

PUBLISHED WEEKLY BY THE AMERICAN NATIONAL STANDARDS INSTITUTE 25 West 43rd Street, NY, NY 10036

VOL. 47, #53

December 30, 2016

Co	nte	nts
----	-----	-----

American National Standards	
Call for Comment on Standards Proposals	2
Call for Members (ANS Consensus Bodies)	8
Final Actions	10
Project Initiation Notification System (PINS)	12
ANS Maintained Under Continuous Maintenance	14
ANSI-Accredited Standards Developers Contact Information	15
International Standards	
ISO and IEC Draft Standards	16
Proposed Foreign Government Regulations	19
Information Concerning	20
Standards Action Publishing Schedule for 2017	51

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

© 2016 by American National Standards Institute, Inc. ANSI members may reproduce for internal distribution. Journals may excerpt items in their fields

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum aa to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

This ISC further refines the definition of renewable energy certificates (RECS) and clarifies their use. These changes were made in response to comments.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum ac to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

This addendum augments requirements for demand response, including modifications to changes made by Addenda b and ce to Standard 189.1 -2014 (both approved for publication) and was revised based upon public comments.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum ar to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

The energy performance criteria in Section 7.5.2 currently includes energy cost and carbon emissions. This addendum would add a third criteria, based on source energy and zero energy performance index.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum au to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

This addendum provides additional requirements for irrigation systems to improve water use efficiency, based in part on consideration of requirements included in the International Green Construction Code.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum ax to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

This addendum is intended to modify the existing requirements on water features by focusing on those circumstances, malfunctioning automatic water-refilling values, that are most likely to use excessive water.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum ay to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

This addendum would add requirements for dual plumbing in new buildings so that non-potable waters (when available) can be used to flush toilets and urinals.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum az to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

(addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014) This addendum proposes to add exceptions to the calculation of the area of greenfield sites that must consist of biodiverse plantings other than turfgrass.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at 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/ASHE Standard 189.3P-201x, Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities (new standard)

This proposed standard addresses the sustainability of healthcare facilities as a document paralleling, yet distinct from, ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance Green Buildings. Healthcare facilities have a keen interest and, in many cases, the desire to develop in a sustainable manner. These facilities are often the largest and most energy intensive buildings in a community, and their leadership recognizes that saving energy and operating costs are an opportunity to reflect smart decision-making, care and stewardship of the environment and fiscal practicality.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-reviewdrafts

NSF (NSF International)

Revision

BSR/NSF 50-201x (i93r1), Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF 50-2016)

This Standard covers materials, components, products, equipment, and systems, related to public and residential recreational water facility operation.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Lauren Panoff, (734) 769 -5197, lpanoff@nsf.org

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 60335-2-40-201X, Household and Similar Electrical Appliances -Part 2: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers (national adoption of IEC 60335-2-40 with modifications and revision of ANSI/UL 60335-2-40-2012)

In recent years, millions of dehumidifiers have been recalled due to a potential fire hazard. The industry has determined that the cause of the overwhelming majority of the dehumidifier fires is due to loss of charge in combination with small unventilated polymeric compressor enclosures. Therefore, UL is proposing to add these requirements.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Alan McGrath, (847) 664 -3038, alan.t.mcgrath@ul.com

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 61010-2-201-201x, Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201 Particular Requirements for Control Equipment (national adoption of IEC 61010-2-201 with modifications and revision of ANSI/UL 61010-2-201-2014)

This proposal represents the addition of requirements for the durability of Markings for Open Equipment to clause 5.3 of UL 61010-2-201 as a National Difference.

Click here to view these changes in full

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

UL (Underwriters Laboratories, Inc.) *Revision*

BSR/UL 427-201x, Standard for Safety for Refrigerating Units (Proposal dated 12/30/16) (revision of ANSI/UL 427-2014)

The following changes in requirements to UL 427, they are: (1) Proposed addition of alternate method for evaluating protective electronic circuits and controls using requirements based on the Standard for Safety of Household and Similar Electrical Appliances, Part 1: General Requirements, UL 60335 -1

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Wilbert Fletcher, (919) 549 -1337, Wilbert.Fletcher@ul.com

Comment Deadline: February 13, 2017

AAMI (Association for the Advancement of Medical Instrumentation)

New National Adoption

BSR/AAMI/ISO 5910-201x, Cardiovascular implants and extracorporeal systems - Cardiac valve repair devices (identical national adoption of ISO/DIS 5910)

Applies to all heart valve repair systems that have an intended use to repair and/or improve the function of native human heart valves by acting either on the valve apparatus or on the adjacent anatomy (e.g., ventricle, coronary sinus, atrioventricular node).

Single copy price: Free

Obtain an electronic copy from: cbernier@aami.org

Order from: Cliff Bernier, 703-253-8263, cbernier@aami.org

Send comments (with copy to psa@ansi.org) to: Cliff Bernier, cbernier@aami.org

ASC X9 (Accredited Standards Committee X9, Incorporated)

New Standard

BSR X9.24-3-201x, Retail Financial Services Symmetric Key Management -Part 3: Derived Unique Key per Transaction (new standard)

The use of DUKPT, as defined in X9.24 Part 1, Informative Annex A, has become an industry standard. With the move from TDEA to AES, the AES DUKPT should itself become a standard. This new standard would be used to define various secure and vetted methods of any DUKPT implementation.

Single copy price: \$140.00

Obtain an electronic copy from: Ambria.frazier@x9.org

Order from: Ambria Frazier, (410) 267-7707, Ambria.frazier@x9.org

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

Addenda

BSR/ASHRAE/ICC/USGBC/IES Addendum av to

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2014)

This proposal simplifies the application of lighting power allowances in ASHRAE 189.1 and increases their stringency, while maintaining the same provisions for illuminance.

Single copy price: \$35.00

Obtain an electronic copy from: standards.section@ashrae.org

Order from: standards.section@ashrae.org

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

AWS (American Welding Society)

Revision

BSR/AWS C7.4/C7.4M-201x, Process Specification and Operator Qualification for Laser Beam Welding (revision of ANSI/AWS C7.4/C7.4M -2008)

This specification covers the preparation, processing, and quality control requirements for laser beam welding. Welding equipment includes Gas Lasers (CO2) and Solid-State Lasers (Nd:YAG, Yb:YAG, Nd:Glass, Diode, Ruby, Disk and Fiber) in both pulsed, continuous power (CW) and quasi-continuous (QCW) output as defined in AWS A3.0/A3.0, Standard Welding Terms and Definitions. Tutorial information regarding techniques of welding or details of equipment setup or operation is beyond the scope of this specification.

Single copy price: \$68.00

Obtain an electronic copy from: pportela@aws.org

Order from: Peter Portela, (800) 443-9353, pportela@aws.org

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

AWWA (American Water Works Association)

New Standard

BSR/AWWA G520-201x, Wastewater Collection System Operation and Management (new standard)

This standard describes the critical requirements for the effective operation and management of a wastewater collection system.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa. org

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

AWWA (American Water Works Association)

Revision

BSR/AWWA C200-201x, Steel Water Pipe - 6 in. (150 mm) and Larger (revision of ANSI/AWWA C200-2012)

This standard describes electrically butt-joint-welded straight-seam or spiralseam pipe and seamless pipe, 6 in. (150 mm) in nominal diameter and larger, for the transmission and distribution of water or for use in other water system facilities.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa.org

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

AWWA (American Water Works Association)

Revision

BSR/AWWA C219-201x, Bolted, Sleeve-Type Couplings for Plain-End Pipe (revision of ANSI/AWWA C219-2011)

This standard describes bolted, sleeve-type couplings, reducing or transition couplings, and flanged coupling adapters (couplings) used to join plain-end pipe. Couplings may be manufactured from carbon steel, stainless steel, or ductile iron, and are intended for use in systems conveying water. This standard describes nominal coupling sizes 1/2 in. (13 mm) and larger.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa.org

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

AWWA (American Water Works Association)

Revision

BSR/AWWA C550-201x, Protective Interior Coatings for Valves and Hydrants (revision of ANSI/AWWA C550-2013)

This standard describes protective interior coatings for valves used for water supply, wastewater collection and treatment, and reclaimed water service having a pH range from 4 to 9; and for hydrants used for water supply service. The standard describes the material, application, and performance requirements for these interior coatings. The coating shall not contain coal tar. These coatings are applied for protection of ferrous surfaces of valves and hydrants.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa.org

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

AWWA (American Water Works Association)

Revision

BSR/AWWA G420-201x, Communication and Customer Relations (revision of ANSI/AWWA G420-2009)

This standard covers the essential requirements to effectively manage communication and customer relations.

Single copy price: \$20.00

Obtain an electronic copy from: vdavid@awwa.org

Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa. org

BSR/HI 4.1-4.6-201x, Sealless, Magnetically Driven Rotary Pumps for

Nomenclature, Definitions, Application, Operation, and Test (revision of

magnetic drives or magnetic couplings), which eliminate the shaft seal.

rotary pumps but does not apply to the flexible member/peristaltic rotary

Obtain an electronic copy from: tserazi@pumps.org

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

Order from: Tori Serazi, (973) 267-9700, tserazi@pumps.org

TCNA (ASC A108) (Tile Council of North America)

BSR A108.19-201x, Interior Installation of Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs by the Thin-Bed Method Bonded with

Modified Dry-Set Cement Mortar or Improved Modified Dry-Set Cement

This specification provides interior installation procedures and requirements

for installing gauged porcelain tiles and gauged porcelain tile panels/slabs

This standard covers magnetically coupled rotary pumps (sometimes called

Furthermore, it covers the unique features of sealless, magnetically driven

CSA (CSA Group)

Revision

BSR Z21.89-201x, Outdoor Cooking Specialty Gas Appliances (same as CSA 1.18-201x) (revision of ANSI Z21.89-2007 (R2012))

Details test and examination criteria for portable outdoor specialty gas appliances, (fryer/boiler, smoker, tabletop grill, or any combination). Appliance may be connected to a fixed fuel piping system or self-contained liquefied petroleum gas or propane gas supply system of a single cylinder with a maximum size of 20 pounds (9.1 kg) of fuel.

Single copy price: Free

Obtain an electronic copy from: cathy.rake@csagroup.org

Order from: Cathy Rake, (216) 524-4990 x88321, cathy.rake@csagroup.org

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

CSA (CSA Group)

Revision

BSR Z21.97-201x, Outdoor Decorative Gas Appliances (same as CSA 2.41 -201x) (revision of ANSI Z21.97-2014)

Decorative gas appliances for outdoor installation for use with natural gas and propane. For connection to a fixed fuel piping system, or an integral selfcontained propane gas supply system, provided the appliance incorporates mounting means for the attachment of a maximum of two cylinders, or to a remote self-contained propane gas supply system. These requirements apply to appliances operating at inlet gas pressures not exceeding 1/2 psig (3.5 kPa).

Single copy price: Free

Obtain an electronic copy from: cathy.rake@csagroup.org

Order from: Cathy Rake, (216) 524-4990 x88321, cathy.rake@csagroup.org Send comments (with copy to psa@ansi.org) to: Same

ESTA (Entertainment Services and Technology Association)

New Standard

BSR E1.37-7-201x, Additional Message Sets for ANSI E1.20 (RDM) - Gateway & Splitter Configuration Messages (new standard)

This document provides additional Get/Set Parameter Messages for use with the ANSI E1.20 Remote Device Management protocol and BSR E1.33 RDMnet protocol. This document contains messages relating to configuring RDMnet gateways, managed splitters, and proxy devices.

Single copy price: Free

Obtain an electronic copy from: http://tsp.esta. org/tsp/documents/public_review_docs.php

Order from: Karl Ruling, (212) 244-1505, standards@esta.org Send comments (with copy to psa@ansi.org) to: Same Single copy price: \$50.00

Mortar (new standard)

HI (Hydraulic Institute)

ANSI/HI 4.1-4.6-2010)

Single copy price: \$85.00

Revision

pump type.

New Standard

Obtain an electronic copy from: KSimpson@tileusa.com

that meet the requirements of ANSI A137.3, tables 4 and 5.

Order from: Katelyn Simpson, (864) 646-8453, KSimpson@tileusa.com

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

TCNA (ASC A108) (Tile Council of North America)

New Standard

BSR A137.3-201x, Standard Specifications for Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs (new standard)

These specifications describe the minimum physical properties of gauged porcelain tiles and gauged porcelain tile panels/slabs and back-layered gauged porcelain tiles, and gauged porcelain tile panels/slabs manufactured to a specific nominal thickness.

Single copy price: \$50.00

Obtain an electronic copy from: KSimpson@tileusa.com

Order from: Katelyn Simpson, (864) 646-8453, KSimpson@tileusa.com

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

TCNA (ASC A108) (Tile Council of North America)

Reaffirmation

BSR A108.14-2010 (R201x), Installation of Paper-Faced Glass Mosaic Tile (reaffirmation of ANSI A108.14-2010)

This specification is a guideline for installing paper-faced glass mosaic tile (including glass tile thinner than 3/16 in. and sheets/murals incorporating tiles of varying thickness) using the wet-set method, with Portland cement mortar.

Single copy price: \$15.00

Obtain an electronic copy from: KSimpson@tileusa.com

Order from: Katelyn Simpson, (864) 646-8453, KSimpson@tileusa.com

TCNA (ASC A108) (Tile Council of North America)

Revision

BSR A137.1-201x, Standard Specifications for Ceramic Tile (revision of ANSI A137.1-2012)

These specifications serve as a reference standard for buyers and specifiers of standard-grade and second-grade ceramic tile, decorative tile, and specialty tile. These specifications are also a guide to producers in maintaining quality control of the manufacture of such ceramic tile.

Single copy price: \$50.00

Obtain an electronic copy from: KSimpson@tileusa.com

Order from: Katelyn Simpson, (864) 646-8453, KSimpson@tileusa.com

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

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 60335-2-72-201X, Standard for Safety for Household and Similar Electrical Appliances - Safety - Part 2-72: Particular Requirements for Floor Treatment Machines With or Without Traction Drive, for Commercial Use (national adoption with modifications of IEC 60335-2-72)

This international standard deals with the safety of powered ride-on and powered walk-behind machines intended for commercial indoor or outdoor use for the following applications: sweeping, scrubbing, wet or dry pick-up, polishing, application of wax, sealing products and powder-based detergents, and shampooing of floors with an artificial surface.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Anne Marie Jacobs, (919) 549-0954, annemarie.jacobs@ul.com

UL (Underwriters Laboratories, Inc.)

Reaffirmation

BSR/UL 305-2012a (R201x), Standard for Safety for Panic Hardware (reaffirmation of ANSI/UL 305-2012a)

UL proposes a reaffirmation for ANSI approval of UL 305.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Mary Huras, (613) 368 -4425, Mary.Huras@ul.com

UL (Underwriters Laboratories, Inc.)

Reaffirmation

BSR/UL 1559-2011b (R201x), Insect-Control Equipment - Electrocution Type (Proposal dated December 23, 2016) (reaffirmation of ANSI/UL 1559 -2011b)

UL is proposing the reaffirmation and continuance of the fifth edition of the Standard for Safety for Insect-Control Equipment - Electrocution Type, UL 1559, as an American National Standard.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000, 151 Eastern Avenue, Bensenville, IL 60106 USA, 1 -888-853-3503.

Send comments (with copy to psa@ansi.org) to: Wilbert Fletcher, (919) 549 -1337, Wilbert.Fletcher@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 1951-201x, Standard for Safety for Electric Plumbing Accessories (revision of ANSI/UL 1951-2016)

UL 1951 covers equipment connected to or used with plumbing in commercial or household locations. Examples of equipment covered by these requirements are irrigation equipment, sprinkler controls, pedicure spas, water controls located in kitchens and bathrooms, electric faucets, toilets, and toilet flushing systems. All equipment is intended for installation and use in accordance with the National Electrical Code, NFPA 70, and is rated 600 volts or less.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

Comment Deadline: February 28, 2017

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME A112.19.3-201x/CSA B45.4-201x, Stainless Steel Plumbing Fixtures (revision of ANSI/ASME A112.19.3-2008/CSA B45.4-2008 (R2013))

This Standard covers plumbing fixtures made of stainless steel alloys and specifies requirements for materials, construction, performance, testing, and markings.

Single copy price: Free

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

Send comments (with copy to psa@ansi.org) to: Angel Guzman, (212) 591 -8018, guzman@asme.org

ASME (American Society of Mechanical Engineers) Revision

BSR/ASME B16.10-201x, Face-To-Face and End-To-End Dimensions of Valves (revision of ANSI/ASME B16.10-2009)

Face-to-face and end-to-end dimensions of straightway valves, and centerto-face and center-to-end dimensions of angle valves.

Single copy price: Free

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

Send comments (with copy to psa@ansi.org) to: Richard Lucas, (212) 591 -7541, lucasr@asme.org

ASME (American Society of Mechanical Engineers)

Withdrawal

ANSI/ASME B18.2.3.4M-2001 (R2011), Metric Hex Flange Screws (withdrawal of ANSI/ASME B18.2.3.4M-2001 (R2011))

This Standard covers the complete dimensional and general data for metric series hex flange screws .

Single copy price: \$35.00

For Reaffirmations and Withdrawn standards, please view our catalog at http://www.asme.org/kb/standards

Send comments (with copy to psa@ansi.org) to: Angel Guzman, (212) 591 -8018, guzman@asme.org

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

Revision

INCITS 499-201x, Information technology - Next Generation Access Control - Functional Architecture (revision of INCITS 499-2013)

NGAC follows an attribute-based construction in which characteristics or properties are used to describe and manage policy and to control access to resources. The family of NGAC standards specifies the architecture, functions, operations, and interfaces necessary to ensure their realization in different types of implementation environments at a range of scalability levels. This standard contains an abstract functional description of the NGAC architecture, and also provides an overview of the other standards within the NGAC family of standards. The description in this standard is abstract because it excludes irrelevant details, and is functional because it partitions the entities comprising the architecture purely on the basis of their function and excludes all other constraints.

Single copy price: Free

Obtain an electronic copy from: https://standards.incits.

org/apps/group_public/documents.php?filter=1&state=Public%20Review% 20Register/Notices

Order from: https://standards.incits.org/apps/group_public/documents.php? filter=1&state=Public%20Review%20Register/Notices

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

Technical Reports Registered with ANSI

Technical Reports Registered with ANSI are not consensus documents. Rather, all material contained in Technical Reports Registered with ANSI is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject.

Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to the PSA Center, American National Standards Institute, 25 West 43rd Street, New York, NY 10036 or E-Mail to psa@ansi.org.

AAMI (Association for the Advancement of Medical Instrumentation)

AAMI/IEC TR 80001-2-8-2017, Application of risk management for IT networks incorporating medical devices - Part 2-8: Application guidance -Guidance on standards for establishing the security capabilities identified in IEC 80001-2-2 (TECHNICAL REPORT) (technical report)

This technical report provides guidance for the application of the framework outlined in AAMI/IEC 80001-2-2. Managing the risk in connecting medical devices to IT-networks requires the disclosure of security-related capabilities and risks. AAMI/IEC 80001-2-2 presents a framework for this disclosure and the security dialog that surrounds the AAMI/IEC 80001-1, Risk Management of IT-networks. AAMI/IEC 80001-2-2 presents an informative set of common, descriptive security-related capabilities that are useful in terms of gaining an understanding of user needs. This report addresses each of the security capabilities and identifies security controls for consideration by all stakeholders during risk management activities, supplier selection, device selection, etc.

Single copy price: \$125.00 (AAMI members); \$209.00 (nonmember)

Order from: Will Vargas, (703) 647-2779, wvargas@aami.org

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:
 4301 N. Fairfax Dr., Ste 301 Suite 301 Arlington, VA 22203-1633

 Contact:
 Cliff Bernier

 Phone:
 (703) 253-8263

Fax: (703) 276-0793 E-mail: cbernier@aami.org

BSR/AAMI/ISO 5910-201x, Cardiovascular implants and extracorporeal systems - Cardiac valve repair devices (identical national adoption of ISO/DIS 5910)

CAGI (Compressed Air and Gas Institute)

Office: 1300 Sumner Avenue Cleveland, OH 44115

Contact: Jillian Scott Phone: (216) 241-7333 E-mail: cagi@cagi.org

BSR/CAGI B19.1-2011 (R201x), Safety Standard for Air Compressor Systems (reaffirmation of ANSI/CAGI B19.1-2011)

HI (Hydraulic Institute)

Office: 6 Campus Drive Parsippany, NJ 07054 Contact: Tori Serazi Phone: (973) 267-9700 Fax: (973) 267-9055 E-mail: tserazi@pumps.org

BSR/HI 4.1-4.6-201x, Sealless, Magnetically Driven Rotary Pumps for Nomenclature, Definitions, Application, Operation, and Test (revision of ANSI/HI 4.1-4.6-2010)

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

Office:	1101 K Street NW
	Suite 610
	Washington, DC 20005-3922
Contact:	Rachel Porter
	(000) 000 5744

Phone: (202) 626-5741

- Fax: 202-638-4922
- E-mail: comments@itic.org
- INCITS 499-201x, Information Technology Next Generation Access Control - Functional Architecture (revision of INCITS 499-2013)

NFRC (National Fenestration Rating Council)

Office:	6305 Ivy Lane Suite 140
	Greenbelt, MD 20770
Contact:	Robin Merrifield
Phone:	(240) 821-9513

Fax: (301) 589-3884

- E-mail: rmerrifield@nfrc.org
- BSR/NFRC 100-201x, Procedure for Determining Fenestration Product U-Factors (revision and redesignation of ANSI/NFRC 100 [E0A1] -2015)
- BSR/NFRC 200-201x, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence (revision and redesignation of ANSI/NFRC 200-2014)
- BSR/NFRC 400-201x, Procedure for Determining Fenestration Product Air Leakage (reaffirmation and redesignation of ANSI/NFRC 400 -2014)

NSF (NSF International)

Office:	789 N. Dixboro Road	
	Ann Arbor, MI 48105-9723	
Contact:	Lauren Panoff	
Phone:	(734) 769-5197	
E-mail:	lpanoff@nsf.org	

BSR/NSF 50-201x (i93r1), Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF 50-2016)

UL (Underwriters Laboratories, Inc.)

Office:	12 Laboratory Drive	
	Suite 400	
	Research Triangle Park, NC	27709-3995

Contact: Mary Huras

Phone:	(613)	368-4425
--------	-------	----------

- E-mail: Mary.Huras@ul.com
- BSR/UL 305-2012a (R201x), Standard for Safety for Panic Hardware (reaffirmation of ANSI/UL 305-2012a)

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:

- o General Interest
- o Government
- o Producer
- o 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.

ANS (American Nuclear Society)

Reaffirmation

ANSI/ANS 8.26-2007 (R2016), Criticality Safety Engineer Training and Qualification Program (reaffirmation of ANSI/ANS 8.26-2007 (R2012)): 12/15/2016

ASABE (American Society of Agricultural and Biological Engineers)

Reaffirmation

ANSI/ASAE EP486.2-2012 (R2016), Shallow Post and Pier Foundation Design (reaffirmation of ANSI/ASAE EP486.2-2012): 12/15/2016

ASC X9 (Accredited Standards Committee X9, Incorporated)

Reaffirmation

ANSI X9.104, Part 2-2004 (R2016), Financial transaction card originated messages - Card acceptor to acquiring host messages -Part 2 Convenience store and petroleum marketing industry (reaffirmation of ANSI X9.104, Part 2-2004 (R2010)): 12/15/2016

BHMA (Builders Hardware Manufacturers Association)

New Standard

* ANSI/BHMA A156.34-2016, Bored Locks and Mortise Locks with Ligature Resistant Trim (new standard): 12/15/2016

Revision

* ANSI/BHMA A156.1-2016, Butts and Hinges (revision of ANSI/BHMA A156.1-2013): 12/15/2016

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

Reaffirmation

- INCITS/ISO 19105:2000 [R2016], Geographic information -Conformance and testing (reaffirmation of INCITS/ISO/IEC 19105:2000 [R2011]): 12/15/2016
- INCITS/ISO 19123:2005 [R2016], Geographic information Schema for coverage geometry and functions (reaffirmation of INCITS/ISO 19123:2005 [R2011]): 12/15/2016
- INCITS/ISO 19133:2005 [R2016], Geographic information Location Based Services - Tracking and navigation (reaffirmation of INCITS/ISO/ 19133:2005 [R2011]): 12/15/2016
- INCITS/ISO 19135:2005 [R2016], Geographic information -Procedures for registration of geographical information items (reaffirmation of INCITS/ISO/ 19135:2005 [R2011]): 12/15/2016
- INCITS/ISO 19142:2010 [R2016], Geographic information Web Feature Service (reaffirmation of INCITS/ISO 19142:2010 [2011]): 12/15/2016
- INCITS/ISO 19143:2010 [R2016], Geographic information Filter encoding (reaffirmation of INCITS/ISO 19143:2010 [2011]): 12/15/2016

INCITS/ISO 19146:2010 [R2016], Geographic information - Crossdomain vocabularies (reaffirmation of INCITS/ISO 19146:2010 [2011]): 12/15/2016

- INCITS/ISO/IEC 13818-4:2004/AM3:2009 [R2016], Information technology Generic coding of moving pictures and associated audio information Part 4: Conformance testing Amendment 3: Level for 1080@50p/60p conformance testing (reaffirmation of INCITS/ISO/IEC 13818-4:2004/AM3:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 13818-6:1998/AM1:2000 [R2016], Information technology - Generic coding of moving pictures and associated audio info - Part 6: Extensions for DSM-CC - Amendment 1: Additions to support data broadcasting (reaffirmation of INCITS/ISO/IEC 13818-6-1998/AM1-2000 [R2011]): 12/19/2016
- INCITS/ISO/IEC 14495-1:2000 [R2016], Information technology -Lossless and near-lossless compression of continuous-tone still images: Baseline (reaffirmation of INCITS/ISO/IEC 14495-1-2000 [R2011]): 12/19/2016
- INCITS/ISO/IEC 14496-4:2004 [R2016], Information technology -Coding of audio-visual objects - Part 4: Conformance testing (reaffirmation of INCITS/ISO/IEC 14496-4-2004 [R2011]): 12/15/2016
- INCITS/ISO/IEC 14496-6:2000 [R2016], Information technology -Coding of audio-visual objects - Part 6: Delivery Multimedia Integration Framework (DMIF) (reaffirmation of INCITS/ISO/IEC 14496-6-2000 [R2011]): 12/15/2016
- INCITS/ISO/IEC 14496-4:2004/AM30:2009 [R2016], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 30: Conformance testing for new profiles for professional applications (reaffirmation of INCITS/ISO/IEC 14496 -4:2004/AM30:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 14496-4:2004/AM31:2009 [R2016], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 31: Conformance testing for SVC profiles (reaffirmation of INCITS/ISO/IEC 14496-4:2004/AM31:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 14496-4:2004/AM35:2009 [R2016], Information technology - Coding of audio-visual objects - Part 4: Conformance testing - Amendment 35: Simple studio profile levels 5 and 6 conformance testing (reaffirmation of INCITS/ISO/IEC 14496 -4:2004/AM35:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 14496-5:2001/AM14:2009 [R2016], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 14: Open Font Format reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM14:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 14496-5:2001/AM19:2009 [R2016], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 19: Reference software for Scalable Video Coding (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM19:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 14496-5:2001/AM20:2009 [R2016], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 20: MPEG-1 and -2 on MPEG-4 reference software (reaffirmation of INCITS/ISO/IEC 14496 -5:2001/AM20:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 14496-5:2001/AM21:2009 [R2016], Information technology - Coding of audio-visual objects - Part 5: Reference software - Amendment 21: Frame-based Animated Mesh Compression reference software (reaffirmation of INCITS/ISO/IEC 14496-5:2001/AM21:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 15444-8:2007/AM1:2008 [R2016], Information technology - JPEG 2000 image coding system: Secure JPEG 2000 -Amendment 1: File format security (reaffirmation of INCITS/ISO/IEC 15444-8:2007/AM1:2008 [2011]): 12/19/2016

- INCITS/ISO/IEC 15938-3:2002/AM3:2009 [R2016], Information technology - Multimedia content description interface - Part 3: Visual - Amendment 3: Image Signature Tools (reaffirmation of INCITS/ISO/IEC 15938-3:2002/AM3:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 21000-8:2008/AM1:2009 [R2016], Information technology - Multimedia framework (MPEG-21) - Part 8: Reference software - Amendment 1: Extract reference software (reaffirmation of INCITS/ISO/IEC 21000-8:2008/AM1:2009 [2011]): 12/15/2016
- INCITS/ISO/IEC 23000-4:2009 [R2016], Information technology -Multimedia application format (MPEG-A) - Part 4: Musical slide show application format (reaffirmation of INCITS/ISO/IEC 23000 -4:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 23000-6:2009 [R2016], Information technology -Multimedia application format (MPEG-A) - Part 6: Professional archival application format (reaffirmation of INCITS/ISO/IEC 23000 -6:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 23000-10:2009 [R2016], Information technology -Multimedia application format (MPEG-A) - Part 10: Video surveillance application format (reaffirmation of INCITS/ISO/IEC 23000-10:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 23000-3:2007/AM1:2009 [R2016], Information technology - Multimedia application format (MPEG-A) - Part 3: MPEG photo player application format - Amendment 1: Reference software for photo player MAF (reaffirmation of INCITS/ISO/IEC 23000-3:2007/AM1:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 23000-4:2009/AM1:2009 [R2016], Information technology - Multimedia application format (MPEG-A) - Part 4: Musical slide show application format - Amendment 1: Conformance and reference software for musical slide show application format (reaffirmation of INCITS/ISO/IEC 23000-4:2009/AM1:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 23000-7:2008/AM1:2009 [R2016], Information technology - Multimedia application format (MPEG-A) - Part 7: Open access application format - Amendment 1: Conformance and reference software for open access application format (reaffirmation of INCITS/ISO/IEC 23000-7:2008/AM1:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 23004-8:2009 [R2016], Information technology -Multimedia Middleware - Part 8: Reference software (reaffirmation of INCITS/ISO/IEC 23004-8:2009 [2011]): 12/19/2016
- INCITS/ISO/IEC 16485:2000 [R2016], Information technology Mixed Raster Content (MRC) (reaffirmation of INCITS/ISO/IEC 16485 -2000 [R2011]): 12/19/2016
- INCITS/ISO/IEC 29183:2010 [R2016], Information technology Office equipment - Method for measuring digital copying productivity of a single one-sided original (reaffirmation of INCITS/ISO/IEC 29183 -2010 [2011]): 12/19/2016

Withdrawal

INCITS 388-2011, Information technology - Storage management (withdrawal of INCITS 388-2011): 12/19/2016

SCTE (Society of Cable Telecommunications Engineers)

New Standard

ANSI/SCTE 234-2016, ISO 50001:2011 Energy Management Systems, Energy Metrics, with Guidance for Use (new standard): 12/15/2016

UL (Underwriters Laboratories, Inc.)

New National Adoption

ANSI/UL 61010-2-020-2016, Standard for Safety for Safety Requirements for Measurement, Control, and Laboratory Use - Part 2-020: Particular Requirements for Laboratory Centrifuges (identical national adoption of IEC 61010-2-020): 12/15/2016

Reaffirmation

- * ANSI/UL 174-2012 (R2016), Standard for Safety for Household Electric Storage Tank Water Heaters (reaffirmation of ANSI/UL 174 -2012): 12/15/2016
- ANSI/UL 2420-2012a (R2016), Standard for Safety for Belowground Reinforced Thermosetting Resin Conduit (RTRC) and Fittings (reaffirmation of ANSI/UL 2420-2012a): 12/16/2016

Revision

- * ANSI/UL 283-2016, Standard for Safety for Air Fresheners and Deodorizers (Proposal dated 5-20-16) (revision of ANSI/UL 283 -2015): 12/16/2016
- * ANSI/UL 283-2016a, Standard for Safety for Air Fresheners and Deodorizers (Proposal dated 8-19-16) (revision of ANSI/UL 283 -2015): 12/16/2016
- * ANSI/UL 283-2016b, Standard for Safety for Air Fresheners and Deodorizers (Proposal dated 10-28-16) (revision of ANSI/UL 283 -2015): 12/16/2016
- ANSI/UL 558-2016, Standard for Safety for Industrial Trucks, Internal Combustion Engine-Powered (Proposal dated 8-19-16) (revision of ANSI/UL 558-2015): 12/14/2016
- ANSI/UL 558-2016a, Standard for Safety for Industrial Trucks, Internal Combustion Engine-Powered (Proposal dated 10-28-16) (revision of ANSI/UL 558-2015): 12/14/2016

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. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit www.NSSN.org, which is a database of standards information. Note that this database is not exhaustive.

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.

ASABE (American Society of Agricultural and Biological Engineers)

Office:	2950 Niles Road
	St Joseph, MI 49085
Contact:	Jean Walsh
Fax:	(269) 429-3852

E-mail: walsh@asabe.org

ANSI/ASAE EP455-JUL91 (R2012), Environmental Considerations in Development of Mobile Agricultural Electrical/Electronic Components (withdrawal of ANSI/ASAE EP455-JUL91 (R2012))

Stakeholders: Agricultural equipment manufacturers.

Project Need: ANSI/ASAE EP455 was last revised July 1991 and is currently outdated. Test methods have changed considerably since this last revision. There are other Standards Development Organizations that are providing documents supported by subject matter experts that include the items within the scope of ANSI/ASAE EP455.

This Engineering Practice limits the environmental considerations to the natural climatic conditions and the equipment-induced conditions to which the components may be exposed.

CAGI (Compressed Air and Gas Institute)

Office: 1300 Sumner Avenue Cleveland, OH 44115

Contact: Jillian Scott

E-mail: cagi@cagi.org

BSR/CAGI B19.1-2011 (R201x), Safety Standard for Air Compressor Systems (reaffirmation of ANSI/CAGI B19.1-2011)

Stakeholders: Manufacturers, users, and specifiers of compressed air equipment.

Project Need: Industry needs a safety standard for compressed air systems.

This Standard addresses all aspects of air compressor systems from the entrance to the inlet device through the compressor and associated heat exchangers, dryers, and pulsation suppression devices to the point of entry to the distribution system.

CSA (CSA Group)

Office:	8501 East Pleasant Valley Rd. Cleveland, OH 44131
Contact:	Cathy Rake
Fax:	(216) 520-8979
E-mail:	cathy.rake@csagroup.org

* BSR Z21.50-201x, Vented Decorative Gas Appliances (same as CSA 2.22-201x) (revision of ANSI Z21.50-2016)

Stakeholders: Consumers, manufacturers, gas suppliers, and testing agencies.

Project Need: Revise the standard for safety and energy conservation.

Details test and examination criteria for vented decorative gas appliance for use with natural and propane gases. The only function of a vented decorative gas appliance lies in the aesthetic effect of the flame; the appliance is not a source of heat.

ESTA (Entertainment Services and Technology Association)

Office: 630 Ninth Avenue Suite 609 New York, NY 10036-3748

Contact: Karl Ruling

Fax: (212) 244-1502

E-mail: standards@esta.org

BSR/ESTA E1.60-201x, Guidelines for the use of rakes in live performance environments (new standard)

Stakeholders: Performers, technicians, directors, live event producers and management, choreographers, designers, and builders of raked staging

Project Need: There are currently no standards that address actor and technician safety on raked performance floors.

This standard intends to provide guidance for the use of raked stages in live performance environments. The standard intends to define a rake, and to offer guidance for production elements to mitigate the risks for the protection of actors and technicians.

InfoComm (InfoComm International)

Office:	11242 Waples Mill Rd Suite 200
	Fairfax, VA 22030
Contact:	Michelle Streffon
F-mail [.]	mstreffon@infocomm.org

* BSR/INFOCOMM V201.01-201x, Projected Image System Contrast Ratio (revision and redesignation of ANSI/INFOCOMM 3M-2011)

Stakeholders: Corporate and commercial conference facilities, educational institutions, entertainment venues, houses of worship, live events, judicial and municipal chambers, retail facilities, sports venues. Project Need: To determine a consistent means of defining and measuring contrast ratio in audiovisual systems.

This Standard defines audiovisual system contrast ratio and its measurement. It applies to both permanently installed systems and live events. This Standard defines contrast ratio based on content viewing requirements. System contrast ratio refers to the image as it is presented to viewers in a space with ambient light. Practical metrics to measure and validate the defined contrast ratios are provided.

NFRC (National Fenestration Rating Council)

Office:	6305 Ivy Lane
	Suite 140
	Greenbelt, MD 20770
Contact:	Robin Merrifield

 Fax:
 (301) 589-3884

 E-mail:
 rmerrifield@nfrc.org

 * BSR/NFRC 100-201x, Procedure for Determining Fenestration Product U-Factors (revision and redesignation of ANSI/NFRC 100 [E0A1] -2015)

Stakeholders: Manufacturers and vendors of fenestration products or components; consumers and consumer advocacy organizations; construction and building professionals; education and research institutions; energy building code officials; organizations concerned with energy efficiency.

Project Need: ANSI/NFRC 100 is necessary for the fenestration industry to accurately rate energy performance of products to enable code compliance and a fair marketplace.

This standard specifies a method for determining fenestration product U-factor (thermal transmittance).

* BSR/NFRC 200-201x, Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence (revision and redesignation of ANSI/NFRC 200-2014)

Stakeholders: Manufacturers and vendors of fenestration products or components; consumers and consumer advocacy organizations; construction and building professionals; education and research institutions; energy building code officials; organizations concerned with energy efficiency.

Project Need: ANSI/NFRC 200 is necessary for the fenestration industry to accurately rate energy performance of products to enable code compliance and a fair marketplace.

This standard specifies a method for calculating solar heat gain coefficient (SHGC) and visible transmittance (VT) at normal (perpendicular) incidence for fenestration products containing glazings or glazing with applied films, with specular optical properties calculated in accordance with ISO 15099 (except where noted) or tested in accordance with NFRC 201, NFRC 202, and NFRC 203.

 * BSR/NFRC 400-201x, Procedure for Determining Fenestration Product Air Leakage (reaffirmation and redesignation of ANSI/NFRC 400 -2014)

Stakeholders: Manufacturers and vendors of fenestration products or components; consumers and consumer advocacy organizations; construction and building professionals; education and research institutions; energy building code officials; organizations concerned with energy efficiency.

Project Need: ANSI/NFRC 400 is necessary for the fenestration industry to accurately rate energy performance of products to enable code compliance and a fair marketplace.

NFRC 400 is necessary for the fenestration industry to accurately rate energy performance of products to enable code compliance and a fair marketplace.

TNI (The NELAC Institute)

Office:	PO Box 2439
	Weatherford, TX 76086

Contact: Ken Jackson

Fax:	(817) 598-1177
------	----------------

E-mail: ken.jackson@nelac-institute.org

BSR/TNI EL-V2, Modules 1 and 3-201x, General Requirements for Accreditation Bodies Accrediting Environmental Laboratories (revision and redesignation of ANSI/TNI EL-V2)

Stakeholders: Governmental and non-governmental accreditation bodies, environmental laboratories.

Project Need: Modules 1 (General Requirements) and 3 (On-Site Assessment) of this ANS have common and often overlapping needs, and the existence of separate modules has created some confusion and problems for Accreditation Bodies. Overlapping requirements are found in both Modules 1 and 3, while some key requirements are found in Module 3 but not Module 1, and vice-versa. Combining these into a new Module 1 will make implementation of the standard more efficient.

This standard contains three modules addressing the following topics: (1) General Requirements; (2) Proficiency Testing; and (3) On-Site assessment. Recently, Module 2 was revised and Modules 1 and 3 were reaffirmed as American National Standards. It is now proposed to combine Modules 1 and 3 into a new Module 1 that will be based on ISO/IEC 17011.

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)
- AAMVA (American Association of Motor Vehicle Administrators)
- AGA (American Gas Association)
- AGSC (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 (The Green Building Initiative)
- GEIA (Greenguard Environmental Institute)
- HL7 (Health Level Seven)
- IESNA (The Illuminating Engineering Society of North America)
- MHI (ASC MH10) (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network)
- 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 <u>www.ansi.org/asd</u>, select "Standards Activities," click on "Public Review and Comment" and "American National Standards Maintained Under Continuous Maintenance." This information is also available directly at <u>www.ansi.org/publicreview</u>.

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.

AAMI

Association for the Advancement of Medical Instrumentation

4301 N Fairfax Drive Suite 301 Arlington, VA 22203-1633 Phone: (703) 647-2779 Web: www.aami.org

ANS

American Nuclear Society

555 North Kensington Avenue La Grange Park, IL 60526 Phone: (708) 579-8268 Fax: (708) 579-8248 Web: www.ans.org

ASABE

American Society of Agricultural and Biological Engineers 2950 Niles Road St Joseph, MI 49085 Phone: (269) 932-7027 Fax: (269) 429-3852 Web: www.asabe.org

ASC X9

Accredited Standards Committee X9, Incorporated

275 West Street Suite 107 Annapolis, MD 21401 Phone: (410) 267-7707 Web: www.x9.org

ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329-2305

Phone: (678) 539-1125 Fax: (678) 539-1125 Web: www.ashrae.org

ASME

American Society of Mechanical Engineers Two Park Avenue New York, NY 10016 Phone: (212) 591-8521 Fax: (212) 591-8501 Web: www.asme.org

AWS

American Welding Society 8669 NW 36 ST., #130 Miami, FL 33166 Phone: (800) 443-9353 Fax: (305) 443-5951 Web: www.aws.org

AWWA

American Water Works Association 6666 W. Quincy Ave. Denver, CO 80235 Phone: (303) 347-6178 Fax: (303) 795-7603 Web: www.awwa.org

BHMA

Builders Hardware Manufacturers Association

355 Lexington Avenue 15th Floor New York, NY 10017 Phone: (212) 297-2126 Fax: (212) 370-9047 Web: www.buildershardware.com

CAGI

Compressed Air and Gas Institute 1300 Sumner Avenue Cleveland, OH 44115 Phone: (216) 241-7333 Web: www.cagi.orgwelcome.htm

CSA CSA Group

8501 East Pleasant Valley Rd. Cleveland, OH 44131 Phone: (216) 524-4990 x88321 Fax: (216) 520-8979 Web: www.csa-america.org

ESTA

Entertainment Services and Technology Association

630 Ninth Avenue Suite 609 New York, NY 10036-3748 Phone: (212) 244-1505 Fax: (212) 244-1502 Web: www.esta.org

HI Hydraulic Institute

6 Campus Drive Parsippany, NJ 07054 Phone: (973) 267-9700 Fax: (973) 267-9055 Web: www.pumps.org

InfoComm

InfoComm International 11242 Waples Mill Rd Suite 200 Fairfax, VA 22030 Phone: (703) 277-6745 Web: www.infocomm.org

ITI (INCITS)

InterNational Committee for Information Technology Standards 1101 K Street NW Suite 610 Washington, DC 20005-3922

Phone: (202) 626-5737 Fax: 202-638-4922 Web: www.incits.org

NFRC

National Fenestration Rating Council 6305 Ivy Lane Suite 140 Greenbelt, MD 20770 Phone: (240) 821-9513 Fax: (301) 589-3884 Web: www.nfrc.org

NSF

NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 769-5197 Web: www.nsf.org

SCTE

Society of Cable Telecommunications Engineers 140 Philips Rd

Exton, PA 19341 Phone: (800) 542-5040 Fax: (800) 542-5040 Web: www.scte.org

TCNA (ASC A108)

Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 Phone: (864) 646-8453 Fax: (864) 646-2821 Web: www.tileusa.com

TNI

The NELAC Institute PO Box 2439 Weatherford, TX 76086 Phone: (518) 899-9697 Fax: (817) 598-1177 Web: www.NELAC-Institute.org

UL

Underwriters Laboratories, Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 Phone: (847) 664-3038 Exy: (847) 664-3028

Fax: (847) 664-3038 Web: www.ul.com

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); 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.

ISO Standards

ACOUSTICS (TC 43)

ISO/DIS 389-1, Acoustics - Reference zero for the calibration of audiometric equipment - Part 1: Reference equivalent threshold sound pressure levels for pure tones and supra-aural earphones -1/13/2017, \$58.00

ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

- ISO 15002/DAmd1, Flow-metering devices for connection to terminal units of medical gas pipeline systems Amendment 1 3/12/2017,
- ISO 7396-1/DAmd1, Medical gas pipeline systems Part 1: Pipeline systems for compressed medical gases and vacuum - Amendment 1 - 3/12/2017
- ISO/DIS 10524-1, Pressure regulators for use with medical gases -Part 1: Pressure regulators and pressure regulators with flowmetering devices - 3/12/2017
- ISO/DIS 10524-2, Pressure regulators for use with medical gases -Part 2: Manifold and line pressure regulators - 3/12/2017
- ISO/DIS 10524-3, Pressure regulators for use with medical gases -Part 3: Pressure regulators integrated with cylinder valves -3/12/2017

BUILDING CONSTRUCTION (TC 59)

ISO/DIS 19650-2, Organization of information about construction works - Information management using building information modelling - Part 2: Delivery phase of assets - 3/12/2017

CERAMIC TILE (TC 189)

- ISO/DIS 13006, Ceramic tiles Definitions, classification, characteristics and marking 1/12/2017, \$125.00
- ISO/DIS 10545-3, Ceramic tiles Part 3: Determination of water absorption, apparent porosity, apparent relative density and bulk density - 1/12/2017, \$46.00

CLINICAL LABORATORY TESTING AND IN VITRO DIAGNOSTIC TEST SYSTEMS (TC 212)

ISO/DIS 20186-1, Molecular in vitro diagnostic examinations -Specifications for pre-examination processes for venous whole blood - Part 1: Isolated cellular RNA - 1/15/2017, \$82.00

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/DIS 20186-2, Molecular in vitro diagnostic examinations -Specifications for pre-examination processes for venous whole blood - Part 2: Isolated genomic DNA correct - 1/15/2017, \$82.00

COMPRESSORS, PNEUMATIC TOOLS AND PNEUMATIC MACHINES (TC 118)

ISO/DIS 28927-13, Hand-held portable power tools - Test methods for evaluation of vibration emission - Part 13: Fastener driving tools -1/13/2017, \$71.00

CRYOGENIC VESSELS (TC 220)

- ISO/DIS 21010, Cryogenic vessels Gas/material compatibility 1/12/2017, \$62.00
- ISO/DIS 21029-1, Cryogenic vessels Transportable vacuum insulated vessels of not more than 1 000 litres volume Part 1: Design, fabrication, inspection and tests 1/14/2017, \$155.00

GAS CYLINDERS (TC 58)

ISO/DIS 5145, Cylinder valve outlets for gases and gas mixtures -Selection and dimensioning - 3/9/2017

INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

ISO/DIS 16300-3, Automation systems and integration -Interoperability of capability units for manufacturing application solutions - Part 3: Verification and validation of interoperability among capability units - 3/10/2017

MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)

ISO/DIS 35104, Petroleum and natural gas industries - Arctic operations - Ice management - 1/12/2017, \$165.00

MINING (TC 82)

ISO/DIS 19434, Mining - Classification of mine accidents - 1/14/2017, \$93.00

NUCLEAR ENERGY (TC 85)

- ISO 16793/DAmd1, Nuclear fuel technology Guide for ceramographic preparation of UO2 sintered pellets for microstructure examination Amendment 1 1/15/2017, \$53.00
- ISO/DIS 16647, Nuclear facilities Criteria for design and operation of confinement systems for nuclear worksite and for nuclear installations under decommissioning 1/13/2017, \$102.00

PACKAGING (TC 122)

ISO/DIS 20848-3, Packaging - Plastics drums - Part 3: Plug/bung closure systems for plastic drums with a nominal capacity of 113,6 I to 220 I - 11/8/2015, \$77.00

PAPER, BOARD AND PULPS (TC 6)

ISO/DIS 4094, Paper, board and pulps - International calibration of testing apparatus - Nomination and acceptance of standardizing and authorized laboratories - 12/8/2015, \$98.00

PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)

- ISO/DIS 16900-2, Respiratory protective devices Methods of test and test equipment Part 2: Determination of breathing resistance 1/15/2017, \$46.00
- ISO/DIS 17723-1, PPE ensembles for firefighters undertaking hazardous materials response activities - Part 1: Gas-tight, vaporprotective ensembles for emergency response teams (type 1) -1/13/2017, \$102.00
- ISO/DIS 18639-6, PPE ensembles for firefighters undertaking specialist rescue activities - Part 6: Footwear - 1/13/2017, \$77.00

PLASTICS (TC 61)

- ISO/DIS 4586-1, High-pressure decorative laminates (HPL, HPDL) -Sheets based on thermosetting resins (Usually called Laminates) -Part 1: Introduction and general information - 3/12/2017
- ISO/DIS 4586-2, High-pressure decorative laminates (HPL, HPDL) -Sheets based on thermosetting resins (Usually called Laminates) -Part 2: Determination of properties - 3/12/2017
- ISO/DIS 4586-6, High-pressure decorative laminates (HPL, HPDL) -Sheets based on thermosetting resins (Usually called Laminates) -Part 6: Classification and specifications for exterior-grade compact laminates of thickness 2 mm and greater - 3/12/2017
- ISO/DIS 4586-8, High-pressure decorative laminates (HPL, HPDL) -Sheets based on thermosetting resins (Usually called Laminates) -Part 8: Classification and specifications for alternative core laminates - 3/12/2017
- ISO/DIS 15023-2, Plastics Poly(vinyl alcohol) (PVAL) materials Part 2: Determination of properties 1/11/2017, \$71.00

PLASTICS PIPES, FITTINGS AND VALVES FOR THE TRANSPORT OF FLUIDS (TC 138)

ISO/DIS 161-1, Thermoplastics pipes for the conveyance of fluids -Nominal outside diameters and nominal pressures - Part 1: Metric series - 1/14/2017, \$40.00

PULLEYS AND BELTS (INCLUDING VEEBELTS) (TC 41)

ISO/DIS 17396, Synchronous belt drives - Metric pitch - Tooth profiles T and AT endless and open ended belts and pulleys - 1/13/2017, \$82.00

RISK MANAGEMENT (TC 262)

ISO/DIS 31000, Risk management - Principles and guidelines - 3/12/2017

ROAD VEHICLES (TC 22)

ISO/DIS 20077-2, Road Vehicles - Extended vehicle (ExVe) methodology - Part 2: Methodology for designing the extended vehicle - 1/12/2017, \$98.00

STEEL (TC 17)

ISO/DIS 9328-1, Steel flat products for pressure purposes - Technical delivery conditions - Part 1: General requirements - 1/15/2017, \$71.00

- ISO/DIS 9328-2, Steel flat products for pressure purposes Technical delivery conditions Part 2: Non-alloy and alloy steels with specified elevated temperature properties 1/15/2017, \$93.00
- ISO/DIS 9328-3, Steel flat products for pressure purposes Technical delivery conditions - Part 3: Weldable fine grain steels, normalized -1/15/2017, \$77.00
- ISO/DIS 9328-4, Steel flat products for pressure purposes Technical delivery conditions Part 4: Nickel-alloy steels with specified low temperature properties 1/15/2017, \$62.00
- ISO/DIS 9328-5, Steel flat products for pressure purposes Technical delivery conditions Part 5: Weldable fine grain steels, thermomechanically rolled 1/15/2017, \$67.00
- ISO/DIS 9328-6, Steel flat products for pressure purposes Technical delivery conditions Part 6: Weldable fine grain steels, quenched and tempered 1/15/2017, \$67.00
- ISO/DIS 9328-7, Steel flat products for pressure purposes Technical delivery conditions Part 7: Stainless steels 1/15/2017, \$125.00

THERMAL INSULATION (TC 163)

ISO/DIS 18523-2, Energy performance of buildings - Schedule and condition of building, zone and space usage for energy calculation - Part 2: Residential buildings - 12/18/2016, \$98.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)

ISO 4387/DAmd2, Cigarettes - Determination of total and nicotine-free dry particulate matter using a routine analytical smoking machine -Amendment 2 - 3/10/2017

WELDING AND ALLIED PROCESSES (TC 44)

- ISO/DIS 544, Welding consumables Technical delivery conditions for filler materials and fluxes Type of product, dimensions, tolerances and markings 1/11/2017, \$53.00
- ISO/DIS 18275, Welding consumables Covered electrodes for manual metal arc welding of high-strength steels - Classification -1/12/2017, \$98.00

ISO/IEC JTC 1, Information Technology

- ISO/IEC DIS 19987, Information technology EPC Information services Specification 3/10/2017
- ISO/IEC DIS 19988, Information technology GS1 Core Business Vocabulary (CBV) - 3/10/2017

IEC Standards

- 10/1008/CD, IEC 63012 ED1: Insulating liquids Unused modified or blended esters and mixtures with esters for electrotechnical applications, 2017/2/17
- 17A/1129/CD, IEC/TR 62271-306 A1 Ed. 1: High-voltage switchgear and controlgear - Part 306: Guide to IEC 62271-100, IEC 62271-1 and other IEC standards related to alternating current circuitbreakers, 2017/1/20
- 23B/1235/FDIS, IEC 60669-1 Ed. 4: Switches for household and similar fixed-electrical installations Part 1: General requirements, 017/1/6/
- 23E/990/CDV, IEC 60755 Ed.1: General safety requirements for residual current operated protective devices - Group safety publication, 2017/2/17
- 31/1295/NP, PNW 31-1295: Workplace atmospheres Part 2: Gas detectors Selection, installation, use and maintenance of detectors for toxic gases and vapours and oxygen, 2017/2/17
- 45A/1116/CDV, IEC 62887 Ed.1: Nuclear power plants -Instrumentation systems important to safety - Pressure transmitters: Characteristics and test methods, 2017/2/17

- 48B/2539/FDIS, IEC 61076-2-113 Ed1: Connectors for electronic equipment - Product requirements - Part 2-113: Circular connector -Detail specification for connectors with data and power contacts with M12 screw-locking, 017/1/6/
- 57/1792/DC, Proposed draft for IEC TR 62351-90-2, Power systems management and associated information exchange - Data and communications security - Part 90-2: Deep Packet Inspection (DPI) of encrypted communications, 2017/1/20
- 57/1793/DC, Second draft for IEC TR 62361-103, Power systems management and associated information exchange - Interoperability in the long term - Part 103: Standard profiling, 2017/1/20
- 64/2145/CDV, IEC 60364-7-711: Low voltage electrical installation -Part 7-711: Requirements for special installations or locations -Exhibitions, shows and stands, 2017/2/17
- 65E/516/CDV, IEC 62714-1 Ed. 2.0: Engineering data exchange format for use in industrial automation systems engineering -Automation Markup Language - Part 1: Architecture and general requirements, 2017/2/17
- 82/1212/DTS, IEC TS 62788-7-2 ED1: Measurement procedures for materials used in photovoltaic modules - Part 7-2: Environmental exposures - Accelerated weathering tests of polymeric materials, 2017/2/17
- 82/1211/DC, Proposed revision of IEC 61730-1 Ed.2: Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction, 017/1/6/
- 86A/1764/CDV, IEC 60794-1-3/Ed1: Optical fibre cables Part 1-3: Generic specification optical cable elements, 2017/2/17
- 86B/4025/CDV, IEC 61300-3-30/Ed2: Fibre optic interconnecting devices and passive components -Basic test and measurement procedures Part 3-30: Examinations and measurements Endface geometry of rectangular ferrule, 2017/2/17
- 86C/1427/DTR, IEC TR 61282-15 ED1: Fibre optic communication system design guides - Part 15: Cable plant and link: Testing multifibre optic cable plant terminated with MPO connectors, 2017/1/20
- 86C/1428/DTR, IEC TR 63072-1 ED1: Photonic integrated circuits Part 1: Introduction and roadmap for standardization, 2017/1/20
- 104/714/CDV, IEC 60068-2-52 Ed.3: Environmental testing Part 2 -52: Tests - Test Kb: Salt mist, cyclic (sodium chloride solution), 2017/2/17
- 121A/122/NP, PNW 121A-122: Low-voltage switchgear and controlgear - Ancillary equipment - Terminal blocks for aluminium conductors, 2017/2/17
- 121A/123/CD, IEC 60947-4-1 Ed. 4: Low-voltage switchgear and controlgear - Part 4-1: Contactors and motor-starters -Electromechanical contactors and motor-starters, 2017/2/17

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 issued 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 report proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat disseminates the information to all WTO Members. The purpose of this requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

The National Center for Standards and Certification Information (NCSCI) at the National Institute of Standards and Technology

(NIST), distributes these proposed foreign technical regulations to U.S. stakeholders via an online service, Notify U.S. Notify U.S. is an e-mail and Web service that allows interested U.S. parties to register, obtain notifications, and read full texts of regulations from countries and for industry sectors of interest to them. To register for Notify U.S., please go to Internet URL:

http://www.nist.gov/notifyus/ and click on "Subscribe".

NCSCI is the WTO TBT Inquiry Point for the U.S. and receives all notifications and full texts of regulations to disseminate to U.S. Industry. For further information, please contact: NCSCI, NIST, 100 Bureau Drive, Gaithersburg, MD 20899-2160; Telephone: (301) 975-4040; Fax: (301) 926-1559; E-mail: <u>ncsci@nist.gov</u> or <u>notifyus@nist.gov</u>.

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 ANS 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 and 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.

ANSI Accredited Standards Developers

Reaccreditation

American Dental Association (ADA)

Comment Deadline: January 30, 2017

The American Dental Association (ADA), an ANSI member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on ADA-sponsored American National Standards (and also including new procedures for the registration of technical reports with ANSI), under which it was last reaccredited in 2015. As the current revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Mr. Paul Bralower, Manager, Standards, Center for Informatics & Standards, American Dental Association, 211 E. Chicago Ave., Chicago, IL 60611; phone: 312.587.4129; e-mail: bralowerp@ada.org. You may view/download a copy of the revisions during the public review period at the following URL: www.ansi.org/accredPR. Please submit any public comments on the revised procedures to ADA by January 30, 2017, with a copy to the ExSC Recording Secretary in ANSI's New York Office (jthompso@ANSI.org).

Withdrawal of ASD Accreditation

College of American Pathologists (CAP)

The accreditation of the College of American Pathologists (CAP) as a developer of American National Standards has been administratively withdrawn, effective December 28, 2016. CAP currently maintains no American National Standards. For additional information, please contact: Ms. Sharon Burr, Senior Technical Analyst, College of American Pathologists, 325 Waukegan Road, Northfield, IL 60093; phone: (847) 832-7417; e-mail: sburr@cap.org.

International Organization for Standardization (ISO)

New ISO/IEC Guide

Draft ISO/IEC Guide 14 on Product Information for Consumers

Comment Deadline: January 6, 2017

Please be informed that a working group of ISO's Policy Committee on Consumer Affairs (COPOLCO) has developed a draft ISO/IEC Guide 14 on Product Information for Consumers, with the following scope statement:

This Guide provides guidance on provision of information concerning products and related services intended for consumers. It outlines general principles and recommendations for contents, methods, formats and design enabling consumers to compare and choose consumer products and related services prior to purchase. This Guide does not deal with conformity assessment.

Anyone wishing to review the draft 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, January 6, 2017.

Establishment of ISO Project Committee

ISO/PC 310 - Wheeled Child Conveyances

A new ISO Project Committee, ISO/PC 310 – Wheeled child conveyances, has been formed. The Secretariats has been assigned to France (AFNOR) and China (SAC).

ISO/PC 310 operates under the following scope:

Standardization deliverable in the field of wheeled child conveyances designed for the carriage of one or more children. It covers safety requirements and test methods.

Excluded: toys, shopping trolleys, baby carriers fitted with wheels, wheeled child conveyances propelled by a motor and wheeled child conveyances designed for children with special needs.

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (<u>isot@ansi.org</u>).

ISO Proposal for a New Field of ISO Technical Activity

Gold

Comment Deadline: February 10, 2017

SAC, the ISO member body for China, has submitted to ISO a proposal for a new field of ISO technical activity on Gold, with the following scope statement:

The standardization of gold ores, gold concentrates, gold alloys (excluding gold jewelries), gold compounds, gold material and the standardization of the development, recovery and recycling of gold.

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, February 10, 2017.

New Secretariats

ISO/TC 260 – Human resource management

Comment Deadline: January 6, 2017

The University of Texas Medical Branch (UTMB) has requested ANSI to delegate the responsibilities of the administration of the ISO/TC 260 secretariat to UTMB. The secretariat was previously held by the American National Standards Institute (ANSI) and the secretariat transfer is supported by the U.S. TAG.

ISO/TC 260 operates under the following scope:

Standardization in the field of human resource management.

Organizations wishing to comment on the delegation of the responsibilities should contact ANSI's ISO Team (isot@ansi.org).

Public Review Draft

Proposed Addendum aa to Standard 189.1-2014

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

Second Public Review (December 2016) (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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHARE expressly disclaims such.

© 2013 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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









(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 ISC further refines the definition of renewable energy certificates (RECS) and clarifies their use. These changes were made in response to comments.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (for deletions) unless the instructions specifically mention some other means of indicating the changes. Only these changes 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 substantive changes.

Addendum aa to 189.1-2014, ISC

Text of Second Public Review, ISC

Modify Section 3.2 as follows:

renewable energy certificate (REC): A market based<u>tradable</u> instrument that represents the property rights to the environmental, social and other non-power qualities one megawatt-hour of renewable electricity generation and is transacted separately from the electricity generated by the renewable energy source.

REC: see renewable energy certificate (REC)

Modify Section 7.4.1.1.1 as follows:

7.4.1.1 Standard Renewables Approach: Baseline On-Site Renewable Energy Systems. *Building projects* shall contain *on-site renewable energy systems* that provide the annual energy production equivalent of not less than 6.0 kBtu/ft² (20 kWh/m²) multiplied by the horizontal projection of the *gross roof area* in ft² (m²) for single-story buildings, and not less than 10.0 kBtu/ft² (32 kWh/m²) multiplied by the horizontal projection of the *gross roof area* in ft² (m²) for single-story buildings, and not less than 10.0 kBtu/ft² (32 kWh/m²) multiplied by the horizontal projection of the *gross roof area* in ft² (m² for all other buildings. The annual energy production shall be the combined sum of all on-site renewable energy systems. Documentation shall be provided to the AHJ that indicates that the RECs associated with the *on-site renewable energy system* will be retained and retired by the *owner*. Where the building owner does not have ownership of the RECs associated with the on-site renewable energy system.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

Exceptions:

Buildings that demonstrate compliance with both of the following are not required to contain on-site renewable energy systems:

- 1 An annual daily average incident solar radiation available to a flat plate collector oriented due south at an angle from horizontal equal to the latitude of the collector location less than 4.0 kWh/ m²·day (1.2 kBtu/ft²/day), accounting for existing buildings, permanent infrastructure that is not part of the building project, topography, and trees.
- A commitment to purchase electricity products complying with the Green-e Energy National Standard for Renewable Electricity Products of at least 7 kWh/ft² (75 kWh/m²) of conditioned space each year until the cumulative purchase totals 70 kWh/ft² (750 kWh/m²) of conditioned space.

Modify Section 7.4.1.1.2 as follows:

7.4.1.1.2 Alternate Renewables Approach: Reduced On-Site Renewable Energy Systems and Higher-Efficiency Equipment. *Building projects* complying with this approach shall comply with the applicable equipment efficiency requirements in Normative Appendix B, the water-heating efficiency requirements in Section 7.4.4.1, equipment efficiency requirements in Section 7.4.7.1, and the applicable ENERGY STAR® requirements in Section 7.4.7.3.2, and shall contain *on-site renewable energy systems* that provide the annual energy production equivalent of not less than 4.0 kBtu/ft² (13 kWh/m²) multiplied by the horizontal projection of the *gross roof area* in ft² (m²) for single-story buildings, and not less than 7.0 kBtu/ft² (22 kWh/m²) multiplied by the horizontal projection of the *gross roof area* in ft² (m²) for all other buildings. The annual energy production shall be the combined sum of all *on-site renewable energy systems*. For equipment listed in Section 7.4.7.3.2 that are also contained in Normative Appendix B, the installed equipment shall comply by meeting or exceeding both requirements. 7.4.2. Documentation shall be provided to the AHJ that indicates that the RECs associated with the on-site renewable energy system will be retained and retired by the owner. Where the building owner does not have ownership of the RECs associated with the on-site renewable energy system.

Public Review Draft

Proposed Addendum ac to Standard 189.1-2014

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

Second Public Review (December 2016) (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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHARE expressly disclaims such.

© 2013 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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









This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

(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 augments requirements for demand response, including modifications to changes made by Addenda b and ce to Standard 189.1-2014 (both approved for publication). This addendum deletes the existing Section 7.3.4 and replaces with new text that is based in part on concepts that are included in the 2015 International Green Construction Code.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes. Only these changes 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 substantive changes

Addendum ac to 189.1-2014

7.3.4 Automated Demand Response. *Building projects* shall contain automatic control systems that have the capability to reduce building equipment loads to lower electric peak demand of the building.

The building controls shall be designed with automated demand-response (Auto-DR) infrastructure capable of receiving demand-response requests from the utility, or electrical system operator, or third party DR program provider and automatically implementing load adjustments to the HVAC and lighting-systems.

7.3.4.1 HVAC Systems Zone Setpoints. *The building project's* HVAC systems shall be programmed to allow centralized demand reduction in response to a signal from a centralized contact or software point in accordance with the following:

a. The controls shall be programmed to remotely <u>automatically</u> adjust upward the zone operating cooling set points by a minimum of 3° F (1.7° C).

b. The controls shall programmed to remotely <u>automatically</u> adjust downward the zone operating heating set points by a minimum of 3° F (1.7° C).

c. The controls shall be programmed to remotely <u>automatically</u> adjust downward the zone operating cooling set points by a minimum of 2° F (1.1° C).

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

d. The Auto-DR strategy shall include both ramp-up and ramp-down logic to prevent the building peak demand from exceeding that expected without the demand-response implementation.

Exception to 7.3.4.1:

Systems serving areas deemed by the owner to be critical in nature.

7.3.4.2 Variable Speed Equipment. For HVAC equipment with variable speed control, the controls shall be programmed to allow remote <u>automatic</u> adjustment of the maximum speed of the equipment to 90% of design speed during Auto-DR events. Airflow adjustments shall not decrease the supply airflow rate below the level that would result in outdoor airflow being below the *minimum outdoor airflow rates* specified in Section 8.3.1.1, or that would cause adverse building pressurization problems.

7.3.4.3 Lighting. For *building projects* with interior lighting control systems controlled at a central point, such systems shall be programmed to allow Auto-DR. The programming shall reduce the total connected lighting power demand during a demand response event by not less than 15% but no more than 50% of the baseline power level. The baseline lighting power shall be determined in accordance with Section 7.4.6.1.1. For *building projects* without central lighting controls, demand response capabilities for lighting systems shall not be required.

For spaces not in the *daylight area* and connected to automated daylighting control, the lighting levels shall be uniformly reduced throughout the space.

Exceptions:

1. Luminaires or signage on emergency circuits.

2. Luminaires located within a *daylight area* that are dimmable and connected to automated daylighting control systems.

3. Lighting systems including dimming systems claiming a lighting power allowance *for institutional tuning* according to Section 7.4.6.1.1(d).

Public Review Draft

Proposed Addendum ar to Standard 189.1-2014

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

First Public Review (December 2016) (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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHARE expressly disclaims such.

© 2013 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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









This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

(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

The energy performance criteria in Section 7.5.2 currently includes energy cost and carbon emissions. This addendum would add a third criteria, based on source energy and zero energy performance index. There are two other addenda (w and x) under consideration which also make changes to 7.5.2, but they are entirely independent of this proposal.

Addendum ar to 189.1-2014

Add the following to Section 7.5.2 Performance Option A:

7.5.2(c) Zero Energy Performance Index. The zero energy performance index (zEPI₂₀₀₄) of the *proposed design*, including *on-site renewable energy systems*, shall be less than the target (zEPI₂₀₀₄ Target). zEPI₂₀₀₄ and zEPI₂₀₀₄ Target shall be calculated as described below.

$$\underline{zEPI_{2004}} = \frac{\sum_{i} PDSE_{i} \times r_{i}}{\sum_{i} BBSE_{i} \times r_{i}}$$

where

<u>zEPI</u> 2004	Zero energy performance index relative to the Standard 90.1 baseline as defined in the performance rating method of Appendix G
PDSE	Proposed design source energy use for energy type i
<u>BBSE_i</u>	Baseline building source energy use for energy type i. The baseline building is
	created following the rules in Standard 90.1, Appendix G.
<u>ri</u>	Source energy conversion factor for energy type i, value taken from Table 7.5.4A.

$$\underline{zEPI_{2004 \ Target}} = \frac{BBUSE + (BBRSE \times BPF) - RECSE}{BBUSE + BBRSE}$$

where

<u>zEPI2004 Target</u> Zero energy performance index target (zEPI2004 Target) required for achieving compliance with the standard, unitless.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

BBUSE	Baseline building unregulated energy use expressed in source units.
BBRSE	Baseline building regulated energy use expressed in source units.
BPF	Building performance factor taken from Table 7.5.2A, unitless.
RECSE	Renewable energy production determined from Section 7.4.1.1.1 and converted to
	source energy.

Informative Note: Informative Appendix I details a methodology for converting zEPI₂₀₀₄ to zEPI. zEPI₂₀₀₄ uses Standard 90.1 Appendix G to define the baseline building. The traditional definition of zEPI uses the median energy of the existing building stock in the year 2000 as the baseline. The traditional zEPI definition is used by the Architecture 2030 program and for other programs.

Energy Type	Conversion Factor (r)
Electricity, Imported	<u>3.15</u>
Electricity, Exported Renewable	<u>3.15</u>
Natural Gas	<u>1.09</u>
Fuel Oil (1,2,4,5,6,Diesel, Kerosene)	<u>1.19</u>
Propane & Liquid Propane	<u>1.15</u>
<u>Steam</u>	<u>1.45</u>
Hot Water	<u>1.35</u>
Chilled Water	<u>1.04</u>
Coal or Other	<u>1.05</u>

 TABLE 7.5.4
 - National Average Source Energy Conversion Factors

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

Add the following Informative Appendix:

INFORMATIVE APPENDIX I <u>zEPI CONVERSION METHODOLOGY</u>

The procedures in Section 7.5.4 result in a zEPI target (zEPI_{2004 Target}) and a zEPI rating (zEPI₂₀₀₄) which use 90.1 Appendix G to define the baseline building. The traditional baseline for zEPI uses CBECS 2003 to approximate the building stock at the turn of the millennium. Both zEPI_{2004 Target} and zEPI₂₀₀₄ can be converted to the traditional baseline by applying the multipliers in Table I-1.

 $\underline{zEPI} = \underline{zEPI}_{2004} \times M$

$\underline{zEPI_{Target}} = \underline{zEPI_{2004 Target}} \times \underline{M}$

where

zEPI zero energy performance index using CBECS 2003 as the baseline

zEPI₂₀₀₄ zero energy performance index using 90.1 Appendix G as the baseline

zEPI_{Target} zero energy performance index target using CBECS 2003 as the baseline

zEPI2004 Target zero energy performance index target using 90.1 Appendix G as the baseline

	<u>1A</u>	<u>2A</u>	<u>3A</u>	<u>4A</u>	<u>5A</u>	<u>6A</u>	<u>7</u>	<u>2B</u>	<u>3B</u>	<u>4B</u>	<u>5B</u>	<u>6B</u>	<u>3C</u>	<u>4C</u>	<u>8</u>
<u>Multifamily</u>	<u>0.93</u>	<u>0.86</u>	<u>0.81</u>	<u>0.78</u>	<u>0.79</u>	<u>0.79</u>	<u>0.76</u>	<u>0.86</u>	<u>0.91</u>	<u>0.80</u>	<u>0.80</u>	<u>0.79</u>	<u>0.82</u>	<u>0.77</u>	<u>0.74</u>
Healthcare/Hospit al	<u>0.82</u>	<u>0.83</u>	<u>0.82</u>	<u>0.83</u>	<u>0.86</u>	<u>0.86</u>	<u>0.87</u>	<u>0.81</u>	<u>0.82</u>	<u>0.82</u>	<u>0.85</u>	<u>0.86</u>	<u>0.87</u>	<u>0.83</u>	<u>0.85</u>
Hotel/Motel	<u>0.80</u>	<u>0.85</u>	<u>0.88</u>	<u>0.92</u>	<u>0.95</u>	<u>0.98</u>	<u>1.01</u>	<u>0.83</u>	<u>0.87</u>	<u>0.91</u>	<u>0.95</u>	<u>0.97</u>	<u>0.91</u>	<u>0.93</u>	<u>1.03</u>
Office	<u>0.75</u>	<u>0.76</u>	<u>0.71</u>	<u>0.71</u>	<u>0.72</u>	<u>0.72</u>	<u>0.70</u>	<u>0.75</u>	<u>0.73</u>	<u>0.71</u>	<u>0.72</u>	<u>0.72</u>	<u>0.78</u>	<u>0.72</u>	<u>0.68</u>
Restaurant	<u>0.92</u>	<u>0.93</u>	<u>0.92</u>	<u>0.92</u>	<u>0.92</u>	<u>0.91</u>	<u>0.90</u>	<u>0.93</u>	<u>0.94</u>	<u>0.92</u>	<u>0.92</u>	<u>0.92</u>	<u>0.94</u>	<u>0.93</u>	<u>0.88</u>
Retail	<u>0.61</u>	<u>0.62</u>	<u>0.59</u>	<u>0.61</u>	<u>0.61</u>	<u>0.61</u>	<u>0.61</u>	<u>0.61</u>	<u>0.59</u>	<u>0.61</u>	<u>0.60</u>	0.62	<u>0.61</u>	<u>0.64</u>	<u>0.61</u>
School	<u>0.83</u>	<u>0.83</u>	<u>0.79</u>	0.81	0.82	<u>0.84</u>	<u>0.83</u>	0.82	0.81	<u>0.80</u>	<u>0.83</u>	<u>0.84</u>	<u>0.84</u>	<u>0.80</u>	<u>0.75</u>
Semi-heated Warehouse	<u>2.07</u>	<u>0.94</u>	<u>0.80</u>	<u>0.68</u>	<u>0.61</u>	<u>0.56</u>	<u>0.54</u>	<u>1.02</u>	<u>1.06</u>	<u>0.74</u>	<u>0.66</u>	<u>0.60</u>	<u>0.88</u>	<u>0.75</u>	<u>0.49</u>
All Others	<u>0.93</u>	0.81	0.78	0.78	0.78	0.78	<u>0.79</u>	0.81	0.83	0.78	0.78	0.80	0.81	0.79	0.77

TABLE I-1 – zEPI Conversion Factors (M)

Public Review Draft

Proposed Addendum au to Standard 189.1-2014

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

First Public Review (December 2016) (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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHARE expressly disclaims such.

© 2013 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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









This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

(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 provides additional requirements for irrigation systems to improve water use efficiency, based in part on consideration of requirements included in the International Green Construction Code.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes. Only these changes 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 substantive changes

Addendum au to Standard 189.1-2014

Modify or add definitions in Section 3.2 as follows:

evapotranspiration (ET): the sum of evaporation from soil and plant surfaces and transpiration of water through leaf stomata. Evaporation accounts for the movement of water to the air from sources such as the soil, canopy interception, and water bodies. Transpiration accounts for the movement of water within a plant and the subsequent loss of water as vapor through stomata in its leaves.

ETc: evapotranspiration of the plant material derived by multiplying *ETo* by the appropriate plant <u>factor or coefficient</u>.

ETo: maximum reference *evapotranspiration* for a cool season grass as defined <u>calculated</u> by the standardized Penman-Monteith equation <u>based on or from the National Weather Service weather</u> station data where available.

ground cover: plantings other than turfgrass that are low-growing and form dense vegetation over the soil area.

This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

hydrozone: <u>an irrigated area of landscape in which the plants have similar water needs and are</u> irrigated by the same type of emission devices.

hydrozoning: to divide the landscape irrigation system into sections in order to regulate each zone's water needs based on plant materials, soil, and other factors.

irrigation station: A set of irrigation emission devices supplied water by a single control valve. Also referred to as an irrigation zone.

Modify Section 6 as follows:

6.3.1.2 Irrigation System Design. *Hydrozoning of automatic* irrigation systems to water different plant materials, such as *turfgrass* versus shrubs, is required. Landscaping sprinklers shall not be permitted to spray water directly on a building or within 3 ft (1 m) of a building. The design of the irrigation system shall be performed by an accredited or certified irrigation professional and shall be in accordance with the following:

- a. Irrigation systems:
 - 1. <u>Shall be based on *hydrozones*. *Turfgrass* areas shall be on their own irrigation station(s).</u>
 - 2. <u>Shall have backflow prevention in accordance with the plumbing code.</u>
 - 3. <u>Shall have a master valve on municipally supplied water sources that allows</u> pressurization of the irrigation mainline only when irrigation is scheduled.
 - 4. <u>Shall have a flow sensor and monitoring equipment that will shut off the control</u> valve if the flow exceeds normal flow from an irrigation station.
 - 5. Shall prevent piping from draining between irrigation events.
- b. <u>Irrigation emission devices shall comply with ASABE/ICC 802 Landscape Irrigation</u> <u>Sprinkler and Emitter Standard.</u>
- c. <u>Irrigation sprinklers</u>:
 - 1. <u>Shall not spray water directly on buildings or hardscape area.</u>
 - 2. <u>Shall have matched precipitation rate nozzles within an irrigation station.</u>
 - 3. <u>Shall be prohibited on landscape areas having any dimension less than 4 feet (1220 mm).</u>
 - 4. <u>Shall have an application rate less than or equal to 0.75 inches (19 mm) per hour on</u> slopes greater than 1 unit vertical in 4 units horizontal.

This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

- 5. <u>Shall be limited to use with *turfgrass* or *ground cover* areas with vegetation maintained at 8 inches (203 mm) or less in height.</u>
- 6. Where of the pop-up configuration, shall have a pop-up height of not less than 4 inches.
- d. Micro-irrigation zones:
 - 1. <u>Shall be equipped with pressure regulators, filters and flush assemblies.</u>
 - 2. Shall have indicators that allow confirmation of operation by visual inspection.

6.3.1.3 Controls. Any irrigation system for the project *site* shall be controlled by a qualifying *smart controller* that uses *evapotranspiration* (*ET*) and weather data to adjust irrigation schedules and that complies with the minimum requirements or an on-site rain or moisture sensor that automatically shuts the system off after a predetermined amount of rainfall or sensed moisture in the soil. Qualifying *smart controllers* shall be labeled according to <u>EPA WaterSense</u> <u>Specification for Weather-Based Irrigation Controllers</u>, Version 1.0, November 3, 2011 or tested in accordance with meet the minimum requirements, as listed below, when tested in accordance with of Irrigation Association SWAT Climatologically -Based Controllers, 8th Draft-Testing Protocol. *Smart controllers* that use *ET* data shall provide use the following inputs for calculating appropriate irrigation amounts:

a. *Irrigation adequacy*—80% minimum *ETc*.

b. Irrigation excess—not to exceed 10% of ETc.

Exception to 6.3.1.3: A temporary irrigation system used exclusively for the establishment of new landscape shall be exempt from this requirement. Temporary irrigation systems shall be removed or permanently disabled at such time as the *landscape establishment period* has expired.

6.3.1.3.1 The following settings and schedule for the irrigation control system shall be posted on or adjacent to the controller:

a. Precipitation rate of each *irrigation station*b. Plant factors for each *hydrozone*c. Soil type
d. Rain sensor settings
e. Soil moisture sensor settings, where installed
f. Peak demand schedule including run times, cycle starts and soak times
g. Maximum runtimes to prevent water runoff.

Modify Section 11 Normative References as follows:

This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

American Society of Agricultural and Biological Engineers (ASABE) 2950 Niles Road Saint Joseph, MI 49085, United States 1-269-429-0300; www.asabe.org

ASABE/ICC 802-2014

Landscape Irrigation Sprinkler and Emitter Standard 6.3.1.2

Irrigation Association (IA) 6540 Arlington Boulevard-8280 Willow Oaks Corporate Drive, Suite 400 Falls Church-Fairfax, VA 22042-663822031, United States 1-703-536-7080; www.irrigation.org

Smart Water Application Technolog<u>yies</u> (SWAT) Climatological<u>ly</u> Based Controllers<u>.</u> 8th Draft Testing Protocol — November 2006 <u>September 2008</u>

United States Environmental Protection Agency (EPA) Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington, DC 20460, United States 1-919-541-0800; www.epa.gov ENERGY STAR® 1-888-782-7937 WaterSense 1-866-987-7367 and 1-202-564-2660

WaterSense Specification for Weather-Based Irrigation Controllers, Version 1.0, November 3, 2011

 Smart Water Application Technologyies (SWAT),

 Turf and Landscape Irrigation Equipment System

 Smart Controllers, Climatologically Based

 Controllers

 WaterSense Specification for Weather-Based
 6.3.1.3

 Irrigation Controllers
 6.3.1.3

Public Review Draft

Proposed Addendum ax to Standard 189.1-2014

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

First Public Review (December 2016) (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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHARE expressly disclaims such.

© 2013 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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









This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

(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 is intended to modify the existing requirements on water features by focusing on those circumstances, malfunctioning automatic water-refilling values, that are most likely to use excessive water.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes. Only these changes 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 substantive changes.

Addendum ax to 189.1-2014

Modify Section 6.4.3 as follows:

6.4.3 Special Water Features. Water use shall comply with the following:

a. Ornamental fountains and other ornamental water features shall be supplied either by *alternate on-site sources of water* or by municipally *reclaimed water* delivered by the local water utility acceptable to the *AHJ*. Fountains and other features <u>equipped</u> <u>with automatic water refilling valves</u> shall be equipped with (1) makeup water meters, (2) leak detection devices that shut off water flow if a leak of more than 1.0 gal/h (3.8 L/h) is detected, and (3) equipment to recirculate, filter, and treat all water for reuse within the system.

Exception to 6.4.3(a): Where *alternate on-site sources of water* or municipally *reclaimed water* are not available within 500 ft (150 m) of the *building project site, potable water* is allowed to be used for water features with less than 10,000 gallon (38,000 L) capacity.

©2016 ASHRAE: This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document. This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such. The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

Public Review Draft

Proposed Addendum ay to Standard 189.1-2014

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

First Public Review (December 2016) (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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHARE expressly disclaims such.

© 2013 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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









This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

(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 would add requirements for dual plumbing in new buildings so that nonpotable waters (when available) can be used to flush toilets and urinals. This requirement is expected to add less than 10% to the plumbing costs in new construction, but it is usually cost prohibitive to re-plumb an existing building to accommodate alternate water sources. Toilets and urinals represent approximately 30% of water use in commercial buildings, and offer a large opportunity to preserve potable water resources.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes. Only these changes 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 substantive changes.

Addendum ay to 189.1-2014

Modify section 6.4.2 to add the following new section:

6.4.2 Building Water Use Reduction

6.4.4 Dual Water Supply Plumbing

<u>6.4.4.1</u> Where sufficient supply of *reclaimed water* or *alternate on-site sources of water* is available or planned to be available within 5 years of completed building construction,

©2016 ASHRAE: This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document. This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such. The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

the water supply system within the building shall be installed to allow the supply of reclaimed or alternative water to all urinals and water closets.

Exceptions:

a. Existing buildings under renovation, where the water supply to the urinals and water closets within the building is to remain intact, shall not be required to supply non-potable water to urinals and water closets.

b. Urinals and water closets designed to operate without the use of water shall not be required to have alternate or reclaimed water supply to the fixture.

©2016 ASHRAE: This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document. This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such. The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

This is a working draft document intended for review only by the cognizant ASHRAE groups and other designated reviewers and is not for distribution to any private interests, individuals or third parties that are not designated as ASHRAE reviewers for this document.

This document may not be distributed in whole or in part in either paper or electronic form outside of the PC without the express permission of the MOS and shall include a statement indicating such.

The appearance of any technical data or editorial material in this draft document does not constitute endorsement, warranty or guaranty by ASHRAE of any product, service, process, procedure, design, or the like, and ASHRAE expressly disclaims such.

(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 proposes to add exceptions to the calculation of the area of greenfield sites that must consist of biodiverse plantings other than turfgrass. Such plantings are required by the standard to realize the benefits of such plantings, relative to turfgrass, for pollinators, birds, and other wildlife, and to reduce the negative impacts from power tools, fertilizers, and herbicides. These exceptions recognize common functional purposes of turfgrass by excepting certain areas from the calculation of the area that must meet the requirement for biodiverse plantings.

Addendum az to Standard 189.1-2014

Revise section 5.3.3.2 as follows:

5.3.3.2 Greenfield Sites. On a greenfield site:

a. <u>More than 20% existing native or adapted plants:</u> where more than 20% of the area of the predevelopment *site* has existing *native plants* or *adapted plants*, a minimum of 20% of the area of *native plants* or *adapted plants* shall be retained.

b. Less than 20% existing native or adapted plants:

<u>i.</u> where 20% or less of the area of the predevelopment *site* has existing *native plants* or *adapted plants*, a minimum of 20% of the *site* shall be developed or retained as vegetated area. Such vegetated areas include bioretention facilities, rain gardens, filter strips, grass swales, vegetated level spreaders, constructed *wetlands*, planters, and open space with plantings.

<u>ii.</u> A minimum of 60% of such the vegetated area shall consist of *biodiverse planting* of *native plants* and/or *adapted plants* other than *turfgrass*.

Exception to ii: The following areas shall not be included in the calculations: dedicated sports fields, driving ranges, burial grounds, vegetated pavers, and the minimum fire lanes required by the jurisdiction.



BSR/ASHRAE/ASHE Standard 189.3P

Public Review Draft

Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities

Fifth Public Review (December 2016) (Draft Shows Proposed Independent Substantive Changes to Previous Public Review Draft)

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 <u>www.ashrae.org/standards-research--technology/public-review-drafts</u> 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 <u>www.ashrae.org/bookstore</u> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

© 2016 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any pat of this document must be obtained from the ASHRAE Manager of Standards, 1791 Tullie Circle, NE, Atlanta, GA 30329. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: <u>standards.section@ashrae.org</u>.

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



American Society for Healthcare Engineering of the American Hospital Association BSR/ASHRAE/ASHE Standard 189.3P, Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities Fifth Independent Substantive Change 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

ASHRAE addresses the specific ventilation requirements of a healthcare facility separately from the general ventilation requirements via ASHRAE/ASHE Standard 170 in lieu of ASHRAE Standard 62.1. This standard has been developed to address the sustainability of healthcare facilities as a document paralleling yet distinct from ASHRAE/USGBC/IES Standard 189.1. The tremendous work already accomplished and established by that standard has provided a solid framework and clear path for the development of this standard, and as such has become a necessary and primary reference that this standard employs.

The development of this standard has also illuminated some unique challenges created by our need to reference other standards, namely ASHRAE/IES Standard 90.1 and ASHRAE Standard ASHRAE/USGBC/IES Standard 189.1, and the continuous maintenance process that allows those standards to continually change and improve. Additionally, re-publication of these documents in order for promulgation of the standards into the building codes during their update cycles results in a flurry of changes as the alignment of each of those standards accomplishes their respective goals. As this committee has wrestled with the necessary criteria to include in our document, we readily acknowledge that the reference documents that form the basis information for compliance has in some cases moved forward without us. In order to join the parade of continuous improvement, we have had to establish a starting point in which to begin. Please recognize, as we have, that the process has many flaws but the objective is to align with and benefit from the many efforts that those standards make while also offering the perspective and alternative view that this special subset of the building sector provides.

Healthcare facilities have a keen interest and, in many cases, the desire to develop in a sustainable manner. These facilities are often the largest and most energy intensive buildings in a community, and their leadership recognizes that saving energy and operating costs are an opportunity to reflect smart decision-making, care and steward-ship of the environment and fiscal practicality. In a competitive and regulated market there are, however, limitations in the ability of healthcare facilities to provide the necessary capital for the increasingly complex new facilities needed to meet sustainability objectives, especially as they presently experience eroding financial compensation for their life-sustaining services. Likewise, the special requirements of the facility's use often dictate needs that are divergent from other facility types, and functions that may compel energy consumption for the sake of patient and worker safety. The intent of this standard is to serve as a bridge between the stretch goals of the sustainable vision offered in Standard 189.1 and the practical realities expressed by our partners in the healthcare community.

The committee appreciates the intent and support of the many commenters that have provided helpful insight and fair counterpoint that have guided us to this present consensus document. We are better for your efforts and whole-heartedly thank you for your time and attention to making each and every ASHRAE document represent all the stakeholders affected by it. We also provide a hearty shout out to our co-sponsor partners at ASHE for their embrace of the spirit of sustainability that this document achieves and to the ASHRAE staff for their administrative and advisory support as we have worked our way through this process lo these many years.

[Note to Reviewers: Section numbers cited in this standard coincide with the section numbering in ANSI/ASHRAE/USGBC/IES Standard 189.1-2014. Sections cited in this standard either replace, modify, or delete sections in Standard 189.1. In addition, this standard includes new provisions/sections that are not included in Standard 189.1. The informative appendices in this proposed standard have been identified alphabet-

BSR/ASHRAE/ASHE Standard 189.3P, *Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities* Fourth Independent Substantive Change Public Review Draft

ically (Informative Appendices I, J and K) so they do not conflict with the appendices currently published in ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 (Appendices A through H). A viewable version of ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 is available at <u>http://www.techstreet.com/ashrae/ashrae_standards.html.</u>]

[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 <u>underlining</u> (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 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 substantive changes.]

Revise Section 7 as shown below. The remainder of Section 7 is unchanged.

[...]

7.4.1.1 On-Site Renewable Energy Systems. Building projects shall comply with either the Standard Renewables Approach in 7.4.1.1.1 or the higher efficiency equipment requirements defined in the Alternate Renewables Approach in Section 7.4.1.1.2 of ANSI/ASHRAE/USGBC/IES Standard 189.1. Where Section 7.4.1.1.1 is used, it is permissible to exclude helicopter landing areas shall be excluded from the calculation of gross roof area for on-site renewable energy systems. Where Section 7.4.1.1.2 is used, on-site renewable energy shall not be required.

[...]

7.4.3.10.3 HVAC Setpoint Control. Provide automatic controls configured to reset space temperature <u>and reduce</u> <u>cooling, heating and/or reheat energy</u> setpoint during unoccupied periods. Provide local override system to allow for unscheduled procedures. The offset above and below occupied space temperature setpoint shall be as follows:

- a. Scheduled periods of vacancy greater than two hours shall reset cooling and heating temperature setpoints by at least 5°F (2.8°C).
- b. Periods of vacancy detected by a local occupant sensor or for scheduled periods of vacancy less than two hours shall reset cooling and heating temperature setpoints by 3°F (1.7°C).

[...]

7.4.3.11.3 HVAC Setpoint Control. Provide automatic controls configured to reset space temperature setpoint up to 5°F (2.85°C) to reduce cooling, heating and/or reheat energy above the occupied operating cooling setpoint-and 5°F (2.85°C) below the occupied operating heating setpoint-during unoccupied periods. Room humidity shall be controlled to maintain the indoor dew point temperature below the indoor dry bulb temperature and the temperatures of all indoor surfaces with the potential for condensation. Provide local override system to allow for unscheduled procedures. Sensors in the room shall be permitted to override unoccupied mode. Multiple zone HVAC systems serving the Operating Room(s) shall meet the provisions of AHSRAE 90.1 Section 6.5.3.4. Unoccupied Operating Rooms shall be determined by the following criteria:

- a. All procedures, scheduled and unscheduled, have been completed.
- b. Staff activities and environmental services activities have been completed.

Exception: An Operating Room designated to be an Emergency Operating Room(s). [...]

Not for publication. This document is part of the NSF International standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

NSF/ANSI 50 – 2016 Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities

- . . 9 Recessed automatic surface skimmers
- .

9.5.3 Skimmer cleanability

9.5.3.1 The cover shall be designed to be easily cleanable. Covers with interior exposed structural ridges shall conform to the following. Non-exposed structural ridges are exempt from sections 9.5.3.1.1, 9.5.3.1.2 and 9.5.3.1.3.

9.5.3.1.1 Ridges with a height of less than Y4 in are exempt from radius or fillet requirements.

9.5.3.1.2 Ridges with a height greater than or equal to Y4 in shall have a minimum radius of Y4 in (0.25 in, 6.4 mm) or provide a 135 degree, Y4 in fillet at the base of the ridges (See figure 1).

9.5.3.1.3 Ridges forming an open box, triangle, or any shape shall not have a depth greater than the internal width of the shape. Shapes that are formed by ridges of multiple heights shall have their depth defined by the ridges that allow for the shape to be accessed for cleaning.

- a. For triangular shapes, the width shall be defined as the length of the shortest median of the triangle (a median is the line from a corner of the triangle to the midpoint of the opposite side). See Figure 1 below.
- For rectangular shapes, the width shall be defined as the smaller of the two major dimensions.
- c. For shapes in the form of a section of a circular sector, the width shall be defined as the smallest distance measured between the midpoints of opposite sides. See Figure 2 below.





Figure 2 - Medians of a Triangle

Figure 3 - Section of a Circular Sector

BSR/UL 60335-2-40-201X, Standard for Safety for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers

19.101DV **D2** - Modification by adding the following after the third paragraph of 19.101

In appliances in which the compressor is enclosed in an unventilated enclosure where temperatures of the enclosure or components with in the enclosure might become a hazard upon loss of refrigerant flow, the refrigerant flow shall be reduced by removal of the refrigerant from the system.

The test shall be conducted under each of the following conditions:

appliance de-energized The appliance shall be operated under the conditions of Clause 11 at the lower limit of the rated voltage and an ambient temperature of 23 °C ± 5°C. The appliance shall be operated until all components and the enclosure temperatures stabilize or are declining, but for not less than 24 hours, or until the operation of the compressor is terminated by a non-self-resetting protective device. Any self-resetting protective devices that actuates during this test shall be allowed to cycle as interided.

Component temperatures shall:

not exceed the temperature limits in Clause 11

not exceed the relative thermal index of the material in accordance with UL746B and CAN/CSA C22.2 No. QMV for polymeric materials

22.112DV.18 D2 - Modification by adding the following:

Self-resetting protective devices which cycle during 19.101DV shall be rated for at least 100,000 cycles for line break devices and 5,000 cycles for non-line break.

Note: There a number of solutions which may be effective in meeting the test criteria. For example; a) thermal based solutions such as electronic devices like HDCI and others and electromechanical devices like bi-metal snap disc and similar thermal based devices, or b) refrigerant pressure sensitive devices.

Compliance is checked by inspection and in case of doubt, the test shall be conducted.

30.2.3DV D2 - Modification by adding the following to the Part 1:

For appliances in which the compressor is enclosed in an unventilated non-metallic enclosure, polymeric materials of the enclosure and components within the enclosure shall be classified V-0 or higher according to IEC 60695-11-0.

Compliance is checked by inspection.

Weognander and an interest of the second of

BSR/UL 61010-2-201, Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-201 Particular **Requirements for Control Equipment**

PROPOSAL

5.3DV D2 Modification of Clause 5.3 of the Part 1 by replacing the text with the following requirement:

in commencement Open equipment shall be exempt from the Durability of markings test unless cleaning in the area of required markings is recommended by the manufactures

^{1.} Addition of Requirements for Durability of Markings for Open Equipment to Clause 5.3 of UL 61010-2-201 as a National Difference

BSR/UL 427, Standard for Safety for Refrigerating Units

1. Proposed Addition Of Alternate Method For Evaluating Protective Electronic Circuits And Controls Using Requirements Based On the Standard for Safety of Household and Similar Electrical Appliances, Part 1: General Requirements, UL 60335-1

20.25 The electronic control devices specified in 20.1 - 20.24 may alternatively be from the evaluated to the requirements in Supplement SC, "UL 60335-1 Based Requirements for the Evaluation of Electronic Circuits," in the Stand real Rea areal Real and a strategies of the second strategies and the



Standards Action Publishing Schedule for 2017, Volume No. 48

*The "Submit End" deadline applies to forms received by Monday, 5:00 PM ET

ISSUE	SUBMIT START	*SUBMIT END 5PM	SA PUBLISHED	30-DAY PR END	45-DAY PR END	60-DAY PR END
1	12/20/2016	12/26/2016	Jan-6	2/5/2017	2/20/2017	3/7/2017
2	12/27/2016	1/2/2017	Jan-13	2/12/2017	2/27/2017	3/14/2017
3	1/3/2017	1/9/2017	Jan-20	2/19/2017	3/6/2017	3/21/2017
4	1/10/2017	1/16/2017	Jan-27	2/26/2017	3/13/2017	3/28/2017
5	1/17/2017	1/23/2017	Feb-3	3/5/2017	3/20/2017	4/4/2017
6	1/24/2017	1/30/2017	Feb-10	3/12/2017	3/27/2017	4/11/2017
7	1/31/2017	2/6/2017	Feb-17	3/19/2017	4/3/2017	4/18/2017
8	2/7/2017	2/13/2017	Feb-24	3/26/2017	4/10/2017	4/25/2017
9	2/14/2017	2/20/2017	Mar-3	4/2/2017	4/17/2017	5/2/2017
10	2/21/2017	2/27/2017	Mar-10	4/9/2017	4/24/2017	5/9/2017
11	2/28/2017	3/6/2017	Mar-17	4/16/2017	5/1/2017	5/16/2017
12	3/7/2017	3/13/2017	Mar-24	4/23/2017	5/8/2017	5/23/2017
13	3/14/2017	3/20/2017	Mar-31	4/30/2017	5/15/2017	5/30/2017
14	3/21/2017	3/27/2017	Apr-7	5/7/2017	5/22/2017	6/6/2017
15	3/28/2017	4/3/2017	Apr-14	5/14/2017	5/29/2017	6/13/2017
16	4/4/2017	4/10/2017	Apr-21	5/21/2017	6/5/2017	6/20/2017
17	4/11/2017	4/17/2017	Apr-28	5/28/2017	6/12/2017	6/27/2017
18	4/18/2017	4/24/2017	May-5	6/4/2017	6/19/2017	7/4/2017
19	4/25/2017	5/1/2017	May-12	6/11/2017	6/26/2017	7/11/2017
20	5/2/2017	5/8/2017	May-19	6/18/2017	7/3/2017	7/18/2017
21	5/9/2017	5/15/2017	May-26	6/25/2017	7/10/2017	7/25/2017
22	5/16/2017	5/22/2017	Jun-2	7/2/2017	7/17/2017	8/1/2017
23	5/23/2017	5/29/2017	Jun-9	7/9/2017	7/24/2017	8/8/2017
24	5/30/2017	6/5/2017	Jun-16	7/16/2017	7/31/2017	8/15/2017
25	6/6/2017	6/12/2017	Jun-23	7/23/2017	8/7/2017	8/22/2017
26	6/13/2017	6/19/2017	Jun-30	7/30/2017	8/14/2017	8/29/2017
27	6/20/2017	6/26/2017	Jul-7	8/6/2017	8/21/2017	9/5/2017
28	6/27/2017	7/3/2017	Jul-14	8/13/2017	8/28/2017	9/12/2017
29	7/4/2017	7/10/2017	Jul-21	8/20/2017	9/4/2017	9/19/2017



Standards Action Publishing Schedule for 2017, Volume No. 48

*The "Submit End" deadline applies to forms received by Monday, 5:00 PM ET

ISSUE	SUBMIT START	*SUBMIT END 5PM	SA PUBLISHED	30-DAY PR END	45-DAY PR END	60-DAY PR END
30	7/11/2017	7/17/2017	Jul-28	8/27/2017	9/11/2017	9/26/2017
31	7/18/2017	7/24/2017	Aug-4	9/3/2017	9/18/2017	10/3/2017
32	7/25/2017	7/31/2017	Aug-11	9/10/2017	9/25/2017	10/10/2017
33	8/1/2017	8/7/2017	Aug-18	9/17/2017	10/2/2017	10/17/2017
34	8/8/2017	8/14/2017	Aug-25	9/24/2017	10/9/2017	10/24/2017
35	8/15/2017	8/21/2017	Sep-1	10/1/2017	10/16/2017	10/31/2017
36	8/22/2017	8/28/2017	Sep-8	10/8/2017	10/23/2017	11/7/2017
37	8/29/2017	9/4/2017	Sep-15	10/15/2017	10/30/2017	11/14/2017
38	9/5/2017	9/11/2017	Sep-22	10/22/2017	11/6/2017	11/21/2017
39	9/12/2017	9/18/2017	Sep-29	10/29/2017	11/13/2017	11/28/2017
40	9/19/2017	9/25/2017	Oct-6	11/5/2017	11/20/2017	12/5/2017
41	9/26/2017	10/2/2017	Oct-13	11/12/2017	11/27/2017	12/12/2017
42	10/3/2017	10/9/2017	Oct-20	11/19/2017	12/4/2017	12/19/2017
43	10/10/2017	10/16/2017	Oct-27	11/26/2017	12/11/2017	12/26/2017
44	10/17/2017	10/23/2017	Nov-3	12/3/2017	12/18/2017	1/2/2018
45	10/24/2017	10/30/2017	Nov-10	12/10/2017	12/25/2017	1/9/2018
46	10/31/2017	11/6/2017	Nov-17	12/17/2017	1/1/2018	1/16/2018
47	11/7/2017	11/13/2017	Nov-24	12/24/2017	1/8/2018	1/23/2018
48	11/14/2017	11/20/2017	Dec-1	12/31/2017	1/15/2018	1/30/2018
49	11/21/2017	11/27/2017	Dec-8	1/7/2018	1/22/2018	2/6/2018
50	11/28/2017	12/4/2017	Dec-15	1/14/2018	1/29/2018	2/13/2018
51	12/5/2017	12/11/2017	Dec-22	1/21/2018	2/5/2018	2/20/2018
52	12/12/2017	12/18/2017	Dec-29	1/28/2018	2/12/2018	2/27/2018