporative refrigerant condensers. Technical revisions have been incorporated as appropriate. Additional revisions have been implemented to bring this standard into compliance with ASHRAE's mandatory language requirements. References have been updated.

Single copy price: \$35.00

Obtain an electronic copy from: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

Order from: standards.section@ashrae.org

Send comments (with optional copy to psa@ansi.org) to: <http://www.ashrae.org/standards-research--technology/public-review-drafts>

ASTM (ASTM International)***New Standard***

BSR/ASTM WK59635-201x, Test Method for Determining Flammability of Exterior Wall Assemblies for Multi-story Structures (new standard)

https://www.astm.org/ANSI_SA

Single copy price: Free

Obtain an electronic copy from: lklineburger@astm.org

Order from: Laura Klineburger, (610) 832-9744, accreditation@astm.org

Send comments (with optional copy to psa@ansi.org) to: Same

AWS (American Welding Society)***New Standard***

BSR/AWS F4.2-201X, Safety Guidelines for Proper Selection of Welding Cables (new standard)

This document provides guidance on the safe and proper selection of welding cables. This includes identifying specific criteria including minimum copper content, gauge sizing, electrical performance, and resistance for welding cable sizes.

Single copy price: \$32.00

Obtain an electronic copy from: steveh@aws.org

Order from: Stephen Hedrick, (305) 443-9353, steveh@aws.org

Send comments (with optional copy to psa@ansi.org) to: pportela@aws.org

CSA (CSA America Standards Inc.)***New Standard***

BSR/CSA LNG 3.20-201x, LNG Fuel System Components - Part 20: Flexible Fuel or Vent Lines (new standard)

This CSA LNG 3.20 standard specifies tests and requirements for the flexible fuel line or vent line for service temperature colder than -40 C (-40 F) and cryogenic conditions, a liquefied natural gas fuel system component intended for use on the types of motor vehicles defined in ISO 3833. This standard is not applicable to the following: (a) fuel containers; (b) stationary gas engines; (c) container mounting hardware; (d) electronic fuel management; or (e) refueling receptacles.

NOTE 1: It is recognized that miscellaneous components not specifically covered in this standard can be examined to meet the criteria of this standard when tested according to the appropriate functional tests.

NOTE 2: All references to pressure in this standard are to be considered gauge pressures unless otherwise specified.

NOTE 3: This standard is based upon a Maximum Allowable Working Pressure (MAWP) for natural gas as a fuel of 1.6 MPa (232 psig). Other working pressures can be accommodated by adjusting the pressure by the appropriate factor (ratio). For example, 2 MPa (290 psi) working pressure system will require pressures to be multiplied by 1.25

Single copy price: Free

Obtain an electronic copy from: david.zimmerman@csagroup.org

Send comments (with optional copy to psa@ansi.org) to: david.zimmerman@csagroup.org

CTA (Consumer Technology Association)***Stabilized Maintenance***

BSR/CTA 608-E S-2008 (S201x), Line 21 Data Services (stabilized maintenance of ANSI/CTA 608-E-2008 (R2014))

CTA-608-E is a technical standard and guide for using or providing Closed Captioning services or other data services embedded in line 21 of the vertical blanking interval of the NTSC video signal. This includes provision for encoding equipment and/or decoding equipment to produce such material as well as manufacturers of television receivers which are required to include such decoders in their equipment as a matter of regulation (see Annex F).

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: standards@cta.tech

Send comments (with optional copy to psa@ansi.org) to: Same

HPVA (Hardwood Plywood & Veneer Association)

Revision

BSR/HPVA EF-201X, The Standard for Engineered Wood Flooring (revision of ANSI/HPVA EF-2012)

Revise current ANS. This Standard establishes nationally recognized requirements for commercially available engineered wood flooring. It is intended to provide manufacturers, distributors, and users with a basis for common understanding of the characteristics of these products.

Single copy price: \$40.00

Obtain an electronic copy from: standards@decorativehardwoods.org

Send comments (with optional copy to psa@ansi.org) to: standards@decorativehardwoods.org

NECA (National Electrical Contractors Association)

New Standard

BSR/NECA 331-201x, Standard for Installing Building and Service Entrance Grounding (new standard)

This standard describes installation procedures for building and service entrance grounding as well as building interior bonding and grounding. The information provided in this standard is intended to define what is meant by installing equipment in a "neat and workmanlike manner".

Single copy price: \$25.00 (NECA members); \$55.00 (non-members)

Obtain an electronic copy from: neis@necanet.org

Order from: Aga Golriz, (301) 215-4549, Aga.golriz@necanet.org

Send comments (with optional copy to psa@ansi.org) to: Same

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 61010-2-032-201x, Standard for Safety for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-032: Particular Requirements for Hand-Held and Hand Manipulated Current Sensors for Electrical Test and Measurement (identical national adoption of IEC 61010-2-032 and revision of ANSI/UL 61010-2-032-2014 (R2018))

This proposal for UL 61010-2-032 covers Types A-D current sensors and is an Adoption of IEC 61010-2-032, Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 2-032: Particular Requirements for Hand-Held and Hand Manipulated Current Sensors for Electrical Test and Measurement (fourth edition, issued by IEC June 2019) as a new IEC-based UL standard, UL 61010-2-032 with no US Differences.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <http://www.shopulstandards.com>

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

BSR/UL 61010-2-033-201X, Standard for Safety for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-033: Particular Requirements for Hand-Held Multimeters for Domestic and Professional Use, Capable of measuring MAINS Voltage. (identical national adoption of IEC 61010-2-033 and revision of ANSI/UL 61010-2-033-2014 (R2018))

This proposal for UL 61010-2-033 covers hand-held multimeters for domestic and professional use and is an Adoption of IEC 61010-2-033, Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 2-033: Particular Requirements for Hand-Held Multimeters for Domestic and Professional Use, Capable of measuring MAINS Voltage, UL 61010-2-033, (second edition, issued by IEC June 2019) as a new IEC-based UL standard, UL 61010-2-033 with no US Differences

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <http://www.shopulstandards.com>

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

VITA (VMEbus International Trade Association (VITA))

Revision

BSR/VITA 65.0-201x, OpenVPX System Standard (revision of ANSI/VITA 65.0-2017)

The OpenVPX System Standard was created to bring versatile system architectural solutions to the VPX market. Based on the extremely flexible VPX family of standards, the OpenVPX standard uses module mechanical, connectors, thermal, communications protocols, utility, and power definitions provided by specific VPX standards and then describes a series of standard profiles that define slots, backplanes, modules, and Standard Development Chassis.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

Send comments (with optional copy to psa@ansi.org) to: admin@vita.com

BSR/VITA 65.1-201x, OpenVPX System Standard - Profile Tables (revision of ANSI/VITA 65.1-2017)

This standard documents variations of Slot, Backplane, and Modules Profiles. As part of the Slot Profile Description, there are also some Connector Modules defined. This document is primarily tables which are referenced by VITA 65.0.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

Send comments (with optional copy to psa@ansi.org) to: admin@vita.com

Comment Deadline: October 29, 2019

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME B107.500-201x, Pliers (revision of ANSI/ASME B107.500-2010)

This Standard defines essential performance and safety requirements for several types of pliers, including long-nose pliers, shears, electronic pliers, and wire cutters. It specifies test methods to evaluate performance related to the defined requirements and safety and indicates limitations of safe use.

Single copy price: Free

Obtain an electronic copy from: <http://cstools.asme.org/publicreview>

Order from: Mayra Santiago, ASME; ansibox@asme.org

Send comments (with optional copy to psa@ansi.org) to: Daniel Papert, (212) 591-7526, papertd@asme.org

BSR/ASME Y14.38-200x, Abbreviations and Acronyms for Use on Drawings and Related Documents (revision of ANSI/ASME Y14.38-2007 (R2013))

This standard provides abbreviations and acronyms, referred to in this standard as "abbreviations," used in engineering product definition and related documentation.

Single copy price: Free

Obtain an electronic copy from: <http://cstools.asme.org/publicreview>

Order from: Mayra Santiago, ASME; ansibox@asme.org

Send comments (with optional copy to psa@ansi.org) to: Fredric Constantino, (212) 591-8684, constantinof@asme.org

ITI (INCITS) (InterNational Committee for Information Technology Standards)

New Standard

INCITS 543-201x, Information technology - Fibre Channel - Physical Interfaces - 7 (FC-PI-7) (new standard)

The FC-PI-7 standard will define the requirements for new physical-layer variants that operate at higher data rates than those specified in FC-PI-6 and FC-PI-6P. The standard defines a single-lane serial variant and a four-lane parallel variant. It is desirable that new variants operate at similar distances as those of the corresponding variants specified in FCPI- 6 and FC-PI-6P.

Single copy price: Free

Obtain an electronic copy from: https://standards.incits.org/apps/group_public/document.php?document_id=111228&wg_abbrev=eb

Order from: https://standards.incits.org/apps/group_public/document.php?document_id=111228&wg_abbrev=eb

Send comments (with optional copy to psa@ansi.org) to: comments@standards.incits.org

Notice of Withdrawal: ANS at least 10 years past approval date

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

AWS (American Welding Society)

ANSI/AWS A3.0M/A3.0-2009, Standard Welding Terms and Definitions

ANSI/AWS D10.10M-2009, Recommended Practices for Local Heating of Welds in Piping and Tubing

SCTE (Society of Cable Telecommunications Engineers)

ANSI/SCTE 55-1-2009, Digital Broadband Delivery System: Out of Band Transport Part 1: Mode A

Call for Members (ANS Consensus Bodies)

Directly and materially affected parties who are interested in participating as a member of an ANS consensus body for the standards listed below are requested to contact the sponsoring standards developer directly and in a timely manner.

AAMI (Association for the Advancement of Medical Instrumentation)

Office: 901 N. Glebe Road, Suite 300
Arlington, VA 22203

Contact: Colleen Elliott

Phone: (703) 253-8261

E-mail: celliott@aami.org

BSR/AAMI/ISO 10993-9-201x, Biological evaluation of medical devices - Part 9: Framework for identification and quantification of potential degradation products (identical national adoption of ISO 10993-9)

BSR/AAMI/ISO 10993-17-201x, Biological evaluation of medical devices - Part 17: Toxicological risk assessment of medical device constituents (revision of ANSI/AAMI/ISO 10993-17-2002 (R2012))

BSR/AAMI/ISO 10993-18-201x, Biological evaluation of medical devices - Part 18: Chemical characterization of medical device materials within a risk management process (revision and redesignation of ANSI/AAMI BE83-2006 (R2011))

BSR/AAMI/ISO 14155-201x, Clinical investigation of medical devices for human subjects - Good clinical practice (identical national adoption of ISO 14155)

BSR/AAMI/ISO 80369-7-201x, Small-bore connectors for liquids and gases in healthcare applications - Part 7: Connectors for intravascular or hypodermic applications (identical national adoption of ISO 80369-7 (Ed.2))

AIAA (American Institute of Aeronautics and Astronautics)

Office: 12700 Sunrise Valley Drive, Suite 200
Reston, VA 20191-5807

Contact: Hillary Woehrl

Phone: (703) 264-7546

E-mail: hillaryw@aiaa.org

BSR/AIAA S-102.2.4-201x, Performance-Based Failure Reporting, Analysis & Corrective Action Systems (FRACAS) Requirements (revision of ANSI/AIAA S-102.2.4-201x)

API (American Petroleum Institute)

Office: 1220 L Street, NW
Washington, DC 20005-4070

Contact: Stephen Crimardo

Phone: (202) 682-8151

E-mail: crimaudos@api.org

BSR/API Recommended Practice 754-201x, Process Safety Performance Indicators for the Refining and Petrochemical Industries (revision and redesignation of ANSI/API Recommended Practice 754, Second Edition-2016)

ASA (ASC S1) (Acoustical Society of America)

Office: 1305 Walt Whitman Road
Suite 300
Melville, NY 11747

Contact: Caryn Mennigke

Phone: (631) 390-0215

E-mail: asastds@acousticalsociety.org

BSR/ASA S1.26-2014 (R201x), Methods for Calculation of the Absorption of Sound by the Atmosphere (reaffirmation of ANSI/ASA S1.26-2014)

ASA (ASC S12) (Acoustical Society of America)

Office: 1305 Walt Whitman Road
Suite 300
Melville, NY 11747

Contact: Caryn Mennigke

Phone: (631) 390-0215

E-mail: asastds@acousticalsociety.org

BSR/ASA S12.64-2009/Part 1 (R201x), Quantities and Procedures for Description and Measurement of Underwater Sound from Ships - Part 1: General Requirements (reaffirmation of ANSI/ASA S12.64-2009/Part 1 (R201x))

ASA (ASC S3) (Acoustical Society of America)

Office: 1305 Walt Whitman Road
Suite 300
Melville, NY 11747

Contact: Caryn Mennigke

Phone: (631) 390-0215

E-mail: asastds@acousticalsociety.org

BSR/ASA S3.25-2009 (R201x), Standard for an Occluded Ear Simulator (reaffirmation of ANSI/ASA S3.25-2009 (R2014))

ASME (American Society of Mechanical Engineers)

Office: Two Park Avenue
New York, NY 10016-5990
Contact: Mayra Santiago
Phone: (212) 591-8521
E-mail: ansibox@asme.org

BSR/ASME B16.39-202X, Malleable Iron Threaded Pipe Unions
(revision of ANSI/ASME B16.39-2014)

BSR/ASME MFC-3.1-202X, Measurement of Fluid Flow in Pipes using
Orifice, Flow Nozzle, and Venturi - Part 1: General (revision and
partition of ANSI/ASME MFC-3M-2004 (R2017))

BSR/ASME MFC-3.2-202X, Measurement of Fluid Flow in Pipes using
Orifice, Flow Nozzle, and Venturi - Part 2: Orifice Meters (revision,
redesignation and consolidation of ANSI/ASME MFC-3M-2004
(R2017), ANSI/ASME MFC-14M-2003 (R2018))

BSR/ASME MFC-3.3-202X, Measurement of Fluid Flow in Pipes using
Orifice, Flow Nozzle, and Venturi - Part 3: Flow Nozzles and Venturi
Nozzles (revision and partition of ANSI/ASME MFC-3M-2004
(R2017))

BSR/ASME MFC-3.4-202X, Measurement of Fluid Flow in Pipes using
Orifice, Flow Nozzle, and Venturi - Part 4: Venturi Meters (revision
and partition of ANSI/ASME MFC-3M-2004 (R2017))

CTA (Consumer Technology Association)

Office: 1919 South Eads Street
Arlington, VA 22202
Contact: Veronica Lancaster
Phone: (703) 907-7697
E-mail: vlancaster@cta.tech

BSR/CTA 608-E S-2008 (S201x), Line 21 Data Services (stabilized
maintenance of ANSI/CTA 608-E-2008 (R2014))

ITI (INCITS) (InterNational Committee for Information Technology Standards)

Office: 700 K Street NW
Suite 600
Washington, DC 20001
Contact: Rachel Porter
Phone: (202) 737-8888
E-mail: comments@standards.incits.org

INCITS 543-201x, Information technology - Fibre Channel - Physical
Interfaces - 7 (FC-PI-7) (new standard)

NECA (National Electrical Contractors Association)

Office: 3 Bethesda Metro Center
Suite 1100
Bethesda, MD 20814
Contact: Aga Golriz
Phone: (301) 215-4549
E-mail: Aga.golriz@necanet.org

BSR/NECA 331-201x, Standard for Installing Building and Service
Entrance Grounding (new standard)

VITA (VMEbus International Trade Association (VITA))

Office: 929 W. Portobello Avenue
Mesa, AZ 85210
Contact: Jing Kwok
Phone: (602) 281-4497
E-mail: jing.kwok@vita.com

BSR/VITA 65.0-201x, OpenVPX System Standard (revision of
ANSI/VITA 65.0-2017)

BSR/VITA 65.1-201x, OpenVPX System Standard - Profile Tables
(revision of ANSI/VITA 65.1-2017)

Call for Members (ANS Consensus Bodies)

GBI (Green Building Initiative)

Office: 7805 SW 40th Ave. #80010, Portland, OR 97219

Contact: Emily Marx, Manager of Standards and Program Support

Phone: 503.274.0448, x103

E-mail: marx@thegbi.org

ANSI GBI 01-2019, Green Globes Assessment Protocol for Commercial Buildings

GBI is reconstituting its Consensus Body for the new Continuous Maintenance process and invites members of the former Consensus Body to reapply and any additional interested parties to apply by August 26, 2019. GBI is looking for members in the following interest categories: Producer, Users and General Interest. For more information and to apply for a Consensus Body or Task Group, please use the appropriate form located at <https://www.thegbi.org/ansi>. You can send completed Consensus Body and/or Task Group applications to Emily Marx, Manager of Standards and Program Support, at marx@thegbi.org.

Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC O1 – Safety Requirements for Woodworking Machinery

Are you interested in contributing to the development and maintenance of valuable industry safety standards? The ASC O1 is currently looking for members in the following categories:

- General Interest
- Government
- Producer
- User

If you are interested in joining the ASC O1, contact WMMA Associate Director Jennifer Miller at jennifer@wmma.org.

Final Actions on American National Standards

The standards actions listed below have been approved by the ANSI Board of Standards Review (BSR) or by an ANSI-Audited Designator, as applicable.

ADA (American Dental Association)

New National Adoption

- ANSI/ADA 169-2019, Periodontal probes - General requirements (identical national adoption of ISO 21672-1:2012): 8/26/2019
- ANSI/ADA 170-2019, Periodontal Probes - Dental excavators - Discoid Type - General Requirements (identical national adoption of ISO 13397-4:1997): 8/26/2019
- ANSI/ADA 171-2019, Analysis of Fluoride Concentration in Aqueous Solutions by Use of Fluoride Ion-Selective Electrode (identical national adoption of ISO 19448:2018): 8/26/2019
- ANSI/ADA 172-2019, Minimal Dental Implant Data Set for Clinical Use (identical national adoption of ISO 16498:2013): 8/26/2019
- ANSI/ADA 173-2019, Designation System for Dental Implants (identical national adoption of ISO 19429:2015): 8/26/2019
- ANSI/ADA Standard No. 178-2019, Orthodontic Anchor Screws (identical national adoption of ISO 19023:2018): 8/26/2019
- ANSI/ADA Standard No. 35-2019, Dental Handpieces and Motors (identical national adoption of ISO 14457:2017): 8/26/2019
- ANSI/ADA Standard No. 88-2019, Dental Brazing Alloys (identical national adoption of ISO 9333:2006 (R2015) and revision of ANSI/ADA Specification No 88-2000 (R2012)): 8/26/2019

Reaffirmation

- ANSI/ADA Standard No. 122-2007 (R2019), Dental Casting and Baseplate Waxes (reaffirm a national adoption ANSI/ADA Standard No. 122-2007 (R2013)): 8/26/2019

ANS (American Nuclear Society)

Reaffirmation

- ANSI/ANS 8.19-2014 (R2019), Administrative Practices for Nuclear Criticality Safety (reaffirmation of ANSI/ANS 8.19-2014): 8/22/2019

ASABE (American Society of Agricultural and Biological Engineers)

Revision

- ANSI/ASABE S619.1 MONYEAR-2019, Safety for Tractor-Mounted, Boom-Type Post Hole Diggers (revision and redesignation of ANSI/ASABE S619-2014): 8/22/2019

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)

Addenda

- ANSI/ASHRAE Addendum 62.1ad-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019
- ANSI/ASHRAE Addendum 62.1ae-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019

- ANSI/ASHRAE Addendum 62.1af-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019
- ANSI/ASHRAE Addendum 62.1al-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019
- ANSI/ASHRAE Addendum 62.1an-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019
- ANSI/ASHRAE Addendum 62.1as-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019
- ANSI/ASHRAE Addendum 62.1L-2019, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016): 8/26/2019
- ANSI/ASHRAE Addendum 135bs-2019, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 8/26/2019
- ANSI/ASHRAE Addendum br to ANSI/ASHRAE Standard 135-2019, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 8/26/2019
- ANSI/ASHRAE Addendum bt to ANSI/ASHRAE Standard 135-2019, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 8/26/2019
- ANSI/ASHRAE Addendum bu to ANSI/ASHRAE Standard 135-2019, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 8/26/2019
- ANSI/ASHRAE Addendum bw to ANSI/ASHRAE Standard 135-2019, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016): 8/26/2019
- ANSI/ASHRAE Addendum p to ANSI/ASHRAE Standard 34-2019, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2016): 8/26/2019
- ANSI/ASHRAE/ICC/USGBC/IES Addendum 189.1a-2019, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 8/26/2019
- ANSI/ASHRAE/ICC/USGBC/IES Addendum 189.1b-2019, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 8/26/2019
- ANSI/ASHRAE/IES Addendum 90.1bm-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/19/2019
- ANSI/ASHRAE/IES Addendum 90.1bn-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/19/2019
- ANSI/ASHRAE/IES Addendum 90.1bu-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/19/2019
- ANSI/ASHRAE/IES Addendum 90.1bv-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/19/2019

ANSI/ASHRAE/IES Addendum 90.1cm-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/19/2019

ANSI/ASHRAE/IES Addendum bo to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/26/2019

ANSI/ASHRAE/IES Addendum cl to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/26/2019

ANSI/ASHRAE/IES Addendum cv to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/26/2019

ANSI/ASHRAE/IES Addendum cw to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 8/26/2019

ANSI/ASHRAE/ICC/USGBC/IES Addendum x to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2019, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017): 8/26/2019

Revision

ANSI/ASHRAE Standard 24-2019, Methods of Testing for Rating Evaporators Used for Cooling Liquids (revision of ANSI/ASHRAE Standard 24-2013): 8/26/2019

ASME (American Society of Mechanical Engineers)

Revision

* ANSI/ASME B1.1-2019, Unified Inch Screw Threads (UN and UNR Thread Form) (revision of ANSI/ASME B1.1-2003 (R2018)): 8/26/2019

ASSP (Safety) (American Society of Safety Professionals)

Revision

ANSI/ASSP Z10.0-2019, Occupational Health and Safety Management Systems (revision and redesignation of ANSI/ASSE Z10-2012 (R2017)): 8/22/2019

CSA (CSA America Standards Inc.)

New National Adoption

ANSI/CSA ISO 27916-2019, Carbon dioxide storage using enhanced oil recovery (CO₂-EOR) (identical national adoption of ISO 27916-19): 8/26/2019

ECIA (Electronic Components Industry Association)

Reaffirmation

ANSI/EIA 296-F-2015 (R2019), Lead Taping of Components in Axial Lead Configuration for Automatic Handling (reaffirmation of ANSI/EIA 296-F-2015): 8/23/2019

Revision

ANSI/EIA 364-108A-2019, Impedance, Reflection Coefficient, Return Loss, and VSWR Measured in the Time and Frequency Domain Test Procedure for Electrical Connectors, Cable Assemblies or Interconnection Systems (revision and redesignation of ANSI/EIA 364-108-2000 (R2013)): 8/22/2019

HL7 (Health Level Seven)

New Standard

ANSI/HL7 V3 SOA EPSSRVINT, R1-2019, HL7 Version 3 Standard: Unified Communication Service Interface, Release 1 - US Realm (new standard): 8/22/2019

ANSI/HL7 V3 SOA UCRSVINT, R1-2019, HL7 Version 3 Standard: Event Publish & Subscribe Service Interface, Release 1 - US Realm (new standard): 8/23/2019

NEMA (ASC C8) (National Electrical Manufacturers Association)

Revision

ANSI ICEA S-104-696-2019, Standard for Indoor-Outdoor Optical Fiber Cable (revision of ANSI/ICEA S-104-696-2013): 8/26/2019

NSF (NSF International)

Revision

ANSI/NSF 4-2019 (i27r1), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2016): 8/21/2019

ANSI/NSF 50-2019 (i149r1), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF 50-2017): 8/21/2019

ANSI/NSF 173-2019 (i81r3), Dietary Supplements (revision of ANSI/NSF 173-2018): 8/22/2019

UL (Underwriters Laboratories, Inc.)

Revision

ANSI/UL 147A-2019, Standard for Safety for Nonrefillable (Disposable) Type Fuel Gas Cylinder Assemblies (revision of ANSI/UL 147A-2018): 8/20/2019

ANSI/UL 201-2019, Standard for Safety for Garage Equipment (revision of ANSI/UL 201-2015): 8/22/2019

ANSI/UL 121201-2019, Standard for Safety for Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations (revision of ANSI/UL 121201-2017): 8/26/2019

ANSI/UL 121201-2019a, Standard for Safety for Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations (revision of ANSI/UL 121201-2017): 8/26/2019

Project Initiation Notification System (PINS)

ANSI Procedures require notification of ANSI by ANSI-accredited standards developers (ASD) of the initiation and scope of activities expected to result in new or revised American National Standards (ANS). Early notification of activity intended to reaffirm or withdraw an ANS and in some instances a PINS related to a national adoption is optional. The mechanism by which such notification is given is referred to as the PINS process. For additional information, see clause 2.4 of the ANSI Essential Requirements: Due Process Requirements for American National Standards.

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. Use the following Public Document Library url to access PDF & EXCEL reports of approved & proposed ANS: [List of Approved and Proposed ANS](#)

Directly and materially affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

AAMI (Association for the Advancement of Medical Instrumentation)

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New National Adoption

BSR/AAMI/ISO 10993-9-201x, Biological evaluation of medical devices - Part 9: Framework for identification and quantification of potential degradation products (identical national adoption of ISO 10993-9)

Stakeholders: Medical device manufacturers, toxicologists.

Project Need: To standardize systematic evaluation of the potential and observed biodegradation of medical devices.

Provides general principles for the systematic evaluation of the potential and observed biodegradation of medical devices and for the design and performance of biodegradation studies. Information obtained from these studies can be used in the biological evaluation described in the ISO 10993 series.

BSR/AAMI/ISO 10993-15-201x, Biological evaluation of medical devices - Part 15: Identification and quantification of degradation products from metals and alloys (identical national adoption of ISO 10993-15)

Stakeholders: Medical device manufacturers, toxicologists.

Project Need: To standardize requirements for the design of tests for identifying and quantifying degradation products from final metallic medical devices or corresponding material samples finished as ready for clinical use.

Specifies general requirements for the design of tests for identifying and quantifying degradation products from final metallic medical devices or corresponding material samples finished as ready for clinical use.

BSR/AAMI/ISO 14155-201x, Clinical investigation of medical devices for human subjects - Good clinical practice (identical national adoption of ISO 14155)

Stakeholders: Medical device manufacturers, toxicologists.

Project Need: To standardize good clinical practice for the design, conduct, recording, and reporting of pre-market clinical investigations carried out in human subjects to assess the clinical performance or effectiveness and safety of medical devices.

Addresses good clinical practice for the design, conduct, recording, and reporting of pre-market clinical investigations carried out in human subjects to assess the clinical performance or effectiveness and safety of medical devices.

BSR/AAMI/ISO 80369-7-201x, Small-bore connectors for liquids and gases in healthcare applications - Part 7: Connectors for intravascular or hypodermic applications (identical national adoption of ISO 80369-7 (Ed.2))

Stakeholders: Medical device manufacturers.

Project Need: Revision of standard to increase clarity and ease of use.

Specifies dimensions and requirements for the design and functional performance of small-bore connectors intended to be used for connections in intravascular applications or hypodermic connections in hypodermic applications of medical devices and accessories.

Revision

BSR/AAMI/ISO 10993-17-201x, Biological evaluation of medical devices - Part 17: Toxicological risk assessment of medical device constituents (revision of ANSI/AAMI/ISO 10993-17-2002 (R2012))

Stakeholders: Medical device manufacturers, toxicologists.

Project Need: To standardize the determination of allowable limits for substances leachable from medical devices.

Specifies the determination of allowable limits for substances leachable from medical devices. It is intended for use in deriving standards and estimating appropriate limits where standards do not exist. It describes a systematic process through which identified risks arising from toxicologically hazardous substances present in medical devices can be quantified.

BSR/AAMI/ISO 10993-18-201x, Biological evaluation of medical devices - Part 18: Chemical characterization of medical device materials within a risk management process (revision and redesignation of ANSI/AAMI BE83-2006 (R2011))

Stakeholders: Medical device manufacturers.

Project Need: To standardize a framework for the identification, and if necessary, quantification of constituents of a medical device, allowing the identification of biological hazards and the estimation and control of biological risks from material constituents.

Specifies a framework for the identification, and if necessary, quantification of constituents of a medical device, allowing the identification of biological hazards and the estimation and control of biological risks from material constituents, using a generally stepwise approach to the chemical characterization which can include one or more of the following:

- the identification of its materials of construction (medical device configuration);
- the characterization of the materials of construction via the identification and quantification of their chemical constituents (material composition);
- the characterization of the medical device for chemical substances that were introduced during manufacturing (e.g., mould release agents, process contaminants, sterilization residues);
- the estimation (using laboratory extraction conditions) of the potential of the medical device, or its materials of construction, to release chemical substances under clinical use conditions (extractables); and
- the measurement of chemical substances released from a medical device under its clinical conditions of use (leachables).

ADA (American Dental Association)

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New National Adoption

BSR/ADA Standard No. 119-201x, Manual Toothbrushes (identical national adoption of ISO 20126:2012/Amd 1:2018 and revision of ANSI/ADA Standard No. 119-2015)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: ANSI/ADA Standard No. 119 will be revised by identically incorporating ISO 20126/Amd. 1:2018 to provide direct alignment to ISO 20126, where recent revision provided better clarification on the chemical challenge of samples and editorial errors.

This standard describes requirements and test methods for the physical properties of manual toothbrushes in order to promote the safety of these products for their intended use.

BSR/ADA Standard No. 145-201x, Interoperability of CAD/CAM Systems in Dentistry (identical national adoption of ISO 18618:2018)

Stakeholders: Manufacturers, dentists.

Project Need: Manufacturers of dental CAD/CAM systems differ in how they exchange manufacturing information and three-dimensional data. This causes difficulty in data processing, design processes, and manufacturing processes for users of those systems. In order to overcome these interoperability issues, this document has been prepared to facilitate open interoperability between CAD/CAM systems in dentistry.

This document specifies an extensible markup language (XML) format to facilitate the transfer of dental case data and CAD/CAM data between software systems.

BSR/ADA Standard No. 15-201x, Synthetic Teeth (national adoption of ISO 22112:2017 with modifications and revision of ANSI/ADA Standard No. 15-2008 (R2013))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: As dental materials continue to advance, the standard needs to evolve with the inclusion of materials that are an amalgamation of different components and materials that are milled as well.

This standard defines the classification, requirements, and test methods for synthetic polymer and ceramic teeth that are manufactured for use in prostheses used in dentistry.

BSR/ADA Standard No. 160-201x, Soft Lining Materials for Removable Dentures - Part 2: Materials for Long-Term Use (national adoption with modifications of ISO 10139-2:2016)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The U.S. TAG voted in favor of ISO 10139-2:2016, Dentistry - Soft lining materials for removable dentures - Part 2: Materials for long-term use, so a national adoption is appropriate.

This document specifies requirements for softness, adhesion, water sorption and water solubility, as well as for packaging, marking, and manufacturer's instructions for soft denture lining materials suitable for long-term use.

BSR/ADA Standard No. 165-201x, Vocabulary of Process Chain for Dental CAD/CAM Systems (national adoption with modifications of ISO 18739:2016 & ISO/TR 22710:2019)

Stakeholders: Manufacturers, dentists, dental laboratories, consumers.

Project Need: Terms and designations for individual system parts and process steps used in product descriptions and instructions for use provided by the manufacturers of dental CAD/CAM systems differ from each other. To provide guidance and avoid confusion among dentists and to overcome these ambiguities, the standards committee decided to prepare a U.S. standard for vocabulary used in the process chain for CAD/CAM systems.

This standard specifies terms, synonyms for terms, and definitions used in the process chain for CAD/CAM systems in dentistry.

BSR/ADA Standard No. 167-201x, Dental Unit Waterline Test Methods (national adoption of ISO 16954:2015 with modifications and revision of ANSI/ADA 167-2018)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: This revision will include a test method that uses a standardized-model dental-unit procedural water system to evaluate the effectiveness of separately marketed products intended to control biofilm in dental units with the addition of a normative annex.

This standard provides type test methods for evaluating the effectiveness of treatment methods intended to prevent or inhibit the formation of biofilm or to remove biofilm present in dental unit procedural water delivery systems under laboratory conditions.

BSR/ADA Standard No. 182-201x, Test Method for the Bonding Test Between Polymer Teeth and Denture Base Polymer (national adoption with modifications of ISO/TS 19736:2017)

Stakeholders: Manufacturers, dentists.

Project Need: The purpose of this new standard is to provide a national adoption for the U.S. of the international standard, which was approved by the U.S. TAG.

This standard specifies a test method for bonding of polymer teeth to denture-base materials.

BSR/ADA Standard No. 183-201x, Reprocessable Cartridge Syringes for Intraligamentary Injections (identical national adoption of ISO 21533:2018)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The U.S. TAG voted in favor of ISO 21533:2018, Dentistry - Reprocessable cartridge syringes for intraligamentary injections. National adoption should be considered to align with the ISO standard.

This document specifies requirements and test methods for reprocessable cartridge syringes intended for intraligamentary injections. It specifies requirements for cartridge syringes with ISO metric thread sizes, and only intended for intraligamentary injections

BSR/ADA Standard No. 184-201x, Laser Welding and Filler Materials in Dentistry (identical national adoption of ISO 28319:2018)

Stakeholders: Dental laboratories.

Project Need: The U.S. TAG voted in favor of ISO 28319:2018, Dentistry - Laser welding and filler materials. National adoption is being considered to align U.S. National Standards with ISO Standards whenever possible.

This document specifies requirements and test methods for laser welding and the filler materials thereto used in the dental laboratory for welding of metallic restorations and appliances.

BSR/ADA Standard No. 185-201x, Integrated Dental Floss and Handles (identical national adoption of ISO 28158:2018)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: There is currently no national standard on this topic and the U.S. TAG approved the International Standard.

This document specifies the requirements and test methods for integrated dental floss and handles used for home care, community care, professional care of oral health, or a part of dental treatment. This document is applicable to integrated dental floss and handles for manual use. It does not include dental floss and handles which contain a continuous supply of dental floss or handles to which the floss is subsequently added.

BSR/ADA Standard No. 28-201x, Endodontic instruments - Shaping and Cleaning Instruments (identical national adoption of ISO 3630-5:2019 and revision of ANSI/ADA Standard No. 28-2008 (R2013))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The purpose of this revision is to align the National Standard with the new ISO standard.

This standard specifies requirements and test methods for hand-held or mechanically operated shaping and cleaning instruments used to perform root canal procedures. It specifies requirements for size, marking, product designation, safety considerations, labeling, and packaging.

BSR/ADA Standard No. 41-201x, Evaluation of Biocompatibility of Medical Devices Used in Dentistry (national adoption of ISO 7405:2018 with modifications and revision of ANSI/ADA Standard No. 41-2015)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: ANSI/ADA Standard No. 41:2015 is a modified adoption of ISO 7405:2008. The U.S. TAG voted in favor of the recently published revision of ISO 7405. A national adoption of the new standard will ensure the U.S. standard is up to date.

Revisions will be made to ISO 7405, section 6.5.3.2.5, Note 1, to delete use of calcium hydroxide as a reference control.

This document specifies test methods for the evaluation of biological effects of medical devices used in dentistry. It includes testing of pharmacological agents that are an integral part of the device.

BSR/ADA Standard No. 43-201x, Mixing Machines for Dental Amalgam (identical national adoption of ISO 7488:2018 and revision of ANSI/ADA Standard No. 43-1986 (R2015))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The ISO standard, which the U.S. TAG voted in the affirmative on, should be considered for adoption as an update to ANSI/ADA Standard 43.

This document specifies requirements for electrically powered mixing machines for mixing dental amalgam alloy and dental mercury in capsules to produce dental amalgam. This document specifies the test methods used to determine conformity with these requirements.

BSR/ADA Standard No. 47-1-201x, Stationary Dental Units and Patient Chairs - Part 1: General Requirements (national adoption of ISO 7494-1:2018 with modifications and revision of ANSI/ADA Standard No. 47-2006 (R2017))

Stakeholders: Manufacturers, dentists.

Project Need: The purpose of this revision is to align the National Standard with the new ISO standard.

This document specifies requirements and test methods for stationary dental units, dental patient chairs, and combinations of both, regardless of whether they are or are not electrically powered.

BSR/ADA Standard No. 47-2-201x, Stationary Dental Units and Patient Chairs - Part 2: Air, Water Suction and Wastewater Systems (national adoption of ISO 7494-2:2015 with modifications and revision of BSR/ADA Standard No. 47-2-201x)

Stakeholders: Manufacturers, dentists.

Project Need: The purpose of this revision is to align the National Standard with the new ISO standard.

This standard specifies requirements and test methods concerning: (1) the configuration of dental unit connections to the compressed air supply, water supply, suction supply, and wastewater drain plumbing; (2) the materials, design, and construction of the compressed air and water system within the dental unit; (3) the quality for incoming water and air, and (4) the performance of the dental unit suction system.

BSR/ADA Standard No. 48-201x, Curing Lights (Powered Polymerization Activators) (identical national adoption of ISO 10650:2018 and revision of ANSI/ADA Standard No. 48-2004 (R2015))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The revision by identical adoption of ISO 10650:2018 consolidates ANSI/ADA Standard 48, Visible Light Curing Units, and ANSI/ADA Standard 48.2, LED Curing Lights, into a single ANSI/ADA Standard 48. The major changes in the revision of ANSI/ADA Standard 48 are: (1) include a test procedure using a spectrometer, (2) modify a test procedure using filters, and (3) add an upper limit to the radiant existence for the 380-nm to 515-nm wavelength region.

The document specifies requirements and test methods for curing lights in the 380-nm to 515-nm wavelength region intended for chairside use in polymerization of dental polymer-based materials. It applies to quartz-tungsten-halogen lamps and light-emitting diode (LED) lamps.

BSR/ADA Standard No. 63-201x, Endodontic Instruments - Auxiliary (national adoption of ISO 3630-4:2009 with modifications and revision of ANSI/ADA Standard No. 63-2013)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The purpose of the revision is to align the national standard with the ISO standard, with modifications for U.S. market.

This standard specifies requirements and test methods for hand-held or mechanically operated instruments for performing root canal procedures. It specifies requirements for size, marking, product designation, safety considerations, labeling, and packaging.

BSR/ADA Standard No. 69-201x, Dental Ceramic (identical national adoption of ISO 6872:2015/Amd 1:2018 and revision of ANSI/ADA Standard No. 69-2017)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: ANSI/ADA Standard 69:2017 is an identical adoption of ISO 6872:2015. The standard will be revised to include the changes published in the 2018 ISO Amendment.

This standard specifies the requirements and the corresponding test methods for dental ceramic materials for fixed all-ceramic and metal-ceramic restorations and prostheses.

BSR/ADA Standard No. 71-201x, Endodontic Instruments - Compactors: Pluggers and spreaders (identical national adoption of ISO 3630-3:2019 and revision of ANSI/ADA Standard No. 71-2008 (R2013))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: The purpose of this revision is to align the National Standard with the new ISO standard.

This standard specifies requirements and test methods for endodontic instruments used as pluggers and spreaders, used to compact endodontic filling materials not cited in ANSI/ADA Standard Nos. 28, 63, 71, or 101. It specifies requirements for size, marking, product designation, safety considerations, and labeling and packaging.

BSR/ADA Standard No. 75-201x, Soft Lining Materials for Removable Dentures - Part 1: Materials for Short-Term Use (identical national adoption of ISO 10139-1:2018 and revision of ANSI/ADA Standard No. 75-1997 (R2014))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: ANSI/ADA Standard 75:1997 (R2014) is a modified adoption of ISO 10139-1:1991. Revision of the National Standard is needed to align with the newly published ISO 10139-1:2018, which the U.S. TAG voted in favor of.

This document specifies requirements for the physical properties, test methods, packaging, marking, and manufacturer's instructions for soft denture lining materials suitable for short-term use.

BSR/ADA Standard No. 95-201x, Endodontic Instruments - Enlargers (national adoption of ISO 3630-2:2013 with modifications and revision of ANSI/ADA Standard No. 95-2013)

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: This revision is needed to align the National Standard with the ISO Standard with modifications for U.S. market.

This standard specifies requirements for enlargers including size, marking, product designation, safety considerations, labeling and packaging, and instructions for use.

BSR/ADA Standard No. 97-201x, Corrosion Test Methods for Metallic Materials (identical national adoption of ISO 10271:2011 and revision of ANSI/ADA Standard No. 97-2002 (R2013))

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: ANSI/ADA Standard No. 97:2002 (R2013), Corrosion Test Methods, is an adoption of an outdated version of the ISO standard (ISO 10271:2001). A revision of the National Standard is in order to align with International Standards the U.S. TAG has voted in favor of.

This standard provides test methods and procedures to determine the corrosion behavior of metallic materials used in the oral cavity. It is intended that the test methods and procedures in this standard be referred to in the individual standards specifying such metallic materials.

New Standard

BSR/ADA Standard No. 186-201x, Dental CAD/CAM Machinable Polymer Blanks (new standard)

Stakeholders: Manufacturers, dentists, dental laboratories, consumers.

Project Need: Multiple types of machinable polymer blanks are now being used for fixed and removable dental restorations. There are no existing standards for these machinable materials.

This standard specifies the requirements and test methods for fully dense polymer blanks and the machinability of fully dense polymer blanks used for the fabrication of dental fixed and removable restorations.

BSR/ADA Standard No. 187-201x, Dental CAD/CAM Machinable Ceramic Blanks (new standard)

Stakeholders: Manufacturers, dentists, dental laboratories, consumers.

Project Need: Machining is the dominant method of fabricating indirect restorations. Standards applying to most machinable blanks do not exist.

This standard specifies the requirements and test methods for fully dense ceramic blanks and the machinability of fully dense and partially sintered ceramic blanks used for the fabrication of dental fixed restorations.

BSR/ADA Standard No. 188-201x, Orthodontic Aligners (new standard)

Stakeholders: Manufacturers, dentists, consumers.

Project Need: Orthodontic aligners require specific requirements for characteristics, physical properties, and labeling that are not adequately addressed by ANSI/ADA Standard 139:2012, Dental Base Polymers. To be sure that specific requirements for the fabrication of these materials are used, and the materials used are of acceptable quality, a separate standard is needed that addresses this ever-growing group of orthodontic materials. A scope that explains the inherent differences that set materials used for sequential orthodontic aligners apart from other orthodontic-base polymers is needed as well.

This standard classifies orthodontic aligner polymers and copolymers and specifies their requirements. It specifies the test methods to be used in determining compliance with these requirements and further specifies requirements with respect to packaging, labeling, and the manufacturer's instructions for use.

Revision**BSR/ADA Standard No. 99-201x, Athletic Mouth Protectors and Materials (revision of ANSI/ADA Standard No. 99-2001 (R2013))**

Stakeholders: Manufacturers, dentists, researchers, consumers.

Project Need: Increased scrutiny by collegiate and professional sports organizations concerning player safety and concussion prevention is occurring. Mouthguard materials and the role of mouthguards in preventing sports injuries has increased to include diagnostic devices and possible therapeutic modalities. Revision of Standard No. 99 is needed to reflect these changes and update testing modalities.

This specification is for thermoplastic or thermosetting polymeric materials, with or without a polymeric shell, that are capable of being formed into an athletic mouth protector, either on a model of the teeth or in the mouth directly on the teeth. It lists the types and classes of mouth protectors and lists requirements for physical properties along with tests specified for determining compliance with those requirements. It also specifies requirements for manufacturer's instructions and for packaging, labeling, and marking.

AIAA (American Institute of Aeronautics and Astronautics)

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Revision**BSR/AIAA S-102.2.4-201x, Performance-Based Failure Reporting, Analysis & Corrective Action Systems (FRACAS) Requirements (revision of BSR/AIAA S-102.2.4-201x)**

Stakeholders: Manufacturers of aircraft, satellites, ground vehicles, sea vehicles, and most any type of equipment.

Project Need: This standard allows a contractor to tailor the FMECA process to be commensurate with the product's unit-value/criticality and Systems Engineering life-cycle phase.

This Standard provides the basis for developing the analysis of failure modes, their effects, and criticality in the context of individual products along with the known performance of their elements. The requirements for contractors, the planning and reporting needs, along with the analytical tools are established. The linkage of this standard to the other standards in the new family of capability-based safety, reliability, and quality assurance standards is described, and all of the keywords for use in automating the Product FMECA process are provided.

AISC (American Institute of Steel Construction)

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New Standard

BSR/AISC 370-201x, Specification for Structural Stainless Steel Buildings (new standard)

Stakeholders: Structural engineers, fabricators, erectors, construction managers

Project Need: There is currently no up-to-date standard available for the design, fabrication, and erection of stainless-steel round hollow structural sections, and no standard at all for the rest of the structural stainless-steel products to be covered by this new standard. This will provide a state-of-the-art consensus standard for use by the stakeholders listed above.

This standard applies to the design, fabrication, and erection of austenitic and duplex stainless steel:

- sections made from annealed sheet, strip, and plate that have not been subsequently cold formed or rolled;
- hollow structural sections;
- round and square bar, annealed, and cold-finished; and
- hot-rolled or extruded shapes.

It also applies to precipitation hardening stainless steel bar.

ANS (American Nuclear Society)

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 555 North Kensington Avenue, La Grange Park, IL 60526

Revision

BSR/ANS 1-202x, Conduct of Critical Experiments (revision of ANSI/ANS 1-2000 (R2019))

Stakeholders: Stakeholders include any entity performing, reviewing, or funding critical experiments. National laboratories conducting critical experiments include LANL, SNL, and INL.

Project Need: It has been almost 20 years since the standard was revised and it needs to be refreshed. The references are mostly out of date and need to be updated and to see if additional references would be useful. Any comments submitted will be addressed. Definitions will be reviewed for completeness and consistency with current glossaries. Some of the American National Standard information external to the body of the standard has been changed in the Forward and References. The format for the standard has been changed.

This standard provides criteria for the safe conduct of critical experiments. Such experiments study neutron behavior in a fission device which may be critical where the energy produced is insufficient to require auxiliary cooling and the power history is such that the inventory of long-lived fission product is insignificant.

API (American Petroleum Institute)

Contact: *Stephen Crimardo, (202) 682-8151, crimardos@api.org*
 1220 L Street, NW, Washington, DC 20005-4070

Revision

BSR/API Recommended Practice 754-201x, Process Safety Performance Indicators for the Refining and Petrochemical Industries (revision and redesignation of ANSI/API Recommended Practice 754, Second Edition-2016)

Stakeholders: Refining and petrochemical industry owners/operators; government agencies; academia; labor unions, industry associations (refining and petrochemical); international organizations (refining and petrochemical); engineering consultants and experts.

Project Need: To revise and update the existing Recommended Practice.

This recommended practice (RP) identifies leading and lagging process safety indicators useful for driving performance improvement. As a framework for measuring activity, status, or performance, this document classifies process safety indicators into four tiers of leading and lagging indicators. Tiers 1 and 2 are suitable for nationwide public reporting and Tiers 3 and 4 are intended for internal use at individual facilities. Guidance on methods for development and use of performance indicators is also provided.

ASME (American Society of Mechanical Engineers)

Contact: *Mayra Santiago, (212) 591-8521, ansibox@asme.org*
Two Park Avenue, New York, NY 10016-5990

Revision

BSR/ASME B16.39-202X, Malleable Iron Threaded Pipe Unions (revision of ANSI/ASME B16.39-2014)

Stakeholders: Manufacturers, users, distributors, designers, regulatory.

Project Need: To update the contents of the B16.39 Standard to ensure it meets current industry advancements.

This Standard covers threaded malleable iron unions, Classes 150, 250, and 300. It also contains provisions for using steel for NPS 1/8 unions.

BSR/ASME MFC-3.1-202X, Measurement of Fluid Flow in Pipes using Orifice, Flow Nozzle, and Venturi - Part 1: General (revision and partition of ANSI/ASME MFC-3M-2004 (R2017))

Stakeholders: Designers, general interest, laboratory, producers/manufacturers, regulatory/government, consultants, and users.

Project Need: "Part 1: General" of ASME MFC-3M is being revised as its own document to reflect the current state-of-the-art of flow-measurement devices and include expanded portions on uncertainty and secondary instrumentation. Additional examples will also be incorporated.

The purpose of this Standard is to provide general material such as definitions, symbols, measurement principles, measurement and installation requirements, as well as uncertainty calculations that apply to orifice, nozzle, and venturi devices for which the flow remains subsonic throughout the measuring section and where the fluid is considered as single-phase.

BSR/ASME MFC-3.2-202X, Measurement of Fluid Flow in Pipes using Orifice, Flow Nozzle, and Venturi - Part 2: Orifice Meters (revision, redesignation and consolidation of ANSI/ASME MFC-3M-2004 (R2017), ANSI/ASME MFC-14M-2003 (R2018))

Stakeholders: Designers, general interest, laboratory, producers/manufacturers, regulatory/government, consultants, and users.

Project Need: Part 2 of ASME MFC-3M is being revised and consolidated with ASME MFC-14M as one standard in order to contain information and requirements specific to orifice meters in a central location; reflect the current state-of-the-art of orifice meters; align with related standards; and incorporate additional examples.

The purpose of this Standard is to specify the geometry and method of use (installation and operating conditions) of orifice meters when they are inserted in a conduit running full to determine the flow rate of the fluid flowing in the conduit.

BSR/ASME MFC-3.3-202X, Measurement of Fluid Flow in Pipes using Orifice, Flow Nozzle, and Venturi - Part 3: Flow Nozzles and Venturi Nozzles (revision and partition of ANSI/ASME MFC-3M-2004 (R2017))

Stakeholders: Designers, general interest, laboratory, producers/manufacturers, regulatory/government, consultants, and users.

Project Need: Part 3 of ASME MFC-3M is being revised as its own document to reflect the current state-of-the-art of flow nozzles and venturi nozzles; align with other standards regarding flow nozzles and venturi nozzles; and incorporate additional examples.

The purpose of this Standard is to specify the geometry and method of use (installation and operating conditions) of flow nozzles and venturi nozzles when they are inserted in a conduit running full to determine the flow rate of the fluid flowing in the conduit.

BSR/ASME MFC-3.4-202X, Measurement of Fluid Flow in Pipes using Orifice, Flow Nozzle, and Venturi - Part 4: Venturi Meters (revision and partition of ANSI/ASME MFC-3M-2004 (R2017))

Stakeholders: Designers, general interest, laboratory, producers/manufacturers, regulatory/government, consultants, and users.

Project Need: Part 4 of ASME MFC-3M is being revised as its own document to reflect the current state-of-the-art of venturi meters; align with other standards regarding venturi meters; and incorporate additional examples.

This Standard specifies the geometry and method of use (installation and operating conditions) of venturi meters when they are inserted in a conduit running full to determine the flow rate of the fluid flowing in the conduit.

ASTM (ASTM International)

Contact: *Laura Klineburger, (610) 832-9744, accreditation@astm.org*
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

New Standard

BSR/ASTM WK69493-201x, Reinstatement of F2747-10, Standard Guide for Construction of Sand-based Rootzones for Golf Putting Greens and Tees (new standard)

Stakeholders: Natural Playing Surfaces industry.

Project Need: This guide provides guidance for the selection of materials, including soil, sand, gravel, peat, etc., for use in designing and constructing sand-based golf-turf rootzones

This guide covers techniques that are appropriate for the construction of high-performance sand-based rootzones for golf greens and tees.

BSR/ASTM WK69536-201x, New Test Method for Static Loading of Treestands, Climbing Sticks, and Tripod or Tower Stands (new standard)

Stakeholders: Treestands industry.

Project Need: This test method covers procedures for static loading of various components of treestands, climbing sticks, and tripod/tower stands that are used for hunting, photographing, or general observation. This test method does not specify actual rated load capacities and corresponding factors of safety to which each component should be evaluated.

This test method covers procedures for static loading of various components of treestands, climbing sticks, and tripod/tower stands that are used for hunting, photographing, or general observation. Currently, three separate test methods exist for static loading of various components (F2125, F2126, F2531). The intent is to combine these three methods into a single coherent document in order to add clarity to the procedures.

BSR/ASTM WK69578-201x, Reinstatement of F1533-01(2009). Standard Specification for Deformed Polyethylene (PE) Liner (new standard)

Stakeholders: Olefin-Based Pipe industry.

Project Need: This application is for municipal sewage, storm water, industrial process liquids and effluents, conduit, and ducts. This renewal process involves installing a deformed liner into an existing pipeline, conduit, or duct, then reforming the liner with heat and pressure to fit tightly to the bore of the original pipeline, conduit, or duct.

This specification covers requirements and test methods for materials of deformed PE liner intended for the rehabilitation of gravity-flow and nonpressure pipelines.

CSA (CSA America Standards Inc.)

Contact: *David Zimmerman, (216) 524-4990, david.zimmerman@csagroup.org*
8501 E. Pleasant Valley Road, Cleveland, OH 44131

Revision

BSR/CSA HPRD 1-201x, Thermally activated pressure relief devices for compressed hydrogen vehicle fuel containers (revision of ANSI/CSA HPRD 1-2013 (R2018))

Stakeholders: Hydrogen component manufacturers.

Project Need: The hydrogen industry is advancing rapidly and the standards need to be updated to align with technology advancements.

This Standard establishes minimum requirements for pressure relief devices intended for use on fuel containers that comply with CSA B51, Part 2 Boiler, Pressure Vessel and Pressure Piping Code or SAE J2579, Technical Information Report for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles. Pressure-relief devices designed to comply with this standard are intended to be used with hydrogen fuel complying with SAE J2719, Hydrogen Fuel Quality for Fuel Cell Vehicles, or ISO 14687, Hydrogen Fuel-Product Specification. Pressure-relief devices may be of any design or manufacturing method that meets the requirements of this standard. The construction of pressure relief devices, whether specifically covered in this standard or not, shall be in accordance with reasonable concepts of safety, performance, and durability. This Standard does not apply to reseating, resealing, or pressure-activated devices

BSR/CSA HGV 2-201x, Compressed Hydrogen Gas Powered Vehicle Fuel Containers (revision of BSR/CSA HGV 2-201x)

Stakeholders: Hydrogen cylinder manufacturers.

Project Need: The hydrogen cylinder industry is advancing at a rapid rate and the existing standards need to be updated to include technology advancements.

1.1 General. This Standard contains requirements for the material, design, manufacture, marking, and testing of serially produced, refillable Type HGV2 containers intended only for the storage of compressed hydrogen gas for on-road vehicle operation. These containers: (a) are to be permanently attached to the vehicle; (b) have a capacity of up to 1 000 liters (35.4 ft³) water capacity; and (c) have a nominal working pressure that does not exceed 70 MPa. 1.2 Alternative construction or materials. The construction of the containers, whether specifically covered by the various provisions of this Standard or not, is to be in accordance with reasonable concepts of safety, performance, and durability. All specifications as to construction set forth herein are to be satisfied by the construction actually prescribed or such other construction as will provide at least equivalent performance. 1.3 Units of measurement. This standard contains SI (metric) units corresponding to the yard/pound quantities, the purpose being to allow the standard to be used in SI (metric) units. IEEE/ASTM SI 10, or ISO 80000-1:2009, is used as a guide in making metric conversion from yard/pound quantities. If a value for measurement and a corresponding value in other units are stated, the first stated value is to be regarded as the requirement. The given corresponding value may be approximate. If a value for a measurement and a corresponding value in other units are both specified as a quoted marking requirement, the first stated unit, or both are to be provided. 1.4 Terminology. In this Standard, "shall" is used to express a requirement, i.e., a provision that the user shall satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the standard. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

MSS (Manufacturers Standardization Society)

Contact: Michelle Pennington, (703) 281-6613, standards@msshq.org
127 Park Street, NE, Vienna, VA 22180-4602

Revision

BSR/MSS SP-44-201x, Steel Pipeline Flanges (revision of ANSI/MSS SP-44-2016)

Stakeholders: Paper, chemical, petroleum production and transport, petrochemical, nuclear power, hydroelectric power, and those involved with fossil-fuel-power-flanged piping joints, including valve and fitting systems.

Project Need: This is a current American National Standard that is widely employed in valve and piping industries and referenced in other industry and ANSI-approved standards. Offers a National Standard for NPS 12 to NPS 60 flanges for high-yield strength materials not covered by current National Standards. Referenced in Federal CFR. 2019 edition is substantially revised.

Covers pressure-temperature ratings, materials, dimensions, tolerances, marking, and testing for steel pipeline flanges. The welding-neck-type flanges shall be forged steel, and the blind flanges may be made from either forged steel or from steel plate. Dimensional and tolerance requirements for NPS 10 and smaller are provided by reference to ASME B16.5. Note that SP-44 covers construction details not covered by another current standard, including P/T ratings, of products made of high-yield strength materials (e.g., for users that have flanged joints, flanged valves, and flanged fittings). This revised standard also covers two Product Specification Levels (PSL).

SAIA (ASC A92) (Scaffold & Access Industry Association)

Contact: DeAnna Martin, (816) 595-4860, deanna@saiaonline.org
400 Admiral Boulevard, Kansas City, MO 64106

Revision

BSR/SAIA A92.20-201x, Design, Calculations, Safety Requirements and Test Methods for Mobile Elevating Work Platforms (MEWPs) (revision of ANSI/SAIA A92.20-2018)

Stakeholders: Designers, manufacturers, dealers, owners, users, supervisors, operators, lessors, lessees, and brokers of Mobile Elevating Work Platforms (MEWPs) within the standard(s) scope(s).

Project Need: To revise the current standard to comply with the ANSI Commercial Terms Policy based of the decision of the ANSI BSR.

This Standard is intended to be used in conjunction BSR/SAIA A92.22, Safe Use of MEWPs, and ANSI/SAIA A92.24-2018, Training Requirements for Operators of MEWPs. This American National Standard specifies safety requirements and preventive measures, and the means for their verification, for certain types and sizes of mobile elevating work platforms (MEWPs) intended to position personnel, along with their necessary tools and materials, at work locations. It contains the structural design calculations and stability criteria, construction, safety examinations, and tests that shall be applied before a MEWP is first put into service.

BSR/SAIA A92.22-201x, Safe Use of Mobile Elevating Work Platforms (MEWPs) (revision of ANSI/SAIA A92.22-2018)

Stakeholders: Designers, Manufacturers, Dealers, Owners, Users, Supervisors, Operators, Lessors, Lessees and Brokers of Mobile Elevating Work Platforms (MEWPs) within the standard(s) scope(s).

Project Need: To revise the current standard to comply with the ANSI Commercial Terms Policy based of the decision of the ANSI BSR.

This Standard is intended to be used in conjunction with BSR/SAIA A92.20, Design calculations, safety requirements and test methods for Mobile Elevating Work Platforms (MEWPs) and ANSI/SAIA A92.24-2018, Training Requirements for Operators of Mobile Elevating Work Platforms (MEWPs). This Standard specifies requirements for application, inspection, training, maintenance, repair and safe operation of Mobile Elevating Work Platforms (hereafter known as MEWPs). It applies to all types and sizes of MEWPs as specified in BSR/SAIA A92.20 that are intended to position personnel, along with their necessary tools and materials, at work locations.

American National Standards Maintained Under Continuous Maintenance

The ANSI Essential Requirements: Due Process Requirements for American National Standards provides two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.7.1) and continuous maintenance (see clause 4.7.2). Continuous maintenance is defined as follows:

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements.

The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option

- AAMI (Association for the Advancement of Medical Instrumentation)
- AARST (American Association of Radon Scientists and Technologists)
- AGA (American Gas Association)
- AGSC-AGRSS (Auto Glass Safety Council)
- ASC X9 (Accredited Standards Committee X9, Incorporated)
- ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
- ASME (American Society of Mechanical Engineers)
- ASTM (ASTM International)
- GBI (Green Building Initiative)
- HL7 (Health Level Seven)
- IES (Illuminating Engineering Society)
- ITI (InterNational Committee for Information Technology Standards)
- MHI (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NEMA (National Electrical Manufacturers Association)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network, Inc.)
- SAE (SAE International)
- TCNA (Tile Council of North America)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at www.ansi.org/asd, select "Standards Activities," click on "Public Review and Comment" and "American National Standards Maintained Under Continuous Maintenance." This information is also available directly at www.ansi.org/publicreview

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at psa@ansi.org or via fax at 212-840-2298. If you request that information be provided via E-mail, please include your E-mail address; if you request that information be provided via fax, please include your fax number. Thank you.

ANSI-Accredited Standards Developers Contact Information

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment and Final Actions. This section is a list of developers who have submitted standards for this issue of *Standards Action* – it is not intended to be a list of all ANSI-Accredited Standards Developers. Please send all address corrections to Standards Action Editor at standact@ansi.org.

<p>AAFS American Academy of Forensic Sciences 410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 453-1036 Web: www.aafs.org</p>	<p>ASA (ASC S1) Acoustical Society of America 1305 Walt Whitman Road Suite 300 Melville, NY 11747 Phone: (631) 390-0215 Web: www.acousticalsociety.org</p>	<p>ASTM ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9744 Web: www.astm.org</p>	<p>MSS Manufacturers Standardization Society 127 Park Street, NE Vienna, VA 22180-4602 Phone: (703) 281-6613 Web: www.mss-hq.org</p>
<p>AAMI Association for the Advancement of Medical Instrumentation 901 N. Glebe Road, Suite 300 Arlington, VA 22203 Phone: (703) 253-8261 Web: www.aami.org</p>	<p>ASA (ASC S12) Acoustical Society of America 1305 Walt Whitman Road Suite 300 Melville, NY 11747 Phone: (631) 390-0215 Web: www.acousticalsociety.org</p>	<p>AWS American Welding Society 8669 NW 36 Street, #130 Miami, FL 33166 Phone: (305) 443-9353 Web: www.aws.org</p>	<p>NECA National Electrical Contractors Association 3 Bethesda Metro Center Suite 1100 Bethesda, MD 20814 Phone: (301) 215-4549 Web: www.neca-neis.org</p>
<p>ADA (Organization) American Dental Association 211 East Chicago Avenue Chicago, IL 60611-2678 Phone: (312) 587-4129 Web: www.ada.org</p>	<p>ASA (ASC S3) Acoustical Society of America 1305 Walt Whitman Road Suite 300 Melville, NY 11747 Phone: (631) 390-0215 Web: www.acousticalsociety.org</p>	<p>CSA CSA America Standards Inc. 8501 E. Pleasant Valley Road Cleveland, OH 44131 Phone: (216) 524-4990 Web: www.csagroup.org</p>	<p>NEMA (ASC C8) National Electrical Manufacturers Association 1300 North 17th Street Rosslyn, VA 22209 Phone: (703) 841-3278 Web: www.nema.org</p>
<p>AGMA American Gear Manufacturers Association 1001 N Fairfax Street, 5th Floor Alexandria, VA 22314-1587 Phone: (703) 684-0211 Web: www.agma.org</p>	<p>ASABE American Society of Agricultural and Biological Engineers 2950 Niles Road Saint Joseph, MI 49085 Phone: (269) 932-7015 Web: www.asabe.org</p>	<p>CTA Consumer Technology Association 1919 South Eads Street Arlington, VA 22202 Phone: (703) 907-7697 Web: www.cta.tech</p>	<p>NSF NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 827-6866 Web: www.nsf.org</p>
<p>AIAA American Institute of Aeronautics and Astronautics 12700 Sunrise Valley Drive, Suite 200 Reston, VA 20191-5807 Phone: (703) 264-7546 Web: www.aiaa.org</p>	<p>ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329 Phone: (404) 636-8400 Web: www.ashrae.org</p>	<p>ECIA Electronic Components Industry Association 13873 Park Center Road Suite 315 Herndon, VA 20171 Phone: (571) 323-0294 Web: www.ecianow.org</p>	<p>UL Underwriters Laboratories, Inc. 12 Laboratory Drive Research Triangle Park, NC 27709-3995 Phone: (919) 549-1851 Web: www.ul.com</p>
<p>AISC American Institute of Steel Construction 130 E. Randolph Street Suite 2000 Chicago, IL 60601-6204 Phone: (312) 670-5410 Web: www.aisc.org</p>	<p>ASME American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990 Phone: (212) 591-8521 Web: www.asme.org</p>	<p>HL7 Health Level Seven 3300 Washtenaw Avenue Suite 227 Ann Arbor, MI 48104 Phone: (734) 677-7777 Web: www.hl7.org</p>	<p>VITA VMEbus International Trade Association (VITA) 929 W. Portobello Avenue Mesa, AZ 85210 Phone: (602) 281-4497 Web: www.vita.com</p>
<p>ANS American Nuclear Society 555 North Kensington Avenue La Grange Park, IL 60526-5592 Phone: (708) 579-8269 Web: www.ans.org</p>	<p>ASSP (Safety) American Society of Safety Professionals 520 N. Northwest Highway Park Ridge, IL 60068 Phone: (847) 768-3411 Web: www.assp.org</p>	<p>HPVA Hardwood Plywood & Veneer Association 42777 Trade West Drive Sterling, VA 20166 Phone: (703) 435-2900 Web: www.hpvalabs.com</p>	
<p>API American Petroleum Institute 1220 L Street, NW Washington, DC 20005-4070 Phone: (202) 682-8151 Web: www.api.org</p>		<p>ITI (INCITS) InterNational Committee for Information Technology Standards 700 K Street NW Suite 600 Washington, DC 20001 Phone: (202) 737-8888 Web: www.incits.org</p>	



ISO & IEC Draft International Standards

This section lists proposed standards that the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) are considering for approval. The proposals have received substantial support within the technical committees or subcommittees that developed them and are now being circulated to ISO and IEC members for comment and vote. Standards Action readers interested in reviewing and commenting on these documents should order copies from ANSI.

Comments

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); comments on IEC documents must be submitted electronically in the approved ISO template and as a Word document as other formats will not be accepted.

Those regarding IEC documents should be sent to Tony Zertuche, General Secretary, USNC/IEC, at ANSI's New York offices (tzertuche@ansi.org). The final date for offering comments is listed after each draft.

Ordering Instructions

ISO and IEC Drafts can be made available by contacting ANSI's Customer Service department. Please e-mail your request for an ISO or IEC Draft to Customer Service at sales@ansi.org. When making your request, please provide the date of the Standards Action issue in which the draft document you are requesting appears.

ISO Standards

ACOUSTICS (TC 43)

ISO 6926/DAMd1, Acoustics - Requirements for the performance and calibration of reference sound sources used for the determination of sound power levels - Amendment 1 - 11/9/2019, \$29.00

ISO/DIS 16283-2, Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 2: Impact sound insulation - 11/4/2019, \$112.00

FOOTWEAR (TC 216)

ISO/DIS 24263, Footwear - Attachments strength of straps, trims and accessories - 11/14/2019, \$40.00

ISO/DIS 24264, Footwear - Attachment strength of top pieces - 11/14/2019, \$33.00

ISO/DIS 24265, Footwear - Test methods for uppers - Fastness to rubbing using a rubber pad - 11/14/2019, \$40.00

ISO/DIS 24266, Footwear - Test methods for whole shoe - Flexing durability - 11/14/2019, \$46.00

MECHANICAL CONTRACEPTIVES (TC 157)

ISO 25841/DAMd1, Female condoms - Requirements and test methods - Amendment 1 - 9/12/2019, \$29.00

NUCLEAR ENERGY (TC 85)

ISO/DIS 7195, Nuclear energy - Packagings for the transport of uranium hexafluoride (UF₆) - 12/13/2021, \$155.00

PETROLEUM PRODUCTS AND LUBRICANTS (TC 28)

ISO 8973/DAMd1, Liquefied petroleum gases - Calculation method for density and vapour pressure - Amendment 1 - 9/15/2019, \$29.00

QUALITY MANAGEMENT AND CORRESPONDING GENERAL ASPECTS FOR MEDICAL DEVICES (TC 210)

ISO/DIS 80369-7, Small-bore connectors for liquids and gases in healthcare applications - Part 7: Connectors with 6% (Luer) taper for intravascular or hypodermic applications - 11/4/2019, \$112.00

ROAD VEHICLES (TC 22)

ISO/DIS 15765-5, Road vehicles - Diagnostic communication over Controller Area Network (DoCAN) - Part 5: Specification for an in-vehicle network connected to the diagnostic link connector - 11/11/2019, \$71.00

SCREW THREADS (TC 1)

ISO 1501/DAMd1, ISO miniature screw threads - Amendment 1: The figure for the tolerance zone of external thread - 9/12/2019, \$29.00

STEEL (TC 17)

ISO 10893-1/DAMd1, Non-destructive testing of steel tubes - Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leaktightness - Amendment 1: Change of dimensions of the reference notch; change acceptance criteria - 9/13/2019, \$29.00

ISO 10893-2/DAMd1, Non-destructive testing of steel tubes - Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections - Amendment 1: Change of dimensions of the reference notch; change acceptance criteria - 9/13/2019, \$29.00

WELDING AND ALLIED PROCESSES (TC 44)

ISO/DIS 2560, Welding consumables - Covered electrodes for manual metal arc welding of non-alloy and fine grain steels - Classification - 11/10/2019, \$98.00

ISO/DIS 24034, Welding consumables - Solid wire electrodes, solid wires and rods for fusion welding of titanium and titanium alloys - Classification - 11/10/2019, \$58.00

ISO/DIS 15792-1, Welding consumables - Test methods - Part 1: Test methods for all-weld metal test specimens in steel, nickel and nickel alloys - 11/10/2019, \$40.00

ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 21472, Information technology - Scenario evaluation methodology for user interaction influence in biometric system performance - 11/9/2019, \$62.00

IEC Standards

21/1020/CD, IEC 63193 ED1: Lead-acid batteries for propulsion of lightweight means of locomotion - General requirements and methods of test, /2019/10/1

27/1118/FDIS, IEC 63078 ED1: Installations for electroheating and electromagnetic processing - Test methods for induction through-heating installations, 2019/10/4

31/1495/DISH, IEC 60079-28/ISH2 ED1: Interpretation Sheet 2 - Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation, 2019/10/4

- 31/1496/DISH, IEC 60079-28/ISH1 ED2: Interpretation Sheet 1 - Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation, /2019/10/4
- 34/629/CD, IEC 63117 ED1: General requirements for lighting systems - Safety, /2019/10/1
- 35/1433/CD, IEC 62281/AMD1 ED4: Amendment 1: Safety of primary and secondary lithium cells and batteries during transport, /2019/10/1
- 37B/190/CD, IEC 61643-321 ED2: Components for low-voltage surge protection - Part 321: Performance requirements and test circuits for silicon PN-junction voltage limiters, /2019/11/1
- 45A/1289/FDIS, IEC 62645 ED2: Nuclear power plants - Instrumentation, control and electrical power systems - Cybersecurity requirements, 2019/10/4
- 46/739/CD, IEC 62153-4-16 ED2: Metallic cables and other passive components test methods - Part 4-16: Electromagnetic compatibility (EMC) - Extension of the frequency range to higher frequencies for transfer impedance and to lower frequencies for screening attenuation measurements using the triaxial set-up, /2019/11/1
- 46F/471/CDV, IEC 61169-66 ED1: Radio-Frequency-Connectors, Part 66: Sectional specification for RF coaxial connectors with 5mm inner diameter of outer conductor, with screw- and snap-on coupling, 50 Ohm characteristic impedance, for use up to 6 GHz - Type 2,2-5, /2019/11/1
- 46F/488/DTS, IEC TS 61169-1-51 ED1: Radio frequency connectors - Part 1-51: Uncertainty specification of frequency domain test for return loss, /2019/11/1
- 47/2584/CDV, IEC 60749-41 ED1: Semiconductor devices - Mechanical and climatic test methods - Part 41: Standard reliability testing methods of non-volatile memory devices, /2019/11/1
- 47A/1081/NP, PNW 47A-1081: Integrated circuits - Three dimensional integrated circuits - Part 5: Known-good-die test of partly integrated circuits, /2019/11/1
- 47A/1082/NP, PNW 47A-1082: Integrated circuits - Three dimensional integrated circuits - Part 6: Thermomechanical reliability test method, /2019/11/1
- 47E/679/FDIS, IEC 60747-14-10 ED1: Semiconductor devices - Part 14-10: Semiconductor sensors - Performance evaluation methods for wearable glucose sensors, 2019/10/4
- 51/1303/CDV, IEC 62024-2 ED2: High frequency inductive components - Electrical characteristics and measuring methods - Part 2: Rated current of inductors for DC to DC converters, /2019/11/1
- 57/2116/CDV, IEC 62351-4/AMD1 ED1: Amendment 1 - Power systems management and associated information exchange - Data and communications security - Part 4: Profiles including MMS and derivatives, /2019/11/1
- 57/2129A/DTR, IEC TR 61850-90-11 ED1: Communication networks and systems for power utility automation - Part 90-11: Methodologies for modelling of logics for IEC 61850 based applications, /2019/10/1
- 57/2136/DTR, IEC TR 61850-90-12 ED2: Communication networks and systems for power utility automation - Part 90-12: Wide area network engineering guidelines, /2019/10/1
- 61J/720/CD, IEC 60335-2-72 ED5: Household and similar electrical appliances - Safety - Part 2-72: Particular requirements for floor treatment machines with or without traction drive, for commercial use, /2019/11/1
- 62D/1707/NP, PNW 62D-1707: ISO 80601-2-xx, Medical Electrical Equipment - Part 2-xx: Particular requirements for basic safety and essential performance of equipment for infant cardiorespiratory monitors, /2019/11/1
- 65/756/CDV, IEC 62443-2-1 ED2: Security for industrial automation and control systems - Part 2-1: Security program requirements for IACS asset owners, /2019/11/1
- 65A/927/CDV, IEC 61326-2-5 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-5: Particular requirements - Test configurations, operational conditions and performance criteria for field devices with field bus interfaces according to IEC 61784-1, /2019/11/1
- 65A/928/CDV, IEC 61326-2-6 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-6: Particular requirements - In vitro diagnostic (IVD) medical equipment, /2019/11/1
- 65A/924/CDV, IEC 61326-2-2 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-2: Particular requirements - Test configurations, operational conditions and performance criteria for portable test, measuring and monitoring equipment used in low-voltage distribution systems, /2019/11/1
- 65A/923/CDV, IEC 61326-2-1 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-1: Particular requirements - Test configurations, operational conditions and performance criteria for sensitive test and measurement equipment for EMC unprotected applications, /2019/11/1
- 65A/925/CDV, IEC 61326-2-3 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-3: Particular requirements - Test configuration, operational conditions and performance criteria for transducers with integrated or remote signal conditioning, /2019/11/1
- 65A/926/CDV, IEC 61326-2-4 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-4: Particular requirements - Test configurations, operational conditions and performance criteria for insulation monitoring devices according to IEC 61557-8 and for equipment for insulation fault location according to IEC 61557-9, /2019/11/1
- 65A/922/CDV, IEC 61326-1 ED3: Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements, /2019/11/1
- 77A/1039/FDIS, IEC 61000-4-11 ED3: Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with input current up to 16 A per phase, 2019/10/4
- 82/1621/CD, IEC 63112 ED1: Safety, functionality and classification of Photovoltaic Earth Fault Protection (PV EFP) equipment, /2019/11/1
- 82/1602/CDV, IEC 62787 ED1: Concentrator photovoltaic (CPV) solar cells and cell-on-carrier (COC) assemblies - Reliability qualification, /2019/11/1
- 96/484/CDV, IEC 61558-2-6 ED3: Safety of transformers, reactors, power supply units and combinations thereof - Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers for general applications, /2019/11/1
- 96/482/CDV, IEC 61558-2-1 ED3: Safety of transformers, reactors, power supply units and combinations thereof - Part 2-1: Particular requirements and tests for separating transformers and power supplies incorporating separating transformers for general applications, /2019/11/1
- 96/483/CDV, IEC 61558-2-4 ED3: Safety of transformers, reactors, power supply units and combinations thereof - Part 2-4: Particular requirements and tests for isolating transformers and power supply units incorporating isolating transformers for general applications, /2019/11/1
- 96/485/CDV, IEC 61558-2-16 ED2: Safety of transformers, reactors, power supply units and combinations thereof - Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units for general applications, /2019/11/1
- 100/3305/NP, PNW 100-3305: Wireless power transfer - Measuring method for wireless power transfer efficiency and standby power - Mobile phone, /2019/11/1

- 110/1117/CDV, IEC 62977-2-2 ED1: Electronic displays - Part 2-2: Measurements of optical characteristics - Ambient performance, /2019/11/1
- 113/504/CD, IEC TS 62607-6-9 ED1: Nanomanufacturing - Key control Characteristics - Part 6-9: Graphene material - Sheet resistance: Eddy current method, /2019/10/1
- 113/505/CD, IEC 62565-3-1 ED1: Nanomanufacturing - Material specifications - Part 3-1: Graphene - Blank detail specification, /2019/10/1
- 116/416/CDV, IEC 63241-2-6 ED1: Electric motor-operated tools - Dust measurement procedure - Part 2-6: Particular requirements for hand-held hammers, /2019/11/1
- 116/415/CDV, IEC 63241-1 ED1: Electric motor-operated tools - Dust measurement procedure - Part 1: General requirements, /2019/11/1
- JTC1-SC41/112/NP, PNW JTC1-SC41-112: Internet of Things (IoT) - Interoperability for Internet of Things Systems - Part 4: Syntactic interoperability, /2019/11/1



Newly Published ISO & IEC Standards

Listed here are new and revised standards recently approved and promulgated by ISO - the International Organization for Standardization – and IEC – the International Electrotechnical Commission. Most are available at the ANSI Electronic Standards Store (ESS) at www.ansi.org. All paper copies are available from Standards resellers (<http://webstore.ansi.org/faq.aspx#resellers>).

ISO Standards

ISO/IEC JTC 1 Technical Reports

[ISO/IEC TR 33015:2019](#), Information technology - Process assessment - Guidance for process risk determination, \$162.00

AIR QUALITY (TC 146)

[ISO 21877:2019](#), Stationary source emissions - Determination of the mass concentration of ammonia - Manual method, \$185.00

BUILDING ENVIRONMENT DESIGN (TC 205)

[ISO 19454:2019](#), Building environment design - Indoor environment - Daylight opening design for sustainability principles in visual environment, \$138.00

[ISO 18566-6:2019](#), Building environment design - Design, test methods and control of hydronic radiant heating and cooling panel systems - Part 6: Input parameters for the energy calculation, \$45.00

DENTISTRY (TC 106)

[ISO 3630-1:2019](#), Dentistry - Endodontic instruments - Part 1: General requirements, \$138.00

DIMENSIONAL AND GEOMETRICAL PRODUCT SPECIFICATIONS AND VERIFICATION (TC 213)

[ISO 13385-1:2019](#), Geometrical product specifications (GPS) - Dimensional measuring equipment - Part 1: Design and metrological characteristics of callipers, \$103.00

GAS CYLINDERS (TC 58)

[ISO 9809-1:2019](#), Gas cylinders - Design, construction and testing of refillable seamless steel gas cylinders and tubes - Part 1: Quenched and tempered steel cylinders and tubes with tensile strength less than 1 100 MPa, \$209.00

[ISO 9809-2:2019](#), Gas cylinders - Design, construction and testing of refillable seamless steel gas cylinders and tubes - Part 2: Quenched and tempered steel cylinders and tubes with tensile strength greater than or equal to 1 100 MPa, \$209.00

[ISO 9809-3:2019](#), Gas cylinders - Design, construction and testing of refillable seamless steel gas cylinders and tubes - Part 3: Normalized steel cylinders and tubes, \$209.00

MEASUREMENT OF FLUID FLOW IN CLOSED CONDUITS (TC 30)

[ISO 17089-1:2019](#), Measurement of fluid flow in closed conduits - Ultrasonic meters for gas - Part 1: Meters for custody transfer and allocation measurement, \$232.00

PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)

[ISO 17723-1:2019](#), PPE ensembles for firefighters undertaking hazardous materials response activities - Part 1: Gas-tight, vapour-protective ensembles for emergency response teams (type 1), \$162.00

ROAD VEHICLES (TC 22)

[ISO 22565:2019](#), Road vehicles - Durability test method of starter relay for stop and start system, \$68.00

RUBBER AND RUBBER PRODUCTS (TC 45)

[ISO 6915:2019](#), Flexible cellular polymeric materials - Polyurethane foam for laminate use - Specification, \$68.00

SOIL QUALITY (TC 190)

[ISO 23611-3:2019](#), Soil quality - Sampling of soil invertebrates - Part 3: Sampling and extraction of enchytraeids, \$103.00

SURFACE CHEMICAL ANALYSIS (TC 201)

[ISO 10810:2019](#), Surface chemical analysis - X-ray photoelectron spectroscopy - Guidelines for analysis, \$162.00

TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)

[ISO 5718/Amd1:2019](#), Harvesting equipment - Blades for agricultural rotary mowers - Requirements - Amendment 1, \$19.00

ISO Technical Specifications

OTHER

[ISO/TS 17033:2019](#), Ethical claims and supporting information - Principles and requirements, \$103.00

ISO/IEC Guides

OTHER

[ISO/IEC Guide 59:2019](#), ISO and IEC recommended practices for standardization by national bodies, \$103.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 20000-2:2019](#), Information technology - Service management - Part 2: Guidance on the application of service management systems, \$209.00

[ISO/IEC 20000-3:2019](#), Information technology - Service management - Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1, \$162.00

IEC Standards

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES (TC 61)

[IEC 62115 Ed. 2.0 b cor.1:2019](#), Corrigendum 1 - Electric toys - Safety, \$0.00

SWITCHGEAR AND CONTROLGEAR AND THEIR ASSEMBLIES FOR LOW VOLTAGE (TC 121)

[IEC 61439-7 Ed. 1.0 b cor.1:2019](#), Corrigendum 1 - Low-voltage switchgear and controlgear assemblies - Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations, \$0.00

Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations notified by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to notify proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat issues and makes available these notifications. The purpose of the notification requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

The USA Inquiry Point for the WTO TBT Agreement is located at the National Institute of Standards and Technology (NIST) in the Standards Coordination Office (SCO). The Inquiry Point distributes the notified proposed foreign technical regulations (notifications) and makes the associated full-texts available to U.S. stakeholders via its online service, Notify U.S. Interested U.S. parties can register with Notify U.S. to receive e-mail alerts when notifications are added from countries and industry sectors of interest to them.

To register for Notify U.S., please visit <http://www.nist.gov/notifyus/>.

The USA WTO TBT Inquiry Point is the official channel for distributing U.S. comments to the network of WTO TBT Enquiry Points around the world. U.S. business contacts interested in commenting on the notifications are asked to review the comment guidance available on Notify U.S. at <https://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> prior to submitting comments.

For further information about the USA TBT Inquiry Point, please visit: <https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point>

Contact the USA TBT Inquiry Point at:(301) 975-2918; Fax: (301) 926-1559; E-mail: usatbtep@nist.gov or notifyus@nist.gov.

Information Concerning

American National Standards

Call for Members

INCITS Executive Board – ANSI Accredited SDO and US TAG to ISO/IEC JTC 1, Information Technology

The InterNational Committee for Information Technology Standards (INCITS), an ANSI accredited SDO, is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal de jure IT standards. INCITS' mission is to promote the effective use of Information and Communication Technology through standardization in a way that balances the interests of all stakeholders and increases the global competitiveness of the member organizations.

The INCITS Executive Board serves as the consensus body with oversight of its 40+ Technical Committees. Additionally, the INCITS Executive Board has the international leadership role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

Membership in the INCITS Executive Board is open to all directly and materially affected parties in accordance with INCITS membership rules. To find out more about participating on the INCITS Executive Board, contact Jennifer Garner at jgarner@itic.org or visit <http://www.incits.org/participation/membership-info> for more information.

Membership in all interest categories is always welcome; however, the INCITS Executive Board seeks to broaden its membership base in the following categories:

- Service Providers
- Users
- Standards Development Organizations and Consortia
- Academic Institutions

Society of Cable Telecommunications

ANSI Accredited Standards Developer

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE's standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.

SCTE is currently seeking to broaden the membership base of its consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.

Membership in the SCTE Standards Program is open to all directly a materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at www.scte.org or by e-mail from standards@scte.org.

Call for Comment and Canvass Corrections

The August 23, 2019 Call for Comment and Call for Members (Canvass) listings for AAMI/ISO 13485 referred to the wrong version in the designation and project description. The correction project action is:

BSR/AAMI/ISO 13485 (Ed.3)-2016 (R201x), Medical devices – Quality management systems - Requirements for regulatory purposes (reaffirmation of ANSI/AAMI/ISO 13485 (Ed.3)-2016)

ANSI Accredited Standards Developers

Approval of Reaccreditation

National Contract Management Association (NCMA)

The reaccreditation of the National Contract Management Association (NCMA), an ANSI member and Accredited Standards Developer (ASD), has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on NCMA-sponsored American National Standards, effective August 27, 2019. For additional information, please contact: Dr. John W. Wilkinson, CPCM, President, thinc, LLC, Chief Standards and Certification Officer, National Contract Management Association, 21740 Beaumeade Circle, Suite 125, Ashburn, VA 20147; phone: 804.896.6990; e-mail: jwilkinson@thinc-llc.com.

International Organization for Standardization (ISO)

ISO Proposal for a New Field of ISO Technical Activity

Machinery to be Used with Foodstuffs

Comment Deadline: September 6, 2019

DIN, the ISO member body for Germany, has submitted to ISO a proposal for a new field of ISO technical activity on Machinery for use with foodstuffs, with the following scope statement:

Standardization of individual machine types and their accessories used in the foodstuffs supply chain, as well as processing systems and complete production lines consisting of these machines.

All these machines process various raw materials and ingredients into intermediate food products and/or ready-to-eat food.

The standards to be created in this TC deal with specific and typical aspects of machines used in the food industry. These aspects include – but are not limited to – health and safety at work for operators (safety of food machinery) and consumer health and safety (food safety). Standards of this TC also focus on hygienic design principles.

Excluded are the fields covered by ISO/TC 23 (Tractors and machinery for agriculture and forestry), ISO/TC 283 (Occupational health and safety management) and ISO/TC 293 (Feed machinery).

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, September 6, 2019.

Natural and Engineered Stones

Comment Deadline: August 30, 2019

UNI, the ISO member body for Italy, has submitted to ISO a proposal for a new field of ISO technical activity standard on natural and engineered stones, with the following scope statement:

Definitions, requirements and test methods for natural stones relating to rough blocks, slabs, semi-finished and finished products intended for use in building and for monuments and for engineered stones with resin or cement binders or a combination of the two, intended for use in countertops and vanities, floor and wall coverings, ancillary uses, for interior and exterior.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, August 30, 2019.

U.S. Technical Advisory Groups

Application for Accreditation

U.S. Technical Advisory Group (TAG) to ISO TC 323, Circular Economy

Comment Deadline: September 30, 2019

ASTM International has submitted an Application for Accreditation for a new proposed U.S. Technical Advisory Group (TAG) to ISO TC 323, Circular economy, and a request for approval as TAG Administrator. The proposed TAG intends to operate using the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures.

To obtain a copy of the TAG application or to offer comments, please contact: Mr. Travis Murdock, Manager, Technical Committee Operations, ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19248; phone: 610.832.9555; e-mail: tmurdock@astm.org. Please submit your comments to ASTM by September 30, 2019 (please copy ithompso@ansi.org).

Meeting Notices

Meeting for Accredited Standards Committee (ASC) B109 Standards B109.1, B109.2, B109.3, and B109.4

Meeting Date: Monday, September 23, 2019- 8:00 AM – 4:00 PM CST

Meeting Location: Peppermill Reno, 2707 S. Virginia St., Reno, Nevada 89502--(Teleconference information available upon request)

Purpose: This is the annual ANSI B109 meeting. Updates will be given for each of the B109 standards.

Please register on line at www.aga.org. For more information, contact Jeff Meyers, jmeyers@aga.org.

Information Concerning

International Organization for Standardization (ISO)

Call for U.S. TAG Administrators

Subcommittees of TC 17 – Steel

There is currently no ANSI-accredited U.S. TAG Administrator for TC 17/SC 4, TC 17/SC 7, TC 17/SC 9, TC 17/SC 15, TC 17/SC 17, and TC 17/SC 20, and therefore ANSI is not a member of these committees.

The Secretariats for these committees are currently held by Germany (DIN) for TC 17/SC 4; France (AFNOR) for TC 17/SC 7; Japan (JISC) for TC 17/SC 9; China (SAC) for TC 17/SC 15 and TC 17/SC 17; and Sweden (SIS) for TC 17/SC 20.

TC 17/SC 4 operates under the following scope:

Standardization of qualities, dimensions and tolerances of heat treatable and alloy steels used mainly in the engineering and automotive industry in either the non-heat treated or the heat treated conditions. Examples are free-cutting, bright, stainless, heat-resisting, tool, spring, valve and roller bearing steels including tubular products for these applications, but not those covered by ISO/TC 5.

TC 17/SC 7 operates under the following scope:

Standardization of methods of testing steel other than:

mechanical tests

chemical analysis

non-destructive tests covered by other ISO/TC 17/SCs and ISO/TC 135.

TC 17/SC 9 operates under the following scope:

Standardization of tinsplate and blackplate – Qualities, dimensions, packaging, shipping, stocking and loading.

TC 17/SC 15 operates under the following scope:

Standardization of terminology, technical requirements, materials, dimensions and tolerances, test methods for railway rails, rail fasteners, wheel and wheelsets.

TC 17/SC 17 operates under the following scope:

Standardization of qualities, dimensions and tolerances of steel wire rod and steel wire products from a wire mill.

Standardization of types and qualities of wire rod (unalloyed steel for wire drawing and wire rod for electrodes).

Standardization of types and qualities of wires in so far as they are only used in that product form.

Excluded are those products which are already standardized by other Committees, eg, steel wire ropes excluding stainless steel wire, stainless steel wire rod and heat resisting wire which remain the responsibility of ISO/TC 17/SC 4.

TC 17/SC 20 operates under the following scope:

Standardization of general technical delivery conditions, inspection documents and general rules for selection and preparation of samples and test pieces for mechanical testing of wrought steels.

Organizations interested in serving as the U.S. TAG Administrator or participating on a U.S. TAG for these committees should contact ANSI's ISO Team (isot@ansi.org) for more information.



American National Standards (ANS) – Where to find Procedures, Guidance, Interpretations and More...

Please visit ANSI's website (www.ansi.org) for resources that will help you to understand, administer and participate in the American National Standards (ANS) process. Documents posted at these links are updated periodically as new documents and guidance are developed, whenever ANS-related procedures are revised, and routinely with respect to lists of proposed and approved ANS. The main ANS-related link is www.ansi.org/asd and here are some direct links as well as highlights of information that is available:

- *ANSI Essential Requirements: Due process requirements for American National Standards* (always current edition): www.ansi.org/essentialrequirements
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): www.ansi.org/standardsaction
- Accreditation information – for potential developers of American National Standards (ANS): www.ansi.org/sdoaccreditation
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): www.ansi.org/asd
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: www.ansi.org/asd
- American National Standards Key Steps: www.ansi.org/anskeysteps
- American National Standards Value: www.ansi.org/ansvalue
- ANS Web Forms for ANSI-Accredited Standards Developers - PINS, BSR8|108, BSR11, Technical Report: www.ansi.org/PSAWebForms
- Information about standards Incorporated by Reference (IBR): www.ansi.org/ibr
- ANSI - Education and Training: www.standardslearn.org

If you have a question about the ANS process and cannot find the answer quickly, please send an email to psa@ansi.org.

Please also visit Standards Boost Business at www.standardsboostbusiness.org for resources about why standards matter, testimonials, case studies, FAQs and more.

If you are interested in purchasing an American National Standard, please visit <https://webstore.ansi.org/>



**BSR/ASHRAE Addendum g
to ANSI/ASHRAE Standard 147-2013**

Public Review Draft

**Proposed Addendum g to
Standard 147-2013, Reducing the
Release of Halogenated Refrigerants
from Refrigerating and Air-Conditioning
Equipment and Systems**

**First Public Review (August 2019)
(Draft shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

BSR/ASHRAE Addendum g to ANSI/ASHRAE Standard 147-2013, *Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems*
First Public Review Draft

(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

This addendum adds Section 8.6, Decommissioning. This section clarifies the post-consumer handling of refrigerants.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum g to 147-2013

Add Section 8.6 as shown below.

8.6 Decommissioning. *At decommissioning, the refrigerant is to be removed from the system and it shall be recycled, reclaimed, or disposed of in accordance with EPA regulations and local requirements. In no case shall the refrigerant be vented to the atmosphere.*



**BSR/ASHRAE Addendum h
to ANSI/ASHRAE Standard 147-2013**

Public Review Draft

**Proposed Addendum h to
Standard 147-2013, Reducing the
Release of Halogenated Refrigerants
from Refrigerating and Air-Conditioning
Equipment and Systems**

**First Public Review (August 2019)
(Draft shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

BSR/ASHRAE Addendum h to ANSI/ASHRAE Standard 147-2013, *Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems*
First Public Review Draft

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FOREWORD

This addendum adds Section 9.1.1, Recovery Equipment.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum h to 147-2013

Add Section 9.1.1 as shown below.

9.1.1 Recovery Equipment. *Refrigerant recovery equipment shall comply with UL 1963, Standard for Refrigerant Recovery/Recycling Equipment.*



**BSR/ASHRAE Addendum i
to ANSI/ASHRAE Standard 147-2013**

Public Review Draft

**Proposed Addendum i to
Standard 147-2013, Reducing the
Release of Halogenated Refrigerants
from Refrigerating and Air-Conditioning
Equipment and Systems**

**First Public Review (August 2019)
(Draft shows Proposed Changes to Current Standard)**

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BSR/ASHRAE Addendum i to ANSI/ASHRAE Standard 147-2013, *Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems*
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FOREWORD

This addendum changes Section 4.3.2, Vibration to consistently refer to “endurance limits” rather than “endurance testing,” to broaden the scope referring to all tubing rather than only copper tubing, and to offer examples of small diameter tubing that is to be constructed with vibration loops.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum i to 147-2013

Change Section 4.3.2 as shown below.

4.3.2 Vibration. To minimize leakage due to vibration, compressors, compressor mountings, and piping connections shall be evaluated to see that vibration-induced stresses do not exceed material endurance limits. If the equipment is not evaluated for material endurance limits, then all ~~copper~~ tubing that is of an outside diameter of 3/8 in. [9.5mm] or smaller, such as sensing lines to gauges or oil lines, (excluding suction and discharge) and ~~is~~ are connected to compressors or assemblies that are not isolated from compressor vibrations shall be constructed with vibration loops to minimize fatigue at connections.



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FOREWORD

This addendum changes Section 4.5.1 by including the descriptive phrase *saturated suction temperature*.

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Addendum j to 147-2013

Change Section 4.5.1 as shown below.

4.5.1 Minimized Connections. Systems shall be designed in such a manner as to minimize the number of fittings and connections. Tapered pipe threads shall not be used for fittings in refrigerant circuits unless the threads are back-welded or sealed by equally effective means. Single-flare copper fittings shall not be used on cooling only or refrigeration systems whose normal design is less than 40°F (4.4°C) *saturated suction temperature*. Where flare fittings are used, they shall be tightened to manufacturer's torque specifications.



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FOREWORD

This addendum changes Section 4.3.3 to clarify the content by changing the word “bolts” to “fasteners.”

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Addendum k to 147-2013

Change Section 4.3.3 as shown below.

4.3.3 Semi-hermetic Compressors. Materials used for gaskets and O-rings shall be compatible with the refrigerant and lubricant used. All ~~bolts~~ fasteners shall be torqued to the required level as set by the compressor manufacturer.

Public Review Draft

Proposed Addendum aa to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

Second Public Review Draft (August 2019)
(Draft Shows Proposed Independent Substantive
Changes to Previous Public Review Draft)

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Foreword

In response to comments on the first public review of this addendum, modifications to the new Table 7.5.3B are proposed in this second PPR. These changes will make editorial revisions to some of the labeling in the table, but we are adding a new row to the “Fuels used directly in the building” portion of the table for “Other fuels not specified in this table” which uses the emissions factors for coal.

Note that similar changes are also being proposed for a second public review ISC for addendum z on source energy factors.

[Note to Reviewers: This addendum makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous public review draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum aa to 189.1-2017

Modify new Table 7.5.3B CO_{2e} Emissions Factors as shown below

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TABLE 7.5.3B CO₂e Emissions Factors

Energy Form	CO ₂ e Emission Factor	
	lb/MWh	kg/MWh
Fossil Fuels Used Directly in Building		
Natural gas	681	309
LPG or propane	651	295
Fuel oil (residual)	738	335
Fuel oil (distillate)	715	324
Coal	892	405
Gasoline	744	337
<u>Other fuels not specified in this table</u>	<u>892</u>	<u>405</u>
Imported Electricity and Exported Renewable Electricity		
AKGD - ASCC Alaska Grid	1,580	717
AKMS - ASCC Miscellaneous	738	335
AZNM - WECC Southwest	1,496	679
CAMX - WECC California	957	434
ERCT - ERCOT All	1,529	694
FRCC - FRCC All	1,601	726
HIMS - HICC Miscellaneous	1,717	779
HIOA - HICC Oahu	2,460	1,116
MROE - MRO East	2,337	1,060
MROW - MRO West	1,686	765
NEWE - NPCC New England	1,024	464
NWPP - WECC Northwest	936	425
NYCW - NPCC NYC/Westchester	1,034	469
NYLI - NPCC Long Island	1,600	726
NYUP - NPCC Upstate NY	540	245
RFCE - RFC East	1,156	524
RFCM - RFC Michigan	1,806	819
RFCW - RFC West	1,757	797
RMPA - WECC Rockies	1,829	830
SPNO - SPP North	1,851	840
SPSO - SPP South	1,737	788
SRMV - SERC Mississippi Valley	1,421	645
SRMW - SERC Midwest	2,234	1,014
SRSO - SERC South	1,651	749
SRTV - SERC Tennessee Valley	1,677	761
SRVC - SERC Virginia/Carolina	1,255	569
<u>All other electricity and other fuels not specified in this table</u>	<u>1,418</u>	<u>643</u>
District Thermal Energy		
Chilled water	339	154
Steam	1,145	519
Hot water	1,081	491

Informative Note: Values in this table represent averages for the United States and include both direct and indirect emissions.

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Foreword

This addendum deletes the requirements specific to 189.1 for SHGC multipliers for permanent projections, including Table 7.4.2.7. By deleting this, Standard 189.1 reverts to the table in 90.1-2016, which is more up-to-date. With the proposed deletion of Table 7.4.2.7, the definition for “north-oriented,” which does not appear elsewhere in the standard, will also be deleted from Section 3.

Section 7.4.2.7 also allowed a relaxation of the SHGC requirements by 0.1 for north-oriented (within 45 degrees of due north) vertical fenestration for all climate zones. A series of EnergyPlus simulations found that this relaxation of SHGC resulted in increased energy costs except in Climate Zones 4C and 5 through 8 and only for glazing oriented within 22.5 degrees of true north. As a result, the criteria for the SHGC relaxation have been tightened accordingly.

This addendum also deletes the duct insulation section 7.4.3.9. The 189.1 user must comply with the requirements of ASHRAE 90.1-2016. This version of 90.1 has revised duct insulation requirements that generally save more energy than the requirements in 189.1.

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Addendum ad to 189.1-2017

Revise Section 3 Definitions by deleting the definition of north-oriented

~~north-oriented: facing within 45 degrees of true north within the northern hemisphere (however, facing within 45 degrees of true south in the southern hemisphere).~~

Revise Section 7.4.2.7 as follows and Delete Table 7.4.2.7:

7.4.2.7 SHGC of North Facing Vertical Fenestration. ~~For SHGC compliance, the methodology in ANSI/ASHRAE/IES Standard 90.1, Section 5.5.4.4.1, Exception 2, is allowed, provided that the SHGC multipliers in Table 7.4.2.7 of this standard are used. This requirement supersedes the requirement in ANSI/ASHRAE/IES Standard 90.1, Table 5.5.4.4.1; that table shall not apply. In Climate Zones 4C and 5 through 8,~~

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~~vertical~~ Vertical fenestration that is oriented ~~within 22.5 degrees of true north~~ oriented in the Northern Hemisphere or is oriented within 22.5 degrees of true south in the Southern Hemisphere, shall be allowed to have a maximum SHGC of 0.10 greater than that specified in ANSI/ASHRAE/IES Standard 90.1, Tables 5.5-1 through 5.5-8. When this provision is used, separate calculations shall be performed for these sections of the building envelope, and these values shall not be averaged with any others for compliance purposes.

Table 7.4.2.7 SHGC Multipliers for Permanent Projections

...

Delete Section 7.4.3.9 and renumber subsequent sections

~~**7.4.3.9 Duct Insulation.** Duct insulation shall comply with the minimum requirements in Normative Appendix A, Tables A-2 and A-3. These requirements supersede the requirements in ANSI/ASHRAE/IES Standard 90.1, Table 6.8.2.~~

Delete Tables A-2 and A-3 in Normative Appendix A

~~**Table A-2 (Supersedes Table 6.8.2 in ANSI/ASHRAE/IES Standard 90.1)**~~

~~**Minimum Duct Insulation R-Value^a Heating- and Cooling-Only Supply Ducts and Return Ducts (I-P)**~~

...

~~**Table A-3 (Supersedes Table 6.8.2 in ANSI/ASHRAE/IES Standard 90.1)**~~

~~**Minimum Duct Insulation R-Value^a Combined Heating and Cooling Supply Ducts and Return Ducts (I-P)**~~

...

~~**Table A-2 (Supersedes Table 6.8.2 in ANSI/ASHRAE/IES Standard 90.1)**~~

~~**Minimum Duct Insulation R-Value^a Heating- and Cooling-Only Supply Ducts and Return Ducts (SI)**~~

...

~~**Table A-3 (Supersedes Table 6.8.2 in ANSI/ASHRAE/IES Standard 90.1)**~~

~~**Minimum Duct Insulation R-Value^a Combined Heating and Cooling Supply Ducts and Return Ducts (SI)**~~

...

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Foreword

A Fan Efficiency Grade (FEG) requirement for fans that are used in building HVAC systems has existed since the 2013 edition of 90.1 and 2014 edition of 189.1. FEG is a metric for bare-shaft fans as products by themselves, is based on peak total efficiency, and is defined in the rating standard ANSI/AMCA 205, Energy Efficiency Classification for Fans. During a recent collaboration with the U.S. Department of Energy (DOE) on a new rulemaking for commercial fans and blowers, industry stakeholders recommended a new fan efficiency metric called Fan Energy Index (FEI), which was developed by AMCA International in their calculation standard ANSI/AMCA 208-2018.

FEI is a ratio of the electrical input power of a reference fan to the subject fan. The lower the subject fan's electrical input power, the higher the FEI rating. FEI is a wire-to-air metric that considers losses of motors, variable speed drives, belts, etc. FEI is a simple metric for designers, contractors, manufacturers, and code officials to apply and enforce because it does not have a sizing/selection window.

Energy savings will primarily result from better fan selections out of existing product portfolios rather than marginal improvements from costly fan redesigns. FEI incentivizes designers to consider whether a fan is compatible with its mechanical drive and the electric motor at all load points.

Addendum ao to ASHRAE 90.1, which contains FEI requirements proposed for Standard 90.1, is scheduled for publication in ASHRAE 90.1-2019. Under the proposed FEI-based provisions, 189.1 would require an FEI of 1.10 compared to the 90.1 value of 1.00.

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Addendum ag to 189.1-2017

Add new definition to Chapter 3

fan energy index (FEI): the ratio of the electric input power of a reference fan to the electric input power of the actual fan as calculated per AMCA 208.

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

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Revise Section 7.4.3.6.2 as follows:

7.4.3.6.2 Fan Efficiency. The fan efficiency requirements defined in ANSI/ASHRAE/IES Standard 90.1, Section 6.5.3.1.3, shall be used, except that the FEI ~~total efficiency of the fan~~ at the design point of operation shall be 1.10 or greater ~~within ten percentage points of the maximum total efficiency of the fan~~. All exceptions in ANSI/ASHRAE/IES Standard 90.1, Section 6.5.3.1.3, shall apply.

Add new reference to AMCA in Chapter 11

Air Movement and Control Association International (AMCA)
30 West University Drive
Arlington Heights, IL 60004-1806, United States
1-847-394-0150; www.amca.org

AMCA 208-18

Calculation of the Fan Energy Index

Public Review Draft

Proposed Addendum ah to Standard 189.1-2017

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Foreword

Dwelling unit lighting efficacy is regulated in Section 9.4.4 of ASHRAE 90.1 and relies on an efficacy requirement that does not reflect the availability of highly efficient products in the market.

This proposed addendum to ASHRAE 189.1 increases the efficacy requirements for light sources, as well as the percentage of light sources in dwelling units that must meet the higher requirements. The proposal reflects the continued effort to develop standard 189.1 as a high-performance extension of base codes.

This proposal exceeds the existing EnergyStar Standards currently referenced in 189.1 in all cases except for omnidirectional lamps with a Color Rendering Index (CRI) under 90. These are lamps that are intended for utility or outdoor applications where color rendering is not important and are not appropriate to indoor residential applications covered in this section of the standard. The proposed approach would group all lamps and luminaires under a common set of requirements to provide better clarity and alignment with 90.1.

The values in this addendum were selected with consideration of published averages for directional and omnidirectional lamps (77 lm/W and greater than 90 lm/W, respectively, per California's JA8 lighting dataset). Both lamp types have an average CRI below 95, therefore a threshold of 75 lm/W was deemed appropriate to accommodate higher CRI lamps. This proposal also includes an exception for appliance lighting since that lighting is often subject to more demanding operating conditions.

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Addendum ah to 189.1-2017

Add new Section 7.4.6.2 and renumber remaining sections

7.4.6.2 Dwelling Units. This section supersedes ANSI/ASHRAE/IES Standard 90.1, Section 9.4.4. Not less than 90% of the permanently installed lighting serving dwelling units shall be provided by lamps with an efficacy of not less than 75 lm/W or luminaires with an efficacy of not less than 55 lm/W.

Exception to 7.4.6.2: Lighting attached to or integral to appliances.

7.4.6.23 Occupancy Sensor Controls with Multilevel Switching or Dimming ...

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Revise Section 7.4.7.3.1 (e) as follows:

e. Lighting

1. Integral LED lamps not subject to Section 7.4.6.2: ENERGY STAR Program Requirements for Integral LED Lamps

Public Review Draft

Proposed Addendum ai to Standard 189.1-2017

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Foreword

Section 7.5.3 in ASHRAE Standard 90.1 sets the efficiency of “high capacity” service hot water equipment at 0.90 E_t . While federal minimums and boiler markets have advanced since this provision was introduced into Standard 90.1, this provision has not been updated. Additionally, the commercial committee voted to approve a proposal for the 2021 IECC that updates the high-capacity service hot water efficiency requirement from 0.90 to 0.92 E_t , effectively raising the base code above Standard 189.1.

The underlying requirement from Standard 90.1 has an additional issue in that it is restricted to gas equipment. Addendum ai addresses this issue. It raises the efficiency requirements for gas-fired equipment and adds efficiency requirements for electric equipment. The proposed addendum would set gas efficiency requirements at 0.92 E_t . This improvement can be met without making major technology shifts since achieving the 0.90 E_t already required in 189.1-2017 typically involved the use of condensing technology. Of the 2,782 listed boilers that meet the 1,000,000 Btu/h threshold, 852 meet the existing 90% requirement and 792 meet a requirement of 92% E_t , so market availability will not be a significant limitation. The efficiency levels for other equipment types provide a similar level of increased efficiency over 90.1. The required COP of 2.0 for larger heat pump water heaters is based on a Washington state proposal.

Like Standard 90.1, this addendum maintains an exception for renewable energy, but with an additional option of utilizing waste heat recovery. A second exception is also proposed to preclude double-counting renewable energy used to meet other requirements.

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Addendum ai to 189.1-2017

Add new Section 7.4.4.2 and renumber subsequent sections

7.4.4.2 Buildings with High-Capacity Service Water-Heating Systems. This section supersedes ANSI/ASHRAE/IES Standard 90.1, Section 7.5.3. New buildings with service water-heating systems with a total installed water-heating input capacity of 1,000,000 Btu/h (300 kW) or greater shall have fuel-burning water-heating equipment with a minimum rated efficiency of 0.92 E_t or 0.92 UEF, or electric water heating equipment with a minimum rated efficiency of 2.4 UEF or 2.0 COP. Multiple units of water-heating equipment are allowed to meet this requirement based on an input-capacity-weighted average of rated efficiency.

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Exceptions:

1. Buildings provided with any combination of *on-site renewable energy systems* or waste heat recovery systems capable of providing not less than 25 percent of the total water heating load, not including *on-site renewable energy system* capacity used for compliance with any other section of this Standard.
2. Water heaters installed in individual dwelling units.

7.4.4.23 Insulation for Spa Pools

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Proposed Addendum al to Standard 189.1-2017

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Foreword

In the past, WG10 processed addenda to change the term ‘acceptance testing’ to ‘functional and performance testing (FPT)’ which is a defined term in 189.1. This addendum proposes to change legacy uses of ‘acceptance testing’ to read ‘functional and performance testing.’

The definition of functional performance testing is provided for information only and is not proposed to be modified by this Addendum.

functional and performance testing (FPT): testing performed to ensure that designated systems of the project meet the intended design performance requirements.

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Addendum al to 189.1-2017

Revise Section 7.4.2.6 as follows:

Exceptions to 7.4.2.6 (Permanent Projections)

3.d. ~~Acceptance testing~~ Functional and performance testing and commissioning shall be conducted as required by Section 10 to verify that *automatic* controls for shading devices respond to changes in illumination or radiation intensity.

4.c. ~~Acceptance testing~~ Functional and performance testing and commissioning shall be conducted as required by Section 10 to verify that *automatic* controls for shading devices respond to changes in illumination or radiation intensity.

Revise Sections 8.3.3.2.4, 8.3.3.3, and 8.3.3.5.2 as follows:

8.3.3.2.4 Interior Background Noise—Testing. ~~Acceptance testing~~ Functional and performance testing shall be performed in accordance with Section 10.3.1.1.5. Noise from construction activities, emergency vehicles, and sirens need not be considered.

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8.3.3.3.3 Interior Sound Transmission—Testing. ~~Acceptance testing~~ Functional and performance testing shall be performed in accordance with Section 10.3.1.1.5.

8.3.3.5.2 Property Line Sound Levels—Testing. Sound produced by HVAC or other mechanical systems on the premises shall not exceed the values in Table 8.3.3.5.2 at grade level and up to the highest window location on all property lines adjoining receiving properties. Where a generator is used only to provide emergency power, and all periodic operational testing is performed between the hours of 7:00 a.m. and 10:00 p.m., the sound produced by emergency generator during nighttime hours need only comply with the daytime maximum sound level values specified in Table 8.3.3.5.2. ~~Acceptance testing~~ Functional and performance testing shall be performed in accordance with Section 10.3.1.1.5.1.3.

Revise Section 10.3.2.1.2.1 and 10.3.2.1.3.1 as follows:

10.3.2.1.2.1 Initial Measurement and Verification. Use the water measurement devices and collection/storage infrastructure specified in Section 6.3.3 to collect and store water use data for each device, starting no later than after building ~~acceptance testing~~ FPT has been completed and certificate of occupancy has been issued.

10.3.2.1.3.1 Initial Measurement and Verification. Use the energy measurement devices and collection/storage infrastructure specified in Section 7.3.3 to collect and store energy data for each device, starting no later than after ~~acceptance testing~~ FPT has been completed and certificate of occupancy has been issued.

Public Review Draft

Proposed Addendum am to Standard 189.1-2017

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Foreword

The current definition of onsite renewable energy references *building project* which references *site*. This change to the definition eliminates these references and includes all relevant information in the definition.

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Addendum am to 189.1-2017

Modify Section 3.2 as follows

on-site renewable energy system: photovoltaic, solar thermal, *geothermal energy*, and wind systems used to generate energy and located on ~~the building project~~ any of the following:

1. The building.
2. The property upon which the building is located.
3. A property that shares a boundary with and is under the same ownership or control as the property on which the building is located.
4. A property that is under the same ownership or control as the property on which the building is located and is separated only by a public right-of-way from the property on which the building is located.

Public Review Draft

Proposed Addendum k to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

Second Public Review Draft (August 2019)
(Draft Shows Proposed Independent Substantive
Changes to Previous Public Review Draft)

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Foreword

Addendum k adds renewable energy requirements to the performance path of Section 7 to be consistent with requirements being added to the prescriptive path. The addendum includes requirements for treatment of off-site renewable energy sources. Based on public review comments on the 1st public review, this 2nd public review ISC revises the language used to describe various off-site renewable energy supplies to be consistent with industry practice.

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Addendum k to 189.1-2017

NORMATIVE APPENDIX C

PERFORMANCE OPTION FOR ENERGY EFFICIENCY

...

Table C1.1 Modifications and Additions to ANSI/ASHRAE/IES Standard 90.1, Appendix G, Table G3.1

Proposed Building Performance	Baseline Building Performance
-------------------------------	-------------------------------

...

15. Renewable Energy Systems

The reduction in the proposed *building* annual energy cost, CO_2e emissions, and source energy due to renewable energy systems shall be calculated as follows:

- a. **Annual Energy Cost.** The annual energy cost of the proposed design shall be adjusted to account for renewable energy systems as follows.
 1. **On-Site Thermal Energy.** The hourly thermal loads of the *proposed design* shall be reduced by the hourly thermal energy production of the *on-site renewable energy system* (but thermal

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loads shall not be reduced to less than zero). When the on-site renewable thermal energy production exceeds the applicable thermal demands of the building for any hour, the excess generated energy may be used to displace thermal loads at other times, provided the system has the storage capability and storage losses are included in the calculation. The approved energy rate structure shall be applied to the reduced energy consumption.

2. On-Site Electric Renewable Energy Systems – Net Metering.

The total electrical energy production of the *on-site renewable electricity systems* shall be calculated on an hourly basis, and the energy cost of the *proposed building performance* shall be calculated by applying the approved electrical rate structure to each hour's electrical usage, including any reduction from hourly electrical energy production of the *on-site renewable energy system*.

Exception to a.2: For *building projects* with no net metering agreement, feed-in tariff, or other electrical rate structure for net generated electricity, the cost of imported electricity from the grid is calculated by applying the approved electrical rate structure to each hour's electrical loads minus the hourly electrical energy production of the *on-site renewable energy system*, but the cost of imported electricity shall not be less than zero on a monthly basis.

Electricity production of the *on-site renewable energy system* that has a retail value in excess of the retail cost of electricity consumption on a monthly basis shall be credited as a reduction in energy costs to the *building performance* at the wholesale rate as follows:

$$\text{Credit} = \frac{\text{ExRR} - \text{ImRR}}{\text{ExRR}} \times \text{ExkWh} \times \text{WR}$$

where

Credit = cost reduction credit for month where retail value of exported electricity is greater than retail value of imported electricity

ExRR = month's value of exported electricity at retail rate

ImRR = month's value of imported electricity at retail rate

ExkWh = total kilowatt-hours exported in month

WR = average monthly wholesale rate for the region where the building located

Informative Note: *Thermal renewable energy is accounted for in a.1 above so the renewable energy addressed in a.2 will always be on-site electricity. There is no need to apply the renewable energy procurement factors from Table 7.4.1.2 since the multiplier will always be one.*

3. Electricity Generation from Off-Site Community Renewable Energy Systems – Virtual-, Aggregated-, or Community-Net Metering Tariff.

~~Community-~~Renewable energy systems that credit the *building project* electricity account on an hourly basis shall be calculated according to a.2, except that the renewable energy procurement factor from Table 7.4.2-1.2 shall be applied to each hour of electricity production from the community

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renewable energy system. The energy cost credit for other ~~off-site~~~~community~~ renewable energy systems shall be calculated according to a.4.

4. Electricity Generation from Other, Self-Owned Off-Site Renewable Energy Systems or ~~Virtual Power Purchase Agreements~~. The adjusted renewable energy is the actual renewable energy for each procurement source of renewable energy delivered to or credited to the building project multiplied by the appropriate renewable energy procurement factors in Table 7.4.1.2. The annual energy cost reduction ~~credited to~~ ~~of~~ the proposed design shall be the total adjusted renewable energy times the from self-owned off-site systems or virtual power purchase agreements credited to the project at the virtual electric rate paid by the building. The virtual electric rate is the total retail cost for electricity for the year divided by the net consumption for the year, in dollars per kWh (\$/kWh).

b. Annual CO₂e. The annual CO₂e emissions of the proposed *building* shall be equal to the annual CO₂e associated with all building energy use minus the adjusted renewable energy multiplied by the electrical CO₂e emission factor from Table 7.5.2. Each procurement source of renewable energy delivered to or credited to the building project shall be multiplied by the renewable energy procurement factors in Table 7.4.1.2.

$$PD-CO_2e = \sum PDE_i \times e_i - \sum RE_k \times REPF_k \times e_k$$

where

PD-CO₂e = CO₂e emissions for the proposed design.

PDSE_i = Proposed design site energy use for energy type i.

e_i = CO₂e emission factor for energy type i, taken from Table 7.5.2.

RE_k = Annual renewable energy production for renewable energy type k

REPF_k = Renewable procurement factor from Table 7.4.1.2 for renewable energy type k

e_k = CO₂e emission factor for electricity taken from Table 7.5.2.

c. Zero Energy Performance Index. The adjusted renewable energy of the proposed *building* shall be credited using the source-site multiplier for electricity from Table 7.5.3. On-site thermal energy from solar shall be directly modeled according to Table C1.1, 15a.1 and accounted for through the displacement of on-site fossil fuel or electricity.

Documentation: The documentation required in ANSI/ASHRAE/IES Standard 90.1, Section G2.5 (a), (b), and (e), shall be made available to the *AHJ*, upon request, for all *on-site renewable energy systems* in the *proposed design*.

Public Review Draft

Proposed Addendum p to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

Second Public Review Draft (August 2019)
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Foreword

This ISC revises the number of requirements from Section 7 of Standard 189.1 that are appropriate for local jurisdictions to consider excluding from their adopted ordinances.

Section 7.4.3.6 Fan System Power and Efficiency: the committee consensus was to not add this as jurisdictional option. It was added in error in the first public review draft and is being corrected here in response to public review comments.

Section 7.4.3.10 Automatic Control of HVAC and Lights in Hotel/Motel Guest Rooms: this is being removed as a jurisdictional option in response to public review comments.

[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum p to 189.1-2017

Update Table 4.2 to remove 7.4.3.6 and 7.4.3.10 from the list of jurisdictional options

**INFORMATIVE TABLE 4.2 – to become normative in IgCC
REQUIREMENTS DETERMINED BY THE JURISDICTION**

SECTION	SECTION TITLE OR DESCRIPTION AND DIRECTIVES	Jurisdictional Requirement
7.4.2.1	Building Envelope Requirements	___ No
7.4.2.2	Single Rafter Roof Insulation	___ No
7.4.2.3	High Speed Doors	___ No
7.4.2.6	Permanent Projections	___ No
7.4.2.9	Orientation	___ No
7.4.3.2	Ventilation Controls for Densely Occupied Spaces	___ No
7.4.3.4	Economizers	___ No
7.4.3.5	Zone Controls	___ No

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7.4.3.6	Fan System Power and Efficiency	___ No
7.4.3.7	Exhaust Air Energy Recovery	___ No
7.4.3.8	Kitchen Exhaust Systems	___ No
7.4.3.10	Automatic Control of HVAC and Lights in Hotel/Motel Guest Rooms	___ No
7.4.4.2	Insulation for Spa Pools	___ No
7.4.6.2	Occupancy Sensor Controls with Multilevel Switching or Dimming.	___ No
7.4.6.3	Automatic Controls for Egress and Security Lighting	___ No
7.4.7.2	Supermarket Heat Recovery	___ No
7.4.7.4	Programmable Thermostats	___ No
7.4.7.5	Refrigerated Display Cases	___ No

Revise the following section numbers to indicate these are not jurisdictional options:

7.4.3.6 ~~[JO]~~ Fan System Power and Efficiency

7.4.3.6.1 Fan System Power Limitation. Systems shall have fan power limitations 10% below limitations specified in ANSI/ASHRAE/IES Standard 90.1, Table 6.5.3.1-1. This requirement supersedes the requirement in ANSI ASHRAE/IES Standard 90.1, Section 6.5.3.1 and Table 6.5.3.1-1. All exceptions in ANSI/ASHRAE/IES Standard 90.1, Section 6.5.3.1, shall apply.

7.4.3.6.2 Fan Efficiency. The fan efficiency requirements defined in ANSI/ASHRAE/IES Standard 90.1, Section 6.5.3.1.3, shall be used, except that the total efficiency of the fan at the design point of operation shall be within ten percentage points of the maximum total efficiency of the fan. All exceptions in ANSI/ASHRAE/IES Standard 90.1, Section 6.5.3.1.3, shall apply.

7.4.3.10 ~~[JO]~~ Automatic Control of HVAC and Lights in Hotel/Motel Guest Rooms. In hotels and motels with over 50 guest rooms, *automatic controls* for the lighting, switched outlets, television, and HVAC equipment serving each guest room shall be configured according to the following requirements.

....

Public Review Draft

Proposed Addendum y to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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Foreword

Addendum y addresses situations where wall-mounted mechanical equipment defined in ASHRAE 90.1, Table 6.8.1-4, can account for a significant portion of the wall area. For example, Packaged Terminal Air Conditioners (PTACs) can cover as much as 20% of the wall area, having a significant impact on the thermal performance of the wall. This independent substantive change (ISC) to addendum y clarifies how to calculate penetration area in accordance with ASHRAE 90.1, Section 5.5.3. It also increases the threshold for triggering the proposed requirements.

[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum y to 189.1-2017

Revise Section 7.4.2.2 as follows:

7.4.2.2. Mechanical Equipment Penetration Requirements. Where the total area of penetrations from mechanical equipment listed in ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-4 exceeds 24% of the opaque above-grade wall area, the mechanical equipment penetration area shall be calculated as a separate assembly with a published U-factor value for that equipment or a default U-factor of 0.5 Btu/h·ft²·°F (3 W/m²·K) in accordance with ANSI/ASHRAE/IES Standard 90.1, Section 5.5.3 method b. Where Exception 2 to ANSI/ASHRAE/IES Standard 90.1 Section 5.5.3 is used for compliance, the penetration shall be considered to be the same class of construction as an adjacent wall.

Public Review Draft

Proposed Addendum z to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

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Foreword

In response to comments on the first public review of this addendum, modifications to the new Table 7.5.3 are proposed in this second PPR. These changes will make editorial revisions to some of the labeling in the table, but we are adding a new row to the “Fuels used directly in the building” portion of the table for “Other fuels not specified in this table” which uses the source energy factors for coal.

Note that similar changes are also being proposed for a second public review ISC for addendum aa on CO₂e emissions factors.

[Note to Reviewers: This addendum makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous public review draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum z to 189.1-2017

Modify new Table 7.5.3 Source Energy Conversion Factors as shown below

BSR/ASHRAE/ICC/USGBC/IES Addendum z to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* Second Public Review Draft - Independent Substantive Changes.

TABLE 7.5.3 Source Energy Conversion Factors

Energy Form	Source Energy Conversion Factor
Fossil Fuels Used Directly in Building	
Natural gas	1.09
LPG or propane	1.15
Fuel oil (residual)	1.19
Fuel oil (distillate)	1.19
Coal	1.05
Gasoline	1.19
<u>Other fuels not specified in this table</u>	<u>1.05</u>
Imported Electricity and Exported Renewable Electricity	
AKGD - ASCC Alaska Grid	2.52
AKMS - ASCC Miscellaneous	1.21
AZNM - WECC Southwest	2.75
CAMX - WECC California	1.94
ERCT - ERCOT All	2.58
FRCC - FRCC All	2.97
HIMS - HICC Miscellaneous	2.86
HIOA - HICC Oahu	3.83
MROE - MRO East	3.08
MROW - MRO West	2.50
NEWE - NPCC New England	2.87
NWPP - WECC Northwest	1.39
NYCW - NPCC NYC/Westchester	2.92
NYLI - NPCC Long Island	2.90
NYUP - NPCC Upstate NY	1.97
RFCE - RFC East	3.05
RFCM - RFC Michigan	3.06
RFCW - RFC West	3.14
RMPA - WECC Rockies	2.33
SPNO - SPP North	2.67
SPSO - SPP South	2.46
SRMV - SERC Mississippi Valley	2.95
SRMW - SERC Midwest	3.20
SRSO - SERC South	3.04
SRTV - SERC Tennessee Valley	3.02
SRVC - SERC Virginia/Carolina	3.11
<u>All other electricity and other fuels not specified in this table</u>	<u>2.64</u>
District Thermal Energy	
Chilled water	0.63
Steam	1.83
Hot water	1.73

Informative Note: Values in this table represent averages for the United States and include both direct and indirect emissions.

BSR/UL 94, Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

1. Clarification of Requirements in Sections 8 and 11

8.1.2 Some materials, due to their thinness, ~~either distort, and/or~~ shrink, and/or are consumed up to the holding clamp when subjected to this test. ~~Test~~ The test specimens used in this test method shall be limited to a minimum thickness of 0.025 mm. Test specimens with a thickness less than 0.025 mm shall be tested in accordance with the test procedure in the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2 in Section 11.

Exception No. 1: Test specimens with a thickness less than 0.025 mm may be subjected to the 20 mm Vertical Burning Test; V-0, V-1, or V-2 if the specimens cannot be properly formed for the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2, as indicated in 11.3.2 and 11.3.3.

Exception No. 2: A test specimen with a thickness less than or equal to 0.25 mm, but greater than or equal to 0.025 mm that is capable of meeting the physical ~~and performance~~ property requirements of both the 20-mm Vertical Burning Test and the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2 test (Section 11) shall be evaluated by the test of choice.

11.1.1 This test is intended to be performed on materials that due to their thinness, ~~either distort, and/or~~ shrink, and/or are consumed up to the holding clamp when tested using the test described in the 20 mm Vertical Burning Test; V-0, V-1, or V-2, Section 8. This test shall only be performed after it has been determined that the samples cannot meet the requirements of the 20-mm Vertical Burning Test in Section 8. The test specimens used in this test method shall be limited to a maximum thickness of 0.250 mm. The materials shall also possess physical properties that will allow a 200 ±5 mm long by 50 ±1 mm wide specimen to be wrapped longitudinally around a 13 mm diameter mandrel (see 11.3.2).

Exception No. 1: A test specimen with a thickness less than 0.025 mm shall not be subjected to the 20 mm Vertical Burning Test; V-0, V-1, or V-2 in Section 8 prior to conducting the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2 in Section 11.

Exception No. 2: A test specimen with a thickness less than or equal to 0.25 mm, but greater than or equal to 0.025 mm, that is capable of meeting the physical property of both the 20-mm Vertical Burning Test; V-0, V-1, or V-2 (Section 8) and the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2 test (Section 11) shall be evaluated by the test of choice.

Exception No. 3: A test specimen with a thickness greater than 0.250 mm shall be subjected to the Thin Material Burning Test; VTM-0, VTM-1, or VTM-2 in Section 11 only if the specimen distorts and/or shrinks and/or consumed up to the holding clamp when tested according to the 20 mm Vertical Burning Test; V-0, V-1 or V-2 in Section 8.

BSR/UL 1203, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

1. Revisions to include +60°C and -60°C explosion testing with test factors using precompression explosion testing equipment

PROPOSAL

1.6 These requirements cover equipment for use under the following atmospheric conditions:

- a) A minimum ambient temperature of minus ~~50~~ 60°C (minus ~~58~~ 76°F);
- b) An oxygen concentration not greater than 21 percent by volume; and
- c) A nominal barometric pressure of one atmosphere.

21.29 For explosion-proof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be determined by one of the following methods:

Relocated as item a)

performed at the minimum ambient specified, $\pm 5^\circ\text{C}$ ($\pm 9^\circ\text{F}$) degrees. When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table 21.3 remain gasses.

Relocated as item b)

Exception: For equipment for use in Group C or D classified locations, rated not less than minus 50°C (minus 58°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in 21.3(b), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 22.1, based upon room ambient explosion pressure tests.

a) For explosion-proof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be performed at the minimum ambient specified, $\pm 5^\circ\text{C}$ ($\pm 9^\circ\text{F}$) degrees. When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table 21.3 remain gasses, or

b) For equipment for use in Group C or D classified locations, rated not less than minus ~~50~~ 60°C (minus ~~58~~ 76°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in 21.3(b), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 22.1, based upon room ambient explosion pressure tests, or

c) The reference pressure shall be determined at room ambient temperature using the defined test mixture(s), but at increased pressure. The absolute pressure of the test mixture (P) shall be calculated by the following formula, using T_a in °C:

$$P = 100[293 / (T_{a, \text{min}} + 273)] \text{ (kPa)}$$

or

$$P = 14.6959 [293 / (T_{a, \text{min}} + 273)] \text{ (psi)}$$

21.29A.1 For explosion-proof equipment specified and marked for use at ambient temperatures greater than 60°C (140°F), in addition to the tests of 21.29, flame propagation tests shall be conducted under one of the following conditions:

- a) At a temperature not less than the specified maximum ambient temperature; or
- b) At normal ambient temperature using the defined test mixture at increased pressure according to the factors in Table 21.29A; or
- c) At normal atmospheric pressure and temperature, but with the test gap increased by the factors noted in Table 21.29A.

These tests are in addition to the explosion tests required to determine compliance with 21.2 and 21.3a).

21.29A.1.1 All test sample joints are to be based upon the manufacturers maximum specified gap, and tested with the minimum specified joint length. Specially prepared test samples having modified joint lengths, gaps and engagements shall be employed. For Groups A, B, or A and B, test factors per 21.23 and 21.26 are also required to be introduced into the test pressure or test gap in addition to the test factors above.

Table 21.29A

Test factors to increase pressure or joint test gap

<u>Temperature up to °C</u>	<u>Groups A & B 27.5% H2 7.5% C2H2</u>	<u>Group C 37% H2</u>	<u>Group D 55% H2</u>
60	1.00	1.00	1.00
70	1.11	1.04	1.05
80	1.13	1.05	1.06
90	1.15	1.06	1.07
100	1.16	1.06	1.08
110	1.18	1.07	1.09
120	1.20	1.08	1.10
130	1.22	1.09	1.11

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Table 22.1

Safety factors for determining the strength of an enclosure

Enclosure material or part	Test factor for calculations <u>hydrostatic pressure test for ambient to -25°C^d</u>	Test factor for equipment rated and marked as low as minus 50°C ^a (minus 58°F)			Test factor for <u>hydrostatic pressure tests calculations to -25°C</u>
		<u>-40°C</u>	<u>-50°C</u>	<u>-60°C</u>	
Cast metal	<u>5.4</u>	<u>6</u>	<u>6</u>	<u>6.5</u>	<u>4.5</u>
Non-metallic <u>other than glass</u>	<u>4</u>	<u>ε</u>	<u>ε</u>	<u>ε</u>	<u>4</u>
Fabricated steel and aluminum	<u>4.3^b</u>	<u>4.5</u>	<u>4.5</u>	<u>4.8</u>	<u>3^b4</u>
Cover bolts or screws	<u>3</u>	<u>4.54</u>	<u>4.5</u>	<u>4.8</u>	<u>3</u>
^a For Group C or D equipment in accordance with the Exception to 21.29 list item b), where the equipment is not subject to pressure piling.					
^b The enclosure shall withstand a hydrostatic pressure of at least twice the maximum internal explosion pressure without permanent distortion and at least three times the maximum internal explosion pressure without rupture.					
^c Undefined.					
^d Applies to equipment tested in accordance with 21.29 list items a) and c).					

22A Dynamic Pressure Test

22A.1 For explosionproof enclosures not subject to pressure piling and intended for routine testing during production, the Dynamic Pressure Test shall be permitted as an alternative to the Hydrostatic Pressure Test. The dynamic tests shall be carried out in such a way that the maximum pressure to which the enclosure is subjected is 1.5 times the reference pressure.

22A.2 The test shall be made once except for Group A or Group B, in which case the test shall be made three times with each gas mixture as follows:

- Group D: 4.6 ± 0.3 % propane
- Group C: 8 ± 0.5 % ethylene
- Group B: 31 ± 1 % hydrogen
- Group A: 14 ± 1 % acetylene

22A.3 Following the test, there shall be no permanent deformation or damage and joints shall not be permanently enlarged.

SB1.29 For explosion-proof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be performed determined by one of the following methods:

Relocated as item a)

at the minimum ambient specified, ±5°C (±9°F) degrees. When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Tables SB1.3—SB1.5 remain gasses.

Relocated as item b)

Exception: For equipment for use in Group C or D classified locations, rated not less than minus 50°C (minus 58°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in SB1.2(b), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 21.1, based upon room ambient explosion pressure tests.

a) For explosion-proof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be performed at the minimum ambient specified, ±5°C (±9°F) degrees. When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table SB1.3 remain gasses; or

b) For equipment for use in Group C or D classified locations, rated not less than minus 50°C (minus 58°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in SB1.3(a), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 22.1, based upon room ambient explosion pressure tests; or

c) The reference pressure shall be determined at normal ambient temperature using the defined test mixture(s), but at increased pressure. The absolute pressure of the test mixture (P) shall be calculated by the following formula, using T_a in °C:

$$P = 100[293 / (T_{a, \text{min}} + 273)] \text{ (kPa)}$$

$$\text{or}$$

$$P = 14.6959 [293 / (T_{a, \text{min}} + 273)] \text{ (psi)}$$

SB1.29A.1 For explosion-proof equipment specified and marked for use at ambient temperatures greater than 60°C (140°F), flame propagation tests shall be conducted under one of the following conditions:

- 1) At a temperature not less than the specified maximum ambient temperature; or
- 2) At normal ambient temperature using the defined test mixture at increased pressure according to the factors in Table SB1.29A; or
- 3) At normal atmospheric pressure and temperature, but with the test gap increased by the factors noted in Table SB1.29A.

These tests are in addition to the explosion tests required to determine compliance with SB1.2 and SB1.3a).

SB1.29A.1.1 All test sample are to be based upon the manufacturers maximum specified gap, and tested with the minimum specified joint length. Specially prepared test samples having modified joint lengths, gaps and engagements shall be employed.

Table SB1.29A**Test factors to increase pressure or joint test gap**

<u>Temperature up to °C</u>	<u>Groups A & B 27.5% H2 7.5% C2H2</u>	<u>Group C 37% H2</u>	<u>Group D 55% H2</u>
<u>60</u>	<u>1.00</u>	<u>1.00</u>	<u>1.00</u>
<u>70</u>	<u>1.11</u>	<u>1.04</u>	<u>1.05</u>
<u>80</u>	<u>1.13</u>	<u>1.05</u>	<u>1.06</u>
<u>90</u>	<u>1.15</u>	<u>1.06</u>	<u>1.07</u>
<u>100</u>	<u>1.16</u>	<u>1.06</u>	<u>1.08</u>
<u>110</u>	<u>1.18</u>	<u>1.07</u>	<u>1.09</u>
<u>120</u>	<u>1.20</u>	<u>1.08</u>	<u>1.10</u>
<u>130</u>	<u>1.22</u>	<u>1.09</u>	<u>1.11</u>

For Groups A, B, or A and B, test factors per SB1.23 and SB1.26 are also required to be introduced into the test pressure or test gap in addition to the test factors above.

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