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American National Standards

Call for comment on proposals listed

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

Ordering Instructions for “Call-for-Comment” Listings

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

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

* Standard for consumer products
Comment Deadline: September 4, 2016

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

Addenda


This addendum proposes to allow Group A2L refrigerants in high-probability systems for human comfort. This proposal does not change how ASHRAE Standard 15 deals with Group A2L refrigerants in industrial applications or machinery rooms. Some basic requirements for refrigerant leak detectors have been added. However, research and development of refrigerant leak detectors is continuing, and additional requirements to specify robust and reliable refrigerant leak detection may be expected.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: https://osr.ashrae.org/default.aspx

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

Addenda


This addendum proposes to revise the current requirements for renewable energy systems and the related exceptions. It would require that renewable energy certificates (RECs) be retained and retired by the building owner for all compliance options.

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


This addendum adds SI Values to the requirements for kitchen hood exhausts.

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

Standards Action - August 5, 2016 - Page 2 of 80 Pages
**ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)**

**Addenda**


The purpose of this addendum is to update Performance Option A of Section 7.5.2 to be consistent with recent changes to the Performance Rating Method as published in the 2015 Supplement to Standard 90.1-2013.

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

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**HI (Hydraulic Institute)**

**Revision**

BSR/Hi 9.6.1-201x, Rotodynamic Pumps - Guideline for NPSH Margin (revision of ANSI/Hi 9.6.1-2012)

This guideline addresses rotodynamic general purpose pumps with absorbed power levels up to 4 megawatts (MW) (5300 horsepower [hp]) and impeller inlet tip speeds less than 40 meters per second (m/s) (130 feet per second [ft/s]). It describes the benefits to pump longevity when the net positive suction head (NPSH) available is greater than the NPSH required by a suitable margin, and suggests margins for specific applications.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Darcy Chiriboga, (973) 267-9700, dchiriboga@pumps.org

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**NSF (NSF International)**

**Revision**

BSR/NSF 14-201x (i79r2), Plastics piping system components and related materials (revision of ANSI/NSF 14-2014, ANSI/NSF 14-201x (i79r1))

The physical, performance, and health effects requirements in this Standard apply to thermoplastic and thermostet plastic piping system components including, but not limited to, pipes, fittings, valves, joining materials, gaskets, and appurtenances.

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

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**ASME (American Society of Mechanical Engineers)**

**Revision**

BSR/ASME B16.23-201x, Cast Copper Alloy Solder Joint Drainage Fittings: DWV (revision of ANSI/ASME B16.23-2011)

This Standard establishes specifications for cast copper alloy solder joint drainage fittings, designed for use in drain, waste, and vent (DWV) systems. These fittings are designed for use with seamless copper tube conforming to ASTM B306, Copper Drainage Tube (DWV), as well as fittings intended to be assembled with soldering materials conforming to ASTM B32, or tapered pipe thread conforming to ASME B1.20.1.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Erika Lawson, (212) 591-8094, lawsone@asme.org
**UL (Underwriters Laboratories, Inc.)**

**Revision**

BSR/UL 827-201x, Standard for Safety for Central-Station Alarm Services (revision of ANSI/UL 827-2014)

Document dated 8-5-16 recirculates changes that were originally proposed on 4-29-16, including requirements for equivalent options for communication services providers and an alternate approach to Central-Station automation system resiliency.

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

Send comments (with copy to psa@ansi.org) to: Paul Lloret, (510) 319-4269, Paul.E.Lloret@ul.com

**UL (Underwriters Laboratories, Inc.)**

**Revision**

BSR/UL 1083-201X, Standard for Safety for Household Electric Skillets and Frying-Type Appliances (Proposals dated 8/5/16) (revision of ANSI/UL 1083-2013)

Use of commercially available peanut oil for testing of deep fryers, oil fondues, and skillets, Revised 31.2.2.1, 31.2.4.3, 31.2.10.1, 40.2, 46.3.1, 46.4.1.

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

Send comments (with copy to psa@ansi.org) to: Linda Phinney, (510) 319-4297, Linda.L.Pphinney@ul.com

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**Comment Deadline: September 19, 2016**

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

**Reaffirmation**

BSR/ASA S1.40-2006 (R201x), Specifications and Verification Procedures for Sound Calibrators (reaffirmation of ANSI/ASA S1.40-2006 (R2011))

This standard specifies performance requirements for coupler-type sound calibrators in regard to sound pressure level, frequency, and total distortion generated. It also gives requirements for environmental conditions, electromagnetic compatibility, and instrument marking and documentation. It details the tests necessary to verify that a model of sound calibrator conforms to all the requirements as well the method for periodic testing.

Single copy price: $150.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Neil Stremmel, (631) 390-0215, asastds@acousticalsociety.org

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

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

**New Standard**

BSR/ASHRAE Standard 214P-201x, Standard for Determining and Expressing Building Energy Performance in a Rating Program (new standard)

There is no standard for the design of a building rating system. There are many commercial entities that are rating buildings utilizing a number of different building rating systems yielding varying results. ASHRAE’s Executive Committee spoke with several government and regulatory agencies as to the need and viability for this standard. The feedback received was an overwhelming need for a standard that provides uniformity in the building energy labeling and disclosure process. Std. 214 fulfills this need for a non-commercial consensus standard that can be used in international, national, and regional legislation, policy making, and regulation activities.

Single copy price: $35.00

Obtain an electronic copy from: Free download at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

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

**New Standard**

BSR/ASHRAE/ACCA Standard 211P-201x, Standard for Commercial Building Energy Audits (new standard)

The purpose of this standard is to establish consistent practices for conducting and reporting audits for commercial buildings.

Single copy price: $35.00

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

Order from: standards.section@ashrae.org

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

**ASTM (ASTM International)**

**Revision**

BSR/ASTM D3679-201x, Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding (revision of ANSI/ASTM D3679-2011)

http://www.astm.org/ANSI_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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

**Addenda**


This addendum proposes to delete Performance Path B and sections of Appendix C, motivated in part by changes to the Performance Rating Method published in the 2015 Supplement to Standard 90.1-2013.

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
ASTM (ASTM International)

**Revision**


http://www.astm.org/ANSI_SA

Single copy price: Free

Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org

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

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ESTA (Entertainment Services and Technology Association)

**Revision**

BSR E1.4-3-201x, Entertainment Technology - Manually Operated Hoist Rigging Systems (revision and partition of ANSI E1.4-2014)

This standard applies to permanently installed, human-powered manually operated hoists used as part of rigging systems for raising, lowering, and suspension of scenery, properties, lighting, and similar loads. This standard establishes requirements for the design, manufacture, installation, inspection, and maintenance of manual hoist systems for lifting and suspension of loads for performance, presentation, and theatrical production.

Single copy price: Free

Order from: Karl Ruling, (212) 244-1505, standards@esta.org

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

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AWS (American Welding Society)

**Revision**


This standard is a glossary of the technical terms used in the welding industry. Its purpose is to establish standard terms to aid in the communication of welding information. Since it is intended to be a comprehensive compilation of welding terminology, nonstandard terms used in the welding industry are also included. All terms are either standard or nonstandard. They are arranged in word-by-word alphabetical sequence.

Single copy price: $84.00

Order from: Stephen Borrero, (305) 443-9353, sborrero@aws.org

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

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CSA (CSA Group)

**Reaffirmation**


Details test and examination criteria for ventless firebox enclosures for unvented decorative room heaters. Fireboxes covered by this standard are intended for use with unvented decorative room heaters which comply with ANSI Z21.11.2 for installation in solid fuel-burning fireplaces.

Single copy price: Free

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

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

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NACE (NACE International, The Worldwide Corrosion Authority)

**Revision**

BSR/NACE SP0508-201x, Methods of Validating Equivalence to ISO 8502-9 on Measurement of the Levels of Soluble Salts (revision of ANSI/NACE SP0508-2010)

The purpose of this standard practice is to define a method that shows equivalence of other methods for measuring the level of contamination of soluble salts on surfaces to the Bresle patch method defined by ISO 8502-9. This standard practice provides a way to establish equivalence by testing and comparing results of the tests to meet established criteria that would be achieved using the method specified in ISO 8502-9. Equivalence is evaluated at three salt levels (30 mg/m², 50 mg/m², and 85 mg/m²) on three surface conditions (grit-blasted steel, zinc silicate preconstruction primer on steel, and rusted steel).

Single copy price: $32.00 (NACE members); $49.00 (non-members)

Order from: NACE International

Send comments (with copy to psa@ansi.org) to: Richard Southard, (281) 228-6485, rick.southard@nace.org

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NPES (ASC CGATS) (Association for Suppliers of Printing, Publishing and Converting Technologies)

**Reaffirmation**

BSR CGATS/ISO 12640-3-2007 (R201x), Graphic technology - Prepress digital data exchange - Part 3: CIELAB standard colour image data (CIELAB/SCID) (reaffirmation of ANSI CGATS/ISO 12640-3-2007)

This part of ISO 12640 specifies a set of standard large gamut colour images (encoded as 16-bit CIELAB digital data) that can be used for the evaluation of changes in image quality during coding, image processing (including transformation, compression and decompression), displaying on a colour monitor and printing. These images can be used for research, testing, and assessing of output systems such as printers, colour management systems, and colour profiles.

Single copy price: $80.00

Order from: Debra Orf, (703) 264-7200, dorf@npes.org

Send comments (with copy to psa@ansi.org) to: Same
Standards Action - August 5, 2016 - Page 7 of 80 Pages

NPES (ASC CGATS) (Association for Suppliers of Printing, Publishing and Converting Technologies)

Reaffirmation

BSR CGATS/ISO 15930-7-2010 (R201x), Graphic technology - Prepress digital data exchange using PDF - Part 7: Complete exchange of printing data (PDF/X-4) and partial exchange of printing data with external profile reference (PDF/X-4p) using PDF 1.6 (reaffirmation of ANSI/CGATS/ISO 15930-7-2010)

This part of CGATS/ISO 15930 specifies the use of the Portable Document Format (PDF) Version 1.6 for the dissemination of digital data intended for print reproduction. When all elements necessary for final print reproduction are contained within the file, it is designated as PDF/X-4. If a required ICC profile is externally supplied and unambiguously identified, it is designated as PDF/X-4p. Colour-managed, CMYK, gray, RGB or spot colour data are supported, as are PDF transparency and optional content. Files can be prepared for use with gray, RGB and CMYK printing characterizations.

Single copy price: $84.00
Obtain an electronic copy from: dorf@npes.org
Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org
Send comments (with copy to psa@ansi.org) to: Same

NPES (ASC CGATS) (Association for Suppliers of Printing, Publishing and Converting Technologies)

Reaffirmation

BSR CGATS/ISO 15930-8-2010 (R201x), Graphic technology - Prepress digital data exchange using PDF - Part 8: Partial exchange of printing data using PDF 1.6 (PDF/X-5) (reaffirmation of ANSI/CGATS/ISO 15930-8-2010)

This part of CGATS/ISO 15930 specifies the use of the Portable Document Format (PDF) Version 1.6 for the dissemination of digital data intended for print, whereby all elements necessary for final print reproduction are either included or provision is made for unique identification of externally supplied graphical content or n-colorant ICC profiles. Colour-managed, CMYK, gray, RGB or spot colour data are supported in any combination; as are PDF transparency and optional content. Files can be prepared for use with gray, RGB, CMYK and n-colorant printing characterizations.

Single copy price: $44.00
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Send comments (with copy to psa@ansi.org) to: Same

NPES (ASC CGATS) (Association for Suppliers of Printing, Publishing and Converting Technologies)

Reaffirmation

BSR CGATS.4-2011 (R201x), Graphic technology - Graphic arts reflection densitometry measurements - Terminology, equations, image elements and procedures (reaffirmation of ANSI CGATS.4-2011)

This standard defines terms, equations, and procedures for measurement, use, and communication of data obtained using reflection densitometry in the graphic arts. Graphic arts includes, but is not limited to, the preparation of material for, and volume production by, production printing processes, which include offset lithography, letterpress, flexography, gravure, and screen printing. This standard also applies to measurement of materials produced by systems such as photographic, ink jet, thermal transfer, electrophotographic, and toner technology (including off-press proofs), etc., when used for graphic arts applications.

Single copy price: $16.00
Obtain an electronic copy from: dorf@npes.org
Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org
Send comments (with copy to psa@ansi.org) to: Same

NSF (NSF International)

Revision

BSR/NSF 53-201x (i104r1), Drinking Water Treatment Units - Non-Health Effects (revision of ANSI/NSF 53-2015)

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce specific aesthetic-related (non-health effects) contaminants in public or private water supplies. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners as well as the minimum service-related obligations that the manufacturer shall extend to system owners.

Single copy price: Free
Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org
Send comments (with copy to psa@ansi.org) to: Same

NSF (NSF International)

Revision

BSR/NSF 42-201x (i92r1), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2015)

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce specific aesthetic-related (non-health effects) contaminants in public or private water supplies. Such systems include point-of-entry drinking-water treatment systems used to treat all or part of the water at the inlet to a residential facility or a bottled water production facility, and includes the material and components used in these systems.

Single copy price: Free
Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org
Send comments (with copy to psa@ansi.org) to: Same

NSF (NSF International)

Revision

BSR/NSF 44-201x (i41r1), Residential Cation Exchange Water Softeners (revision of ANSI/NSF 44-2015)

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of residential cation exchange water softeners. This Standard also specifies the minimum product literature that manufacturers shall supply to authorized representatives and owners, as well as the minimum service-related obligations that manufacturers shall extend to owners.

Single copy price: Free
Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org
Send comments (with copy to psa@ansi.org) to: Same

BSR/NSF 53-201x (i104r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2015)

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of point-of-use and point-of-entry drinking-water treatment systems that are designed to reduce specific health-related contaminants in public or private water supplies. Such systems include point-of-entry drinking-water treatment systems used to treat all or part of the water at the inlet to a residential facility or a bottled water production facility, and includes the material and components used in these systems.

Single copy price: Free
Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org
Send comments (with copy to psa@ansi.org) to: Same
NSF (NSF International)

Revision

BSR/NSF 55-201x (i42r1), Ultraviolet Microbiological Water Treatment Systems (revision of ANSI/NSF 55-2015)

The purpose of this Standard is to establish minimum requirements for the reduction of microorganisms using ultraviolet radiation (UV). UV water treatment systems covered by this Standard are intended for water that may be either microbiologically safe or microbiologically unsafe. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners, as well as the minimum service-related obligations that shall extend to system owners.

Single copy price: Free


Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org

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

NSF (NSF International)

Revision

BSR/NSF 58-201x (i76r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2015)

The purpose of this Standard is to establish minimum requirements for materials, design and construction, and performance of reverse osmosis drinking water treatment systems. This Standard also specifies the minimum product literature that manufacturers shall supply to authorized representatives and owners, as well as the minimum service-related obligations that manufacturers shall extend to system owners.

Single copy price: Free


Order from: Monica Leslie, (734) 827-5643, mleslie@nsf.org

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

SCTE (Society of Cable Telecommunications Engineers)

Revision

BSR/SCTE 40-201x, Digital Cable Network Interface Standard (revision of ANSI/SCTE 40-2012)

This standard defines the characteristics and normative specifications for the digital network interface between a cable television system and commercially available digital cable products that are used to access multi-channel television programming.

Single copy price: $50.00

Obtain an electronic copy from: standards@scte.org


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

SCTE (Society of Cable Telecommunications Engineers)

Revision

BSR/SCTE 41-201x, POD Copy Protection System (revision of ANSI/SCTE 41-2011)

This standard defines the characteristics and normative specifications for the system that prevents unrestricted copying of such high value content as it crosses the POD-Host interface.

Single copy price: $50.00

Obtain an electronic copy from: standards@scte.org


Send comments (with copy to psa@ansi.org) to: standards@scte.org
SCTE (Society of Cable Telecommunications Engineers)
Revision
BSR/SCTE 56-201x, Digital Multiprogram Distribution by Satellite (revision of ANSI/SCTE 56-2011)
This document analyzes the common elements among existing systems, defines and describes the functions of a generic system model, and identifies the processes and the minimum set of parameters of the various subsystems of the universal elements of a Satellite IRD.
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (with copy to psa@ansi.org) to: standards@scte.org

SCTE (Society of Cable Telecommunications Engineers)
Revision
BSR/SCTE 57-201x, System Information for Satellite Distribution of Digital Television for Cable and MMDS (revision of ANSI/SCTE 57-2011)
This document defines a Standard for System Information (SI) compatible with MPEG-2 compliant digital multiplex bitstreams constructed in accordance with ISO/IEC 13818-1 (MPEG-2) and transmitted over satellite for distribution on cable and MMDS. The document defines the standard protocol that carries relevant System Information (SI) tables contained within packets carried in the transport multiplex. The term, SI, will be used to refer to system-wide information in the Network Packet Identifier (PID).
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (with copy to psa@ansi.org) to: standards@scte.org

UL (Underwriters Laboratories, Inc.)
New National Adoption
BSR/UL 62841-3-4-201x, Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-4: Particular Requirements for Transportable Bench Grinders (identical national adoption of IEC 62841-3-4)
Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to psa@ansi.org) to: Beth Northcott, (847) 664-3198, Elizabeth.Northcott@ul.com

UL (Underwriters Laboratories, Inc.)
Revision
The following items are proposals for UL 2577: (a) Removal of two-component variable from silicone rubber material specified in table 7.1; (b) Assignment of a generic thermal index temperature of 95°C to PPA in table 7.1; and (c) Fixed temperature evaluation for exceptionally durable materials specified in paragraph 13.4 and new table 13.2 and new paragraph 13.4.1.
Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to psa@ansi.org) to: Derrick Martin, (510) 319-4271, Derrick.L.Martin@ul.com
Comment Deadline: October 4, 2016

ASME (American Society of Mechanical Engineers)

Reaffirmation
This Standard covers transmission roller chains, attachments, and sprockets. It is intended to facilitate fulfillment of the needs of users, distributors, and manufacturers of chain sprocket drives on a sound economic basis and in a manner consistent with sound engineering and manufacturing practices.
Single copy price: $39.00
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: Remington Richmond, (212) 591-8404, richmondr@asme.org

ASME (American Society of Mechanical Engineers)

Reaffirmation
BSR/ASME B29.100-2011 (R201X), Double-Pitch Roller Chains, Attachments, and Sprockets (reaffirmation of ANSI/ASME B29.100-2011)
This Standard covers double-pitch roller chains (and their attachments and sprockets) that consist of series of alternately assembled roller links and pin links in which the pins articulate inside the bushings and the rollers are free to turn on the bushings.
Single copy price: $108.00
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: Remington Richmond, (212) 591-8404, richmondr@asme.org

ASME (American Society of Mechanical Engineers)

Reaffirmation
BSR/ASME B89.1.8-2011 (R201x), Performance Evaluation of Displacement-Measuring Laser Interferometers (reaffirmation of ANSI/ASME B89.1.8-2011)
This Standard establishes requirements and methods for the specification, evaluation, setup, and use of laser interferometers.
Single copy price: $46.00
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: Remington Richmond, (212) 591-8404, richmondr@asme.org

ASME (American Society of Mechanical Engineers)

Revision
BSR/ASME B16.5-201x, Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/Inch Standard (revision of ANSI/ASME B16.5-2013)
This Standard covers pressure-temperature ratings, materials, dimensions, tolerances, markings, testing, and methods of designing openings for pipe flanges and flanged fittings. Included are flanges with rating class designations 150, 300, 400, 500, and 1500 in sizes NPS 1/2 through NPS 24 and flanges with rating class designation 2500 in sizes NPS 1/2 through NPS 12.
Single copy price: Free
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Order from: Mayra Santiago, (212) 591-8521, 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)

Revision
BSR/ASME B16.34-201x, Valves - Flanged, Threaded, and Welding End (revision of ANSI/ASME B16.34-2013)
This Standard applies to new construction and covers pressure-temperature ratings, dimensions, tolerances, materials, nondestructive examination requirements, testing, and marking for cast, forged, and fabricated flanged, threaded, and welding end and wafer or flangeless valves of steel, nickel-base alloys, and other alloys.
Single copy price: Free
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Order from: Mayra Santiago, (212) 591-8521, 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)

Revision
This Standard covers general and dimensional data pertinent to the various types of screw and captive washer assemblies, otherwise known as SEMS. SEMS products may include screws, tapping screws, or bolts in sizes #0 through ½ inch diameters in various grades and materials. The word SEMS is recognized in the United States as a generic term applicable to screw and washer assemblies. Also included in this Standard are appendices to illustrate the relative proportions of plain and conical washer SEMS.
Single copy price: $38.00
Order from: Mayra Santiago, (212) 591-8521, ansibox@asme.org
Send comments (with copy to psa@ansi.org) to: Angel Guzman, (212) 591-8018, guzman@asme.org
Projects Withdrawn from Consideration

An accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

**Green Seal (Green Seal, Inc.)**
BSR/GS-48-200x, Green Seal Environmental Standard for Laundry Care Products (new standard)

**Green Seal (Green Seal, Inc.)**
BSR/GS-CC Part A-200x, Green Seal Environmental Standard for Companies Part A: Product Manufacturers (new standard)

**TIA (Telecommunications Industry Association)**
BSR/TIA 455-95A-2000 (R201x), Absolute Optical Power Test for Optical Fibers and Cables (reaffirmation of ANSI/TIA 455-95A-2000 (R2005))

Notice of Withdrawn ANS by an ANSI-Accredited Standards Developer

In accordance with clause 4.2.1.3.2 Withdrawal by ANSI-Accredited Standards Developer of the ANSI Essential Requirements, the following American National Standards have been withdrawn as an ANS.

**Green Seal (Green Seal, Inc.)**
ANSI/GS-46-2009, Green Seal Environmental Standard for Restaurants and Food Services
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.

ASA (ASC S1) (Acoustical Society of America)
Office: 1305 Walt Whitman Road Suite 300
Melville, NY 11747
Contact: Neil Strommel
Phone: (631) 390-0215
Fax: (631) 923-2875
E-mail: asastds@acousticalsociety.org

BSR/ASA S1.40-2006 (R201x), Specifications and Verification Procedures for Sound Calibrators (reaffirmation of ANSI/ASA S1.40-2006 (R2011))
Obtain an electronic copy from: asastds@acousticalsociety.org

SAIA (ASC A11) (Scaffold & Access Industry Association)
Office: 400 Admiral Boulevard
Kansas City, MO 64106
Contact: DeAnna Martin
Phone: (816) 595-4860
E-mail: deanna@saiaonline.org

BSR A11.1-201x, Standard for Testing and Rating Scaffold Assemblies and Components (new standard)
BSR A11.2-201x, Standard for Testing & Rating Shoring Equipment (new standard)
BSR A11.4-201x, Standard Requirements for Testing and Rating Multiple Point Suspended Scaffold Platforms (new standard)
BSR A11.5-201x, Standard for Testing and Rating Vertical Concrete Formwork, Ties, and Accessories (new standard)
BSR A11.6-201x, Standard for Testing and Rating Manufactured Scaffold Planks and Decks (new standard)

HI (Hydraulic Institute)
Office: 6 Campus Drive, 1st Floor North
Parsippany, NJ 07054
Contact: Darcy Chiriboga
Phone: (973) 267-9700
Fax: (973) 267-9705
E-mail: dchiriboga@pumps.org

BSR/HI 9.6.1-201x, Rotodynamic Pumps - Guideline for NPSH Margin (revision of ANSI/HI 9.6.1-2012)
Obtain an electronic copy from: dchiriboga@pumps.org

TAPPI (Technical Association of the Pulp and Paper Industry)
Office: 15 Technology Parkway South
Peachtree Corners, GA 30092
Contact: Laurence Womack
Phone: (770) 209-7276
Fax: (770) 446-6947
E-mail: standards@tappi.org

BSR/TAPPI T 657 sp-201x, Sampling of fillers and pigments (revision of ANSI/TAPPI T 657 sp-2012)
BSR/TAPPI T 839 om-201x, Edgewise compressive strength of corrugated fiberboard using the clamp method (short column test) (revision of ANSI/TAPPI T 839 om-2012)

UL (Underwriters Laboratories, Inc.)
Office: 47173 Benicia Street
Fremont, CA 94538
Contact: Paul Lloret
Phone: (510) 319-4269
E-mail: Paul.E.Lloret@ul.com

BSR/UL 827-201x, Standard for Safety for Central-Station Alarm Services (revision of ANSI/UL 827-2014)
Obtain an electronic copy from: www.comm-2000.com

NSF (NSF International)
Office: 789 N. Dixboro Road
Ann Arbor, MI 48105-9723
Contact: Jessica Evans
Phone: (734) 913-5774
E-mail: jevans@nsf.org

BSR/NSF 367-201X, Light Duty Multi-Purpose Vehicle Step Bumpers (new standard)
BSR/NSF 368-201X, Vehicle Reinforcing Beams (Rebars) (new standard)
BSR/NSF 369-201X, Vehicle Brackets (new standard)
BSR/NSF 370-201X, Vehicle Energy Absorbers (new standard)
BSR/NSF 371-201X, Front Bumpers - Multi-Purpose Vehicle (new standard)
BSR/NSF 377-201X, Automotive Exterior Lighting Parts (new standard)
BSR/NSF 378-201X, Automotive Exterior Plastic Body Parts (new standard)
BSR/NSF 379-201X, Automotive Exterior Sheet Metal Body Parts (new standard)
BSR/NSF 471-201X, Radiator Supports (new standard)
BSR/NSF 474-201X, Rear Visibility Cameras (new standard)
Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC O1

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

- General Interest
- Government
- Producer
- User

If you are interested in joining the ASC O1, contact WMMA Associate Director Jennifer Miller at jennifer@wmma.org.
Final Actions on American National Standards

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

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

Addenda


New Standard


ASME (American Society of Mechanical Engineers)

Revision


ASSE (ASC Z9) (American Society of Safety Engineers)

Revision


ATIS (Alliance for Telecommunications Industry Solutions)

Reaffirmation


AWWA (American Water Works Association)

Revision


CSA (CSA Group)

New National Adoption


CSAA (Central Station Alarm Association)

Revision


HI (Hydraulic Institute)

Revision


HL7 (Health Level Seven)

Revision


ISA (International Society of Automation)

Revision

ANSI/ISA 75.08.01-2016, Face-to-Face Dimensions for Integral Flanged Globe-Style Control Valve Bodies (Classes 125, 150, 250, 300, and 600) (revision of ANSI/ISA 75.08.01-2002 (R2007)): 7/28/2016
ANSI/ISA 75.08.05-2016, Face-to-Face Dimensions for Butt weld-End Globe-Style Control Valves (Classes 150, 300, 600, 900, 1500, and 2500) (revision of ANSI/ISA 75.08.05-2002 (R2007)): 7/28/2016

ITSDF (Industrial Truck Standards Development Foundation, Inc.)

Revision

NSF (NSF International)

Revision
* ANSI/NSF 363-2016 (i3r1), Good Manufacturing Practices (GMP) for Pharmaceutical Excipients (revision of ANSI/NSF 363-2014): 7/19/2016

SCTE (Society of Cable Telecommunications Engineers)

New Standard
ANSI/SCTE 200-2016, Specification for a 75 ohm 'MMCX' Connector (MMCX-75), Male & Female Interface (new standard): 7/22/2016

UL (Underwriters Laboratories, Inc.)

New National Adoption
ANSI/UL 60939-3-2016, Standard for Safety for Passive filter units for electromagnetic interference suppression - Part 3: Passive filter units for which safety tests are appropriate (Proposal dated 5-6-16) (national adoption with modifications of IEC 60939-3): 7/22/2016

Reaffirmation

Revision

Corrections

Missing CSA Final Actions

The Final Actions listing for ANSI/IAS LC-2-1996 (R2015) was scheduled for publication in the August 21, 2015 issue of Standards Action and the Final Actions listing for ANSI Z21.69-2015 was scheduled for publication in the September 11, 2015 issue of Standards Action. Both of these standards were not listed in their respective issues. We apologize for the oversight and print the listings here:

CSA (CSA Group)
Reaffirmation

Revision
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.

AGMA (American Gear Manufacturers Association)
Office: 1001 N Fairfax Street, 5th Floor
          Alexandria, VA  22314-1587
Contact: Amir Aboutaleb
E-mail: tech@AGMA.org

BSR/AGMA 6000-C201x, Specification for Measurement of Linear Vibration on Gear Units (revision and redesignation of ANSI/AGMA 6000-B96 (R2016))
Stakeholders: Manufacturers and users of industrial gearboxes.
Project Need: Update standard to reflect current state-of-the-art.
This standard presents a method for the measurement of linear vibrations on a gear unit. Instrumentation, measuring methods, test procedures and discrete frequency vibration limits are recommended for acceptance testing. An annex that lists system effects on gear unit vibration and responsibility is also provided.

BSR/AGMA 6025-E201x, Sound for Enclosed Helical, Herringbone and Spiral Bevel Gear Drives (revision and redesignation of ANSI/AGMA 6025-D98 (R2016))
Stakeholders: Manufacturers and users of industrial gearboxes.
Project Need: Update standard to reflect current state-of-the-art.
This standard describes the instrumentation, measuring methods, and test procedures necessary for the determination of a gear unit’s sound pressure levels for acceptance testing.

BSR/AGMA 9003-C201x, Flexible Couplings - Keyless Fits (revision of ANSI/AGMA 9003-B-2008 (R2014))
Stakeholders: Users and manufacturers of flexible couplings.
Project Need: Update standard to reflect current state-of-the-art.
This standard presents information on design, dimensions, tolerances, inspection, mounting, removal, and equipment that is in common use with keyless tapered and keyless straight (cylindrical) bore hubs for flexible couplings.

ASC X9 (Accredited Standards Committee X9, Incorporated)
Office: 275 West Street
          Suite 107
          Annapolis, MD 21401
Contact: Ambria Frazier
E-mail: Ambria.frazier@x9.org

BSR X9.24-3-201x, Retail Financial Services Symmetric Key Management - Part 3: Derived Unique Key per Transaction (new standard)
Stakeholders: Merchants, processors, acquirers, and hardware and software providers to these stakeholders, issuers, and payment brands.
Project Need: Provides a means to standard a interoperable key management scheme that generates a unique key for each transaction as the industry transitions from the use of TDEA to AES for securing electronic payment data.
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.

BSR X9 TR-47-201x, Universal Companion Document Industry Adoption of X9.100-187 (new standard)
Stakeholders: Most financial institutions in the U.S. are stakeholders. Because the standard supports files format and validation requirements for sends to the Federal Reserve Bank, it likely impacts all financial institutions and their processors, within the U.S.
Project Need: Advantage added in having a one-stop source for the required documents to fully accomplish image exchange between partners (potentially in differing "networks"). Assurance that the companion document is the correct match to the paired standard.
The purpose of this, the Universal Companion Document, is to formalize an industry standard for check image exchange using the ANSI X9.100-187 standard format and a compilation of industry best practices. This document is not intended to replace the ANSI X9.100-187 standard, but rather to clarify how financial institutions should use the standard to ensure all necessary and appropriate payment data is exchanged between collecting and paying institutions.
ASME (American Society of Mechanical Engineers)

Office: Two Park Avenue
New York, NY  10016
Contact: Mayra Santiago
Fax: (212) 591-8501
E-mail: ansibox@asme.org

BSR/ASME B18.18-201x, Quality Assurance for Fasteners (revision of ANSI/ASME B18.18-2011)
Stakeholders: Users and manufacturers.
Project Need: The Standard is being revised to simplify some of the language to prevent confusion amongst end users. Additionally, there are changes being proposed to the Category 3 requirements. Deviations from the Category 3 intent have been noticed and need to be rectified to make the Standard more user friendly.

This quality-focused Standard establishes in-process and final inspection requirements for fastener products as well as a receiving inspection plan for fastener purchasers. This Standard identifies four categories, recognizing that fastener users have widely varying requirements. The four categories covered are as follows:
(a) Category 1 - A receiving inspection plan for purchasers;
(b) Categories 2 and 3 - Utilizes documented and verifiable in-process controls structured at the producer’s discretion;
(c) Category 4 - Includes all of the requirements of Category 2 plus 100% inspection for a specific feature or features.

AWS (American Welding Society)

Office: 8669 NW 36th Street
#130
Miami, FL  33166
Contact: Rakesh Gupta
Fax: (305) 443-5951
E-mail: gupta@aws.org

BSR/AWS A5.17/A5.17M-201x, Specification for Carbon Steel Electrodes and Fluxes for Submerged Arc Welding (revision of ANSI/AWS A5.17/A5.17M-1997 (R2007))
Stakeholders: Welding industry professionals dealing with submerged arc welding electrodes and fluxes
Project Need: Adding boron reporting requirement in certain conditions.

This specification provides requirements for the classification of solid and composite carbon steel electrodes and fluxes for submerged arc welding. A guide is appended to the specification as a source of information concerning the classification system employed and the intended use of submerged arc fluxes and electrodes.

AWWA (American Water Works Association)

Office: 6666 W. Quincy Ave.
Denver, CO  80235
Contact: Paul Olson
Fax: (303) 795-7603
E-mail: polson@awwa.org; vdavid@awwa.org

BSR/AWWA C217a-201x, Microcrystalline Wax and Petrolatum Tape Coating Systems for Steel Water Pipe and Fittings (supplement to ANSI/AWWA C217-2016)
Stakeholders: Drinking water treatment and supply industry. Water utilities, consulting engineers, water treatment equipment manufacturers, etc.
Project Need: The purpose of this addendum to C217-16 is to decrease the lower value under the specific gravity requirement in Table 1 to reflect materials used in the industry.
The addendum will include a revision to the requirements for specific gravity included in Table 1.

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 Z21.74-201x, Portable Refrigerators (revision of ANSI Z21.74 -2014)
Stakeholders: Consumers, manufacturers, gas suppliers, and certifying agencies.
Project Need: Revise current ANSI.

This standard covers gas fired refrigerators, having refrigerated spaces for storage of foods with input ratings of 1000 Btu per hour (293 W) or less, and which are for use with propane gas, butane gas, or propane-butane gas mixtures. These refrigerators are intended for use both indoors in adequately ventilated structures and outdoors. This standard applies to refrigerators designed for self-contained fuel supplies and using fuel cylinders of not more than 75 cubic inches (1230 cm3) (2-1/2 pounds nominal water capacity). Fuel supplies shall be in accordance with the Standard for the Storage and Handling of Liquefied Petroleum Gases, ANSI/NFPA No. 58.
This Standard applies to brackets made from aluminum, high-strength steel, and are either plated with decorative nickel-chrome, or coated with electrocoat or powder coat primer. Brackets used in the vehicle bumper assembly are covered under the “Vehicle Bumper Brackets Standard.”

**BSR/NSF 370-201X, Vehicle Energy Absorbers (new standard)**

Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of vehicle energy absorbers.

This Standard is intended to define the material and performance testing requirements for high-density foam (EPP) energy absorbers and plastic absorbers used for replacement applications. This Standard applies to vehicle energy absorbers used in bumper systems comprised of a fascia, energy absorber, and reinforcing beam (rebar).

**BSR/NSF 371-201X, Front Bumpers - Multi-Purpose Vehicle (new standard)**

Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of front bumpers used on multi-purpose vehicles.

This Standard is intended to define the material and performance testing requirements for multi-purpose vehicle bumpers (also known as “metal facebars”) used for replacement applications. This standard applies to multi-purpose front bumpers that are made from high-strength steel, and are either plated with decorative nickel-chrome, or are coated with electrocoat or powder coat primer. Brackets used in the front bumper assembly are covered under the “Vehicle Bumper Brackets Standard.”

**BSR/NSF 377-201X, Automotive Exterior Lighting Parts (new standard)**

Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of front bumpers used on multi-purpose vehicles.

This Standard is intended to define the requirements for External Vehicle Lighting Parts used for automotive applications. This Standard applies to the following Automotive Exterior Lighting Devices and other FMVSS 571.108 specified Lighting Parts: Headlamps/headlamp assemblies, fog lamps, signal lamps, stop lamps, backup/reversing lamps, parking lamps, daytime running lamps, license plate lamps, high-mounted stop lamps, reflex reflectors, side marker lamp, clearance/identification lamps, tail lamps, and cornering lamps.

**BSR/NSF 378-201X, Automotive Exterior Plastic Body Parts (new standard)**

Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.

Project Need: Establish a national standard for ensuring the safe production of automotive exterior plastic body parts.

This Standard is intended to define the requirements for External Plastic Body Parts used for automobile applications. This Standard applies to the following Automotive Plastic Parts (less any cosmetic and decorative accessories or ornaments): fenders, bumper fascias, grills, bezels, step bumper fascia pads, air dams, trim pieces, and fender liners.
* BSR/NSF 379-201X, Automotive Exterior Sheet Metal Body Parts (new standard)
  Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.
  Project Need: Establish a national standard for ensuring the safe production of automotive sheet-metal body parts.
  This standard is intended to define the requirements for External Sheet Metal Body Parts used for automobile applications. This standard applies to the following Automotive Sheet Metal Parts made of carbon steel, aluminum, etc. (less any accessories, i.e., handles, grills, ornaments, trim, etc.); fenders, hoods, side doors, truck tailgates, bedsides, and trunk lids.

* BSR/NSF 471-201X, Radiator Supports (new standard)
  Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.
  Project Need: Establish a national standard for ensuring the safe production of automotive radiator supports.
  This standard is intended to define the requirements for Radiator Supports used for automobile applications.

* BSR/NSF 474-201X, Rear Visibility Cameras (new standard)
  Stakeholders: Product manufacturers, product suppliers, auto repair shops, insurance companies, regulators, consumer organizations, and testing laboratories.
  Project Need: Establish a national standard for ensuring the safe production of automotive rear visibility cameras.
  This standard is intended to define the requirements for Rear Visibility Cameras used for automobile applications.

SAIA (ASC A11) (Scaffold & Access Industry Association)
Office: 400 Admiral Boulevard
         Kansas City, MO 64106
Contact: DeAnna Martin
E-mail: deanna@saiaonline.org

BSR A11.1-201x, Standard for Testing and Rating Scaffold Assemblies and Components (new standard)
Stakeholders: Manufacturers, purchasers, and users of scaffold assemblies and components.
Project Need: This standard contains procedures for testing and rating scaffold components and assemblies.
This standard provides methods for testing and rating the performance of the following: Tube and coupler scaffold components; welded frame scaffold assemblies; system scaffold assemblies; guardrail scaffold components; screwjack scaffold components; caster (with lever-actuated brake and swivel lead) scaffold components, putlog scaffold assemblies; and side- and end-bracket scaffold components.

BSR A11.2-201x, Standard for Testing & Rating Shoring Equipment (new standard)
Stakeholders: Manufacturers, purchasers, and users of shoring equipment.
Project Need: This standard contains procedures for testing and rating shoring equipment.
The standard provides methods for testing and rating shoring equipment.

BSR A11.3-201x, Standard Requirements and Test Methods for Testing and Rating Portable Rigging Devices for Suspended Scaffold (new standard)
Stakeholders: Manufacturers, purchasers, and users of portable rigging devices for suspended scaffold.
Project Need: This standard contains procedures for testing and rating portable rigging devices for suspended scaffold.
This standard establishes methods for testing and rating portable rigging devices used to support transportable suspended scaffolds for construction, alteration, demolition, and maintenance of buildings or structures. This standard does not cover permanently installed suspended scaffold systems (davits or roofcars).

BSR A11.4-201x, Standard Requirements for Testing and Rating Multiple Point Suspended Scaffold Platforms (new standard)
Stakeholders: Manufacturers, purchasers, and users of multiple point suspended scaffold platforms.
Project Need: This standard contains procedures for testing and rating multiple-point suspended scaffold platforms.
This standard covers platforms and modular stage platforms used for suspended scaffolds.

BSR A11.5-201x, Standard for Testing and Rating Vertical Concrete Formwork, Ties, and Accessories (new standard)
Stakeholders: Manufacturers, purchasers, and users of vertical concrete formwork, ties, and accessories.
Project Need: This standard contains procedures for testing and rating vertical concrete formwork, ties, and accessories.
This standard contains procedures for testing and rating vertical concrete formwork, ties, and accessories.

BSR A11.6-201x, Standard for Testing and Rating Manufactured Scaffold Planks and Decks (new standard)
Stakeholders: Manufacturers, purchasers, and users of manufactured scaffold planks and decks.
Project Need: This standard contains procedures for testing and rating manufactured scaffold planks and decks.
A standard for the manufacturers, purchasers, and users of manufactured scaffold planks and decks, for testing and rating.

SCTE (Society of Cable Telecommunications Engineers)
Office: 140 Philips Road
         Exton, PA 19341-1318
Contact: Rebecca Yaletchko
Fax: (610) 363-5898
E-mail: ryaletcho@scte.org

Stakeholders: Cable Telecommunication industry.
Project Need: Create new standard.
ISO 50001:2011 specifies requirements for establishing, implementing, maintaining, and improving an energy management system, whose purpose is to enable an organization to follow a systematic approach in achieving continual improvement of energy performance, including energy efficiency, energy use, and consumption.

BSR/SCTE IPS SP 705-201x, Device Specifications Standard (new standard)
Stakeholders: Cable Telecommunication industry.
Project Need: Create new standard.
To publish their device specifications in a computer-consumable format like XML, developers of design software can then develop adapters that will extract the information they need from these standardized computer-consumable specifications and populate their model dictionaries electronically. To fully realize the opportunity, the standard may also specify definitions for the parameters documented so data from different vendors is directly comparable.
TAPPI (Technical Association of the Pulp and Paper Industry)

Office: 15 Technology Parkway South
         Peachtree Corners, GA 30092
Contact: Laurence Womack
Fax: (770) 446-6947
E-mail: standards@tappi.org

BSR/TAPPI T 657 sp-201x, Sampling of fillers and pigments (revision of ANSI/TAPPI T 657 sp-2012)
Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products; and suppliers of equipment, supplies, or raw materials for the manufacture of such products.
Project Need: To conduct required five-year review of an existing TAPPI/ANSI standard in order to revise it if needed to address new technology or correct errors.
This document describes procedures for sampling shipments of fillers, pigments, and other materials in finely divided form for the purpose of securing a sample for analysis. Procedures are given for sampling dry bulk and bagged shipments, as well as high-solids slurries.

BSR/TAPPI T 839 om-201x, Edgewise compressive strength of corrugated fiberboard using the clamp method (short column test) (revision of ANSI/TAPPI T 839 om-2012)
Stakeholders: Manufacturers of pulp, paper, packaging, or related products, consumers or converters of such products, and suppliers of equipment, supplies, or raw materials for the manufacture of such products.
Project Need: To conduct required five-year review of an existing TAPPI/ANSI standard in order to revise it if needed to address new technology or correct errors.
This method describes procedures for determining the edgewise compressive strength, with flutes vertical, loading perpendicular to the axis of the flutes, of a short column of single-, double-, or triple-wall corrugated fiberboard.
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 www.ansi.org/asd; select “Standards Activities,” click on “Public Review and Comment” and “American National Standards Maintained Under Continuous Maintenance.” This information is also available directly at www.ansi.org/publicreview.

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

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

AGMA
American Gear Manufacturers Association
1001 N Fairfax Street, 5th Floor
Alexandria, VA 22314-1587
Phone: (703) 684-0211
Web: www.agma.org

ASA (ASC S1)
Acoustical Society of America
1305 Walt Whitman Road Suite 300
Melville, NY 11747
Phone: (631) 390-0215
Fax: (631) 923-2875
Web: www.acousticalsociety.org

ASC X9
Accredited Standards Committee X9, Incorporated
275 West Street
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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
Phone: (678) 539-1143
Fax: (678) 539-2159
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

ASSE (ASC 29)
American Society of Safety Engineers
520 N. Northwest Highway
Park Ridge, IL 60068
Phone: (847) 232-2012
Web: www.asse.org

ASTM
ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Phone: (610) 832-9744
Fax: (610) 834-3683
Web: www.astm.org

ATIS
Alliance for Telecommunications Industry Solutions
1200 G Street NW
Suite 500
Washington, DC 20005
Phone: (202) 434-8840
Web: www.atis.org

AWS
American Welding Society
8669 NW 36th Street
#130
Miami, FL 33166
Phone: (305) 443-9353, x 301
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

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

CSAA (Organization)
Central Station Alarm Association
8150 Leesburg Pike
Suite 700
Vienna, VA 22182
Phone: (703) 242-4670
Fax: (703) 242-4675
Web: www.csaaul.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.est.org

HI
Hydraulic Institute
6 Campus Drive, 1st Floor North
Parsippany, NJ 07054
Phone: (973) 267-9700
Fax: (973) 267-9055
Web: www.pumps.org

HL7
Health Level Seven
3300 W ashington Avenue
Suite 227
Ann Arbor, MI 48104
Phone: (734) 677-7777
Fax: (734) 677-6622
Web: www.hl7.org

IAPMO (Z)
International Association of Plumbing & Mechanical Officials
5001 East Philadelphia Street
Ontario, CA 91761
Phone: (909) 230-5534
Web: www.iapmort.org

ISA (Organization)
International Society of Automation
67 Alexander Drive
Research Triangle Park, NC 27709
Phone: (919) 990-9228
Fax: (919) 549-8288
Web: www.isa.org

ITSDF
Industrial Truck Standards Development Foundation, Inc.
1750 K Street NW
Suite 460
Washington, DC 20006
Phone: (202) 296-9880
Fax: (202) 296-9884
Web: www.indtrk.org

MHI
Material Handling Industry
8720 Red Oak Blvd. - Ste. 201
Suite 201
Charlotte, NC 28217
Phone: (704) 714-8755
Fax: (704) 676-1199
Web: www.mhi.org

NACE
NACE International, The Worldwide Corrosion Authority
15835 Park Ten Place
Houston, TX 77084
Phone: (281) 228-6485
Web: www.nace.org

NPES (ASC CGATS)
NPES
1899 Preston White Drive
Reston, VA 20191
Phone: (703) 264-7200
Fax: (703) 620-0994
Web: www.npes.org

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
Phone: (734) 913-5774
Web: www.nsf.org

SAIA (ASC A11)
Scaffold & Access Industry Association
400 Admiral Boulevard
Kansas City, MO 64106
Phone: (816) 595-4860
Web: www.saiainline.org

SCTE
Society of Cable Telecommunications Engineers
140 Philips Road
Exton, PA 19341-1318
Phone: (480) 252-2330
Fax: (610) 363-5898
Web: www.scte.org

TAPPI
Technical Association of the Pulp and Paper Industry
15 Technology Parkway South
Peachtree Corners, GA 30092
Phone: (770) 209-7276
Fax: (770) 446-6947
Web: www.tappi.org

UL
Underwriters Laboratories, Inc.
33 Pfingsten Road
Northbrook, IL 60062
Phone: (847) 664-3198
Fax: (847) 664-3198
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.

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

ISO Standards

Agricultural Food Products (TC 34)
ISO 11133/DAmd1, Microbiology of food, animal feed and water - Preparation, production, storage and performance testing of culture media - Amendment 1 - 10/14/2016, $53.00

Aircraft and Space Vehicles (TC 20)
ISO/DIS 18487-1, Aerospace series - Titanium tube for 35MPa operating pressure - Part 1: Inch series - 8/20/2016, $62.00

Anaesthetic and Respiratory Equipment (TC 121)
IEC/bs EN 60601-2-49, Medical electrical equipment - Part 2-49: Particular requirements for the basic safety and essential performance of multifunction patient monitoring equipment, $98.00

Building Construction (TC 59)
ISO/DIS 13640, Buildings and civil engineering works - Sealants - Specifications for test substrates - 10/21/2016, $40.00

Fluid Power Systems (TC 131)
ISO/DIS 23369, Hydraulic fluid power - Multi-pass method of evaluating filtration performance of a filter element under cyclic flow conditions - 10/19/2016, $107.00

Geosynthetics (TC 221)
ISO 10318-1/DAmd1, Geosynthetics - Part 1: Terms and definitions - Amendment 1 - 10/21/2016, $29.00
ISO 10318-2/DAmd1, Geosynthetics - Part 2: Symbols and pictograms - Amendment 1 - 10/21/2016, $29.00

Glass in Building (TC 160)
ISO/DIS 18543, Glass in building - Electrochromic glazings - Accelerated ageing test and requirements - 8/21/2016, $62.00

Graphic Technology (TC 130)
ISO/DIS 2846-1, Graphic technology - Colour and transparency of printing ink sets for four-colour printing - Part 1: Sheet-fed and heat-set web offset lithographic printing - 10/19/2016, $77.00

Health Informatics (TC 215)
ISO/DIS 17090-5, Health informatics - Public key infrastructure - Part 5: Authentication using Healthcare PKI credentials - 8/17/2016, $62.00

Industrial Automation Systems and Integration (TC 184)
ISO/DIS 14306, Industrial automation systems and integration - JT file format specification for 3D visualization - 8/19/2016, $291.00

Internal Combustion Engines (TC 70)
ISO/DIS 8528-7, Reciprocating internal combustion engine driven alternating current generating sets - Part 7: Technical declarations for specification and design - 8/20/2016, $58.00
ISO/DIS 8528-9, Reciprocating internal combustion engine driven alternating current generating sets - Part 9: Measurement and evaluation of mechanical vibrations - 8/20/2016, $58.00

Machine Tools (TC 39)
ISO 10791-7/DAmd1, Test conditions for machining centres - Part 7: Accuracy of finished test pieces - Amendment 1 - 10/16/2016, $29.00
ISO/DIS 14955-4, Machine tools - Environmental evaluation of machine tools - Part 4: Principles for measuring metal-forming machine tools and laser processing machine tools with respect to energy efficiency - 8/18/2016, $155.00

Nuclear Energy (TC 85)
ISO/DIS 19361, Measurement of radioactivity - Determination of beta emitters activities - Test method using liquid scintillation counting - 8/21/2016, $77.00
ISO/DIS 22875, Nuclear energy - Determination of chlorine and fluorine in uranium dioxide powder and sintered pellets - 10/20/2016, $62.00

Optics and Optical Instruments (TC 172)
ISO/DIS 9849, Optics and optical instruments - Geodetic and surveying instruments - Vocabulary - 11/6/2028, $82.00

Petroleum Products and Lubricants (TC 28)
ISO/DIS 11365, Petroleum and related products - Maintenance and use guide for triaryl phosphate ester turbine control fluids - 12/29/2034, $77.00

Plastics (TC 61)
ISO 2797/DAmd1, Textile glass - Rovings - Basis for a specification - Amendment 1 - 10/14/2016, $29.00
ISO/IEC DIS 38505-1, Information technology - Governance of IT - Part 1: The application of ISO/IEC 38500 to the governance of data - 8/20/2016, $77.00

ISO/IEC DIS 7816-11, Identification cards - Integrated circuit cards - Part 11: Personal verification through biometric methods - 8/17/2016, $88.00

IEC Standards

3/1270/DTS, IEC/TS 63034 Ed. 1.0: Guidance how to design graphical symbols for diagrams for standardization and inclusion in IEC 60817, 10/21/2016

9/2198/FDIS, IEC 62846 Ed.1: Railway applications - Current collection systems - Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line, 09/09/2016

9/2199/NP, Railway applications - Batteries for auxiliary power supply systems - Part 2: Nickel Cadmium (NiCd) batteries (proposed IEC 62973-2), 10/21/2016


29/916/DTS, Amendment 1 to IEC TS 62370 Ed.1: Electroacoustics - Instruments for the measurement of sound intensity - Electromagnetic and electrostatic compatibility requirements and test procedures, 10/21/2016

34A/1929/CD, Amendment 2 to IEC 62717 Ed.1: LED modules for general lighting - Performance requirements, 10/21/2016

34C/1229/NP, PWN 34C-1229: IEC 62386-223: Digital addressable lighting interface - Part 223: Particular requirements for control gear - Lightoutput compensation over Lifetime (device type 22), 10/21/2016

45A/1092/CDV, IEC 61504 Ed.2: Nuclear facilities - Instrumentation and control systems important to safety - Centralized systems for continuous monitoring of radiation and/or levels of radioactivity, 10/21/2016

45A/1098/FDIS, IEC 62646 Ed.2: Nuclear power plants - Control rooms - Computer-based procedures, 09/09/2016


47D/878/FRDIS, IEC 60191-6-13 Ed.2: Mechanical standardization of semiconductor devices - Part 6-13: Design guideline of open-top-type sockets for Fine-pitch Ball Grid Array (FBGA) and Fine-pitch Land Grid Array (FLGA), 09/09/2016

47E/545/CDV, Amendment 2 to IEC 60747-16-3 Ed.1: Semiconductor devices - Part 16-3: Microwave integrated circuits - Frequency converters, 10/21/2016

47E/546/CDV, Amendment 2 to IEC 60747-16-4 Ed.1: Semiconductor devices - Part 16-4: Microwave integrated circuits - Switches, 10/21/2016


62C/654/CD, IEC 60601-2-1 Ed.4: Medical electrical equipment - Part 2-1: Particular requirements for the basic safety and essential performance of electron accelerators in the range 1 MeV to 50 MeV, 09/23/2016
62C/655/CD, IEC 62926 Ed.1: Medical electrical system - Recommendations for safe integration and operation of adaptive external beam-radiotherapy system for intra-fractionally moving target volumes, 09/23/2016
64/2131/CD, IEC 60364-4-43 Ed. 4: Low-voltage electrical installations - Part 4-43: Protection for safety - Protection against overcurrent, 11/18/2016
68/553/CD, IEC-60404-9 Ed.2: Magnetic materials - Part 9: Methods of determination of the geometric characteristics of electrical steel strip and sheet, 10/21/2016
81/525/CDV, IEC 62561-6 Ed.2: Lightning Protection System Components (LPSC) - Part 6: Requirements for Lightning Strike and Surge Counters (LSC), 10/21/2016
82/1155/CD, IEC 62892-1 Ed.1: Testing of PV modules to differentiate performance in multiple climates and applications - Part 1: Requirements for testing, 09/23/2016
91/1368/CDV, IEC 62739-3 Ed.1: Test method for erosion of wave soldering equipment using molten lead-free solder alloy - Part 3: Selection guidance of erosion test method, 10/21/2016
104/687A/DTR, IEC/TR 62131-6 Ed.1: Environmental conditions - Vibration and shock of electrotechnical equipment - Part 6: Transportation by Propeller Aircraft, 09/09/2016
109/151A/CD, IEC/TS 62993 Ed.1: Guidance for determination of clearances; creepage distances and requirements for solid insulation for equipment with a rated voltage above 1 000 V a.c. AND 1 500 V d.c. UP TO 2 000 V a.c. AND 3 000 V d.c., 09/16/2016
## ISO Standards

### BUILDING CONSTRUCTION (TC 59)
- **ISO 11528:2016**<br>Buildings and civil engineering works - Sealants - Determination of crazing and cracking following exposure to artificial or natural weathering, $123.00

### COMMON NAMES FOR PESTICIDES AND OTHER AGROCHEMICALS (TC 81)
- **ISO 765:2016**<br>Pesticides considered not to require common names, $265.00

### FIRE SAFETY (TC 92)
- **ISO 24678-6:2016**<br>Fire safety engineering - Requirements governing algebraic formulae - Part 6: Flashover related phenomena, $149.00

### FLUID POWER SYSTEMS (TC 131)
- **ISO 7368:2016**<br>Hydraulic fluid power - Two-port slip-in cartridge valves - Cavities, $200.00

### INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)
- **ISO 10303-242/Cor1:2016**<br>Industrial automation systems and integration - Product data representation and exchange - Part 242: Application protocol: Managed model-based 3D engineering - Corrigendum, FREE

### MEDICAL DEVICES FOR INJECTIONS (TC 84)
- **ISO 11608-7:2016**<br>Needle-based injection systems for medical use - Requirements and test methods - Part 7: Accessibility for persons with visual impairment, $149.00

### PACKAGING (TC 122)
- **ISO 13355:2016**<br>Packaging - Complete, filled transport packages and unit loads - Vertical random vibration test, $88.00

### PAINTS AND VARNISHES (TC 35)
- **ISO 4623-2:2016**<br>Paints and varnishes - Determination of resistance to filiform corrosion - Part 2: Aluminium substrates, $88.00

### PLASTICS PIPES, FITTINGS AND VALVES FOR THE TRANSPORT OF FLUIDS (TC 138)
- **ISO 17885/Amd1:2016**<br>Plastics piping systems - Mechanical fittings for pressure piping systems - Specifications - Amendment 1, $22.00

### SMALL TOOLS (TC 29)
- **ISO 240:2016**<br>Milling cutters - Interchangeability dimensions for cutter arbors or cutter mandrels, $51.00
- **ISO 3293:2016**<br>Morse taper shank countersinks for angles 60 degrees, 90 degrees and 120 degrees inclusive, $51.00

### TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)
- **ISO 24624:2016**<br>Language resource management - Transcription of spoken language, $173.00

## ISO Technical Reports

### APPLICATIONS OF STATISTICAL METHODS (TC 69)
- **ISO/TR 16705:2016**<br>Statistical methods for implementation of Six Sigma - Selected illustrations of contingency table analysis, $173.00

## ISO/IEC JTC 1, Information Technology

### ISO/IEC 29161:2016
- **ISO/IEC 29161:2016**<br>Information technology - Data structure - Unique identification for the Internet of Things, $123.00

### ISO/IEC 23001-9:2016
- **ISO/IEC 23001-9:2016**<br>Information technology - MPEG systems technologies - Part 9: Common encryption of MPEG-2 transport streams, $88.00

### ISO/IEC 30122-1:2016
- **ISO/IEC 30122-1:2016**<br>Information technology - User interfaces - Voice commands - Part 1: Framework and general guidance, $88.00

### ISO/IEC 30122-4:2016
- **ISO/IEC 30122-4:2016**<br>Information technology - User interfaces - Voice commands - Part 4: Management of voice command registration, $88.00

## IEC Standards

### ELECTRICAL INSTALLATIONS OF BUILDINGS (TC 64)
- **IEC 60364-5-55 Amd.2 Ed. 2.0 b:2016**<br>Amendment 2 - Electrical installations of buildings - Part 5-55: Selection and erection of electrical equipment - Other equipment, $12.00
- **IEC 60364-5-55 Ed. 2.2 b:2016**<br>Electrical installations of buildings - Part 5-55: Selection and erection of electrical equipment - Other equipment, $339.00

### ELECTROMAGNETIC COMPATIBILITY (TC 77)
- **IEC 61000-4-31 Ed. 1.0 b:2016**<br>Electromagnetic compatibility (EMC) - Part 4-31: Testing and measurement techniques - AC mains ports broadband conducted disturbance immunity test, $278.00

### FIBRE OPTICS (TC 86)
- **IEC 61300-1 Ed. 4.0 b:2016**<br>Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 1: General and guidance, $157.00
- **IEC 61753-052-3 Ed. 2.0 en:2016**<br>Fibre optic interconnecting devices and passive components - Performance standard - Part 052-3: Single-mode fibre non-connectorized fixed attenuator - Category U in uncontrolled environment, $61.00
IEC 61753-052-6 Ed. 1.0 en:2016, Fibre optic interconnecting devices and passive components - Performance standard - Part 052-6: Single-mode fibre non-connectorized fixed attenuator - Category O in outside plant environment, $61.00

INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL (TC 65)
IEC 61511-2 Ed. 2.0 b:2016, Functional safety - Safety instrumented systems for the process industry sector - Part 2: Guidelines for the application of IEC 61511-1:2016, $411.00
IEC 61784-3-8 Ed. 2.0 b:2016, Industrial communication networks - Profiles - Part 3-8: Functional safety fieldbuses - Additional specifications for CPF 8, $375.00
IEC 61784-3-17 Ed. 1.0 b:2016, Industrial communication networks - Profiles - Part 3-17: Functional safety fieldbuses - Additional specifications for CPF 17, $339.00
S+ IEC 61511-2 Ed. 2.0 en:2016 (Redline version), Functional safety - Safety instrumented systems for the process industry sector - Part 2: Guidelines for the application of IEC 61511-1:2016, $530.00

POWER ELECTRONICS (TC 22)
IEC 62477-1 Amd.1 Ed. 1.0 b:2016, Amendment 1 - Safety requirements for power electronic converter systems and equipment - Part 1: General, $157.00
IEC 62477-1 Ed. 1.1 b:2016, Safety requirements for power electronic converter systems and equipment - Part 1: General, $726.00

IEC Technical Specifications

POWER SYSTEM CONTROL AND ASSOCIATED COMMUNICATIONS (TC 57)
IEC/TS 61850-80-1 Ed. 2.0 en:2016, Communication networks and systems for power utility automation - Part 80-1: Guideline to exchanging information from a CDC-based data model using IEC 60870-5-101 or IEC 60870-5-104, $411.00

SURFACE MOUNTING TECHNOLOGY (TC 91)
IEC/TS 61189-3-301 Ed. 1.0 en:2016, Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 3-301: Test methods for interconnection structures (printed boards) - Appearance inspection method for plated surfaces on PWB, $85.00
Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations 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: ncsci@nist.gov or notifyus@nist.gov.
American National Standards

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 its oversight of programs of its 40+ Technical Committees. Additionally, the INCITS Executive Board exercises international leadership in its role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

The INCITS Executive Board has eleven membership categories that can be viewed at http://www.incits.org/participation/membership-info. Membership in all categories is always welcome. INCITS also seeks to broaden its membership base and looks to recruit new participants in the following under-represented membership categories:

- **Producer – Hardware**
  This category primarily produces hardware products for the ITC marketplace.

- **Producer – Software**
  This category primarily produces software products for the ITC marketplace.

- **Distributor**
  This category is for distributors, resellers or retailers of conformant products in the ITC industry.

- **User**
  This category includes entities that primarily reply on standards in the use of a products/service, as opposed to producing or distributing conformant products/services.

- **Consultants**
  This category is for organizations whose principal activity is in providing consulting services to other organizations.

- **Standards Development Organizations and Consortia**
  - “Minor” an SDO or Consortia that (a) holds no TAG assignments; or (b) holds no SC TAG assignments, but does hold one or more Work Group (WG) or other subsidiary TAG assignments.

- **Academic Institution**
  This category is for organizations that include educational institutions, higher education schools or research programs.

- **Other**
  This category includes all organizations who do not meet the criteria defined in one of the other interest categories.

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, please contact Jennifer Garner at 202-626-5737 or jgarner@itic.org. Visit www.INCITS.org for more information regarding INCITS activities.

Calls for Members

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

Application for Accreditation

Caveon, LLC

Comment Deadline: September 6, 2016

Caveon, LLC, a new ANSI member in 2016, has submitted an application for accreditation as an ANSI Accredited Standards Developer (ASD) and proposed operating procedures for documenting Caveon-sponsored American National Standards. Caveon’s proposed scope of standards activity is as follows:

- Caveon Remote Online Proctoring Standards – These standards stipulate the elements necessary for delivery of high-stakes tests that are delivered in a remote location where a proctor or invigilator observes and interacts with a test taker through the use of computer technologies. The Caveon Online Proctoring standards take into account the ability to:
- Observe the test taker throughout the duration of the test administration
- Interact with the test taker through both visual and audio communication
- Stop the test administration if there is non-compliant behavior being exhibited by the test taker
- Secure/lock down the computer to prevent unauthorized access to other materials
- Use an individual trained as a proctor to observe the testing event
- Alert the proctor when the test taker is accessing unauthorized computer-based resources during the examination
- Record test taking sessions for later review, as necessary

To obtain a copy of Caveon’s application and proposed operating procedures or to offer comments, please contact Mr. David Foster, Ph.D., CEO and President, Caveon, LLC, 6905 South 1300 East #468, Midvale, UT 84047; phone: 801.208.0103; e-mail: david.foster@caveon.com. Please submit any comments to Caveon by September 6, 2016, with a copy to the ExSC Recording Secretary in ANSI’s New York Office (E-mail: Jthompso@ANSI.org). As the proposed operating procedures are available electronically, the public review period is 30 days. You may view or download a copy of Caveon’s proposed operating procedures from ANSI Online during the public review period at the following URL: www.ansi.org/accredPR.

Withdrawal of ASD Accreditation

Green Seal

Green Seal has requested the formal withdrawal of its accreditation as a developer of American National Standards. Consequently, as every American National Standard (ANS) must have an accredited sponsor, the following Green Seal standard is withdrawn as an ANS:

ANSI/GS-46-2009: Green Seal Environmental Standard for Restaurants and Food Services

These actions are taken, effective August 2, 2016. For additional information, please contact: Ms. Brie Welzer, Environmental Scientist, Green Seal, Inc., 1001 Connecticut Avenue NW, Suite 827, Washington, DC 20036; phone: 202.697.4165; e-mail: bwelzer@greenseal.org.

International Organization for Standardization (ISO)

Establishment of ISO Subcommittee

ISO/TC 20/SC 18 – Materials

ISO/TC 20 – Aircraft and space vehicles has created a new ISO Subcommittee on Materials (ISO/TC 20/SC 18) The Secretariat has been assigned to France (AFNOR).

ISO/TC 20/SC 18 operates under the following scope:

Standardization of materials and related processes (e.g. surface treatment/coating, defects in composites...) used by aircraft and engine manufacturers.


ISO Proposal for a New Field of ISO Technical Activity

Remanufacturing Technology

Comment Deadline: September 2, 2016

SAC, the ISO member body for China, has submitted to ISO a new work item proposal for the development of an ISO standard on Wheeled Child Conveyances, with the following scope statement:

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.

Anyone wishing to review the proposal can request a copy by contacting ANSI’s ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, September 2, 2016.
ISO Proposal for a New Field of ISO Technical Activity

Remanufacturing Technology

Comment Deadline: September 2, 2016

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

- Standardization and coordination of remanufacturing technology, including remanufacturing terminology standards and generic technology standards for remanufacturing processes, such as dismantling, cleaning, inspection, coating preparation, forming processing and assembly. The scope of the new TC does not include the relevant areas of TC 127 and TC 67/SC4.

Anyone wishing to review the proposal can request a copy by contacting ANSI’s ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, September 2, 2016.

International Electrotechnical Commission (IEC)

IEEE Advises Intent to Withdraw from the USNC

The IEEE has indicated its intent to withdraw from the USNC Council and USNC overall. The IEEE currently administers several US TAGs and they have indicated a willingness to continue to administer, on an interim basis, these US TAGs until new organizations are identified to take over TAG administrator duties. This will ensure no disruption of US participation in the related IEC Technical Committees.

Organizations with an interest in assuming the TAG Administrator role for any of the committees listed below should contact Tony Zertuche (tqrtuche@ansi.org), USNC General Secretary, for further information:

- IEC/TC 9 - Electrical equipment and systems for railways
- TC 27 - Industrial electroheating and electromagnetic processing
- TC 38 - Instrument transformers
- TC 42 - High-voltage and high-current test techniques
- TC 45 - Nuclear instrumentation
- SC 45A - Instrumentation, control and electrical systems of nuclear facilities
- SC 45B - Radiation protection instrumentation
- TC 57 - Power systems management and associated information exchange
- TC 95 - Measuring relays and protection equipment
- TC 106 - Methods for the assessment of electric, magnetic and electromagnetic fields associated with human exposure
- TC 115 - High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV

The USNC Technical Management Committee (TMC) will consider any expressions of interest received and will allocate the assignments as appropriate.

U.S. Technical Advisory Groups

Application for Accreditation

U.S. TAG to ISO PC 305 – Sustainable Non-Sewered Sanitation Systems

Comment Deadline: September 6, 2016

The American National Standards Institute (ANSI), with financial and technical support from The Bill and Melinda Gates Foundation, has submitted an Application for Accreditation for a new proposed U.S. Technical Advisory Group (TAG) to ISO PC 305, Sustainable non-sewered sanitation systems and a request for approval as TAG Administrator. The proposed TAG will operate using the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures.

For additional information, or to offer comments, please contact: Ms. Kristin Califra, Sr. Program Administrator, ANSI ISO Team, American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, NY 10036; phone: 212.642.4946; e-mail: kcalifra@ansi.org. Please forward any comments on this application to ANSI, with a copy to the Recording Secretary, ExSC in ANSI’s New York Office (fax: 212.840-2298; e-mail: jthompson@ansi.org) by September 6, 2016.

Meeting Notices

AHRI Meetings

Development of AHRI Standard 545P, Performance Rating of Modulating Positive Displacement Refrigerant Compressors and Compressor Units

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding an online meeting on August 18 from 3 p.m. to 4:30 p.m. If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Justin Prosser at jprosser@ahrinet.org.

Development of AHRI Standard 545P, Performance Rating of Modulating Positive Displacement Refrigerant Compressors and Compressor Units

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding a face-to-face meeting in Atlanta, GA, on September 8 from 9 a.m. to 5 p.m. If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Justin Prosser at jprosser@ahrinet.org.


The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) will be holding an online meeting on August 11 from 2 p.m. to 4 p.m. If you are interested in participating in the meeting or providing comments on the standard, please contact AHRI staff member Mikelann Scerbo at mscerbo@ahrinet.org.
GBI Meeting

The 21st, 22nd, and 23rd meetings of the Green Building Initiative – GBI 01-201x Consensus Body

The 21st, 22nd, and 23rd meetings of the Green Building Initiative – GBI 01-201x Consensus Body will be held via conference call and webinar:

- Meeting # 21 August 9, 2016 from 12:00 Noon to 4:00 ET
- Meeting # 22 August 16 & 17, 2016 from 11:00 AM to 3:00 PM ET
- Meeting # 23 August 31, 2016 from 11:00 AM to 3:00 PM ET

The purpose for these teleconferences is for the Consensus Body members to review recommended responses to comments from the public comment period on the Working Draft of 01-201X document and for questions/comments from the public.

The tentative agenda will be posted as soon as possible on the GBI webpage for the standard at: http://www.thegbi.org/ansi. All meetings are open to the public. Any member of the public or Subcommittee participant who would like to attend the meeting should contact the Secretariat, Maria Woodbury, preferably at least 10 days in advance of the meeting to ensure they are included in relevant communications in preparation for the meeting.

To attend, and for additional information, please contact:

Maria Woodbury
Secretariat for Green Building Initiative
207-807-8666 (direct)
Maria@thegbi.org
BSR/ASHRAE Addendum d
ANSI/ASHRAE Standard 15-2013

First Public Review Draft

Safety Standard for
Refrigeration Systems

First Public Review (August 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 www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI.

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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305
ASHRAE Addendum \textcolor{red}{\#d?} to ANSI/ASHRAE Standard 15-2013, Safety Standard for Refrigeration Systems
Publication Public Review Draft

(\textcolor{red}{\textit{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.})

\section*{FOREWORD}

The 2010 edition of ASHRAE Standard 34 added an optional Subclass 2L to the existing Class 2 flammability classification of refrigerants. Several refrigerants, including single component fluids and blends, have been classified as Subclass 2L (refer to ANSI/ASHRAE Standard 34-2013 and subsequent addenda). Use of Subclass 2L refrigerants currently requires following Class 2 requirements per ASHRAE Standard 15 (either 2010 or 2013 edition as applicable to any given jurisdiction).

In July of 2011, ASHRAE SSPC 15 published the first Advisory Public Review draft with proposed changes related to Subclass 2L. In October of 2015 a second Advisory Public Review draft was published. The committee appreciates the many comments that were received, and since that time has been addressing the technical issues identified from that review.

This addendum modifies portions of Standard 15 to incorporate class 2L flammability classification as defined in ASHRAE Standard 34-2013. This addendum is contingent on a Continuous Maintenance Proposal submitted to ASHRAE SSPC 34 to make 2L a flammability class rather than a sub-class, and to define A2L and B2L as safety groups.

This addendum proposes to allow Group A2L refrigerants in high-probability systems for human comfort. This proposal does not change how ASHRAE Standard 15 deals with Group A2L refrigerants in industrial applications or machinery rooms. Those topics are expected to be handled in a separate addendum proposal.

Refrigerant leak detection of Class 2L refrigerants, and air movement to enable rapid mixing of leaked refrigerant, are at the core of the requirements presented in this addendum. Recall that the RCL has a factor of safety of 4 for flammable refrigerants. That is, when leaked refrigerant is fully mixed in a space, the maximum refrigerant concentration is 25\% of the LFL and cannot ignite. Some basic requirements for refrigerant leak detectors have been added. However, research and development of refrigerant leak detectors is continuing, and additional requirements to specify robust and reliable refrigerant leak detection may be expected.

\textcolor{red}{\textit{Note: this addendum is contingent on a Continuous Maintenance Proposal submitted to ASHRAE SSPC 34 to make 2L a flammability class rather than a sub-class, and to define A2L and B2L as safety groups.}}

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

occupational exposure limit (OEL): see definition in ANSI/ASHRAE Standard 34.1.

refrigerant designation: the unique identifying alphanumeric value or refrigerant number assigned to an individual refrigerant and published in ASHRAE Standard 34.1.

refrigerant detector: a device that is capable of sensing the presence of refrigerant vapor.

refrigerant detector: a device or system that senses the presence of refrigerant vapor for the specific refrigerant designation(s) in use by the refrigerating system(s).

7. RESTRICTIONS ON REFRIGERANT USE

7.5 Additional Restrictions

7.5.2 Applications for Human Comfort. Group A2, A3, B1, B2, B2L, and B3 refrigerants shall not be used in high-probability systems for human comfort.

Exceptions:

1. This restriction does not apply to sealed absorption and unit systems having refrigerant quantities less than or equal to those indicated in Table 7.4.

2. This restriction does not apply to industrial occupancies.

3. This restriction does not apply to the use of Group A2L refrigerants complying with Section 7.6.
7.6 Group A2L Refrigerants for Human Comfort. High-probability systems using Group A2L refrigerants for human comfort applications shall comply with this section.

7.6.1 Refrigerant Quantity Limits. The quantity of Group A2L refrigerant including the charge in any interconnecting piping shall be limited in accordance with Section 7.2, or shall be located in a machinery room or outdoors in accordance with Section 7.4.

7.6.2 Listing and Installation Requirements. Refrigeration systems shall be listed and shall be installed in accordance with listing, the manufacturer’s instructions, and any markings on the equipment restricting the installation.

7.6.2.1 The listing shall include a refrigerant detector. The refrigerant detector shall comply with the requirements of Section 7.6.4.

7.6.2.2 When the refrigerant detector activates it shall

a) Turn on the supply air fan at the highest air flow rate available, if the refrigeration system is not already operating.

b) Turn off the compressor and other devices where the voltage supplied to those devices exceeds 50 volts excluding control power transformers. The supply air fan shall continue to operate when the compressor and other devices are turned off. The supply air fan shall operate at the highest air flow rate available.

c) Open any air flow control devices that are located in any ductwork that supplies air to the occupied space to a minimum of 25% of full open.

7.6.3 Compressors or Pressure Vessels Located Indoors. For refrigeration compressors or pressure vessels that are located indoors the following shall apply

a) If any compressor is enclosed, the enclosure shall be ventilated by natural or continuously operated mechanical means.

b) If the space volume where compressors or pressure vessels are located is less than the volume determined by the following equation, the space where such equipment is located shall be ventilated by mechanical means.

\[ V = \frac{M}{0.0050} \]  
\[ V = \frac{M}{0.080} \]  

Where: \( V \) = space volume \( \text{ft}^3 \) (\( m^3 \))

\( M \) = the largest single circuit charge \( \text{lb} \) (\( \text{kg} \))

c) The ventilation system shall be started when the refrigerant detector is activated in accordance with Section 7.6.4.

d) The ventilation rate not be less than 1.5 air changes per hour based on the space volume as calculated in Section 7.6.3 b).

e) The inlet to the exhaust air of the ventilation system shall be located where refrigerant from a leak is expected to accumulate. The inlet elevation shall be within 1.0 ft (0.3m) of the lowest elevation in the space where the compressor or pressure vessel is located.

7.6.4 Refrigerant Detectors Refrigerant detectors required by Section 7.6.2 shall meet the following requirements:

a) Refrigerant detectors that are part of the listing shall be evaluated by the testing laboratory as part of the equipment listing.

b) The refrigerant detector set point to activate the functions required by Section 7.6.2.2 shall be at a value not exceeding the 25% of the lower flammability limit (LFL).
c) The refrigerant detector shall be located
   i) within the self-contained system, in a place where leaked refrigerant will be detected, or
   ii) in the air supply duct work that connects the self-contained system to the occupied space, not farther
       than 6 ft. (1.8 m) from the self-contained system, or
   iii) in the occupied space not farther than 6 ft. (1.8 m) and underneath the air supply inlet to the room.

d) The refrigerant detector as installed, including any sampling tubes, shall cause the functions required by
   Section 7.6.2.2 within a time not to exceed 15 seconds, after exposure to a refrigerant concentration
   exceeding 25% of the LFL.

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

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

This addendum proposes to revise the current requirements for renewable energy systems and the related exceptions. It would require that renewable energy certificates (RECs) be retained and retired by the building owner for all compliance options. Currently, building owners are not required to retain RECs. Unless the RECs are retained and retired, the building owner cannot claim the environmental benefits, and if someone else buys the RECs, the buyer can take credit for the environmental impacts. In addition, the addendum proposes to base the requirement on the building footprint instead of roof area. For saw tooth and other roof configurations, the roof area can be significantly larger than the building footprint, requiring a larger PV system.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (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 aa to 189.1-2014

Modify Section 3.2 to add the following definitions:

renewable energy certificate (REC): A market based instrument that represents the property rights to the environmental, social and other non-power qualities of 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 as follows:

7.4.1.1 On-Site Renewable Energy Systems. Building projects shall comply with either the Standard Renewables Approach in Section 7.4.1.1.1 or the Alternate Renewables Approach in Section 7.4.1.1.2.
7.4.1.1.1 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 no 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 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.

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.

2. 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.

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. 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.

Modify Section 11 Normative References as follows:

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Section</th>
</tr>
</thead>
</table>

First Public Review Draft

Public Review Draft
Proposed Addendum ab to Standard 189.1-2014

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

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

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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA  30329-2305
First Public Review Draft

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Foreword:
This addendum adds SI Values to the requirements for kitchen hood exhausts. The SI values were extracted from Standard 90.1-2013 Table 6.5.7.1.3, which has the same table content as Table 7.4.3.7.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (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 ab to 189.1-2014

(Modify as shown below)

### TABLE 7.4.3.7

<table>
<thead>
<tr>
<th>Type of Hood</th>
<th>Light-Duty Equipment</th>
<th>Medium Duty Equipment</th>
<th>Heavy-Duty Equipment</th>
<th>Extra-Heavy-Duty Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cfm per linear foot</td>
<td>L/s per linear meter</td>
<td>cfm per linear foot</td>
<td>L/s per linear meter</td>
</tr>
<tr>
<td>Wall-mounted canopy</td>
<td>140</td>
<td>217</td>
<td>210</td>
<td>325</td>
</tr>
<tr>
<td>Single island</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extra-heavy-duty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double island (per side)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eyebrow</td>
<td>175</td>
<td>271</td>
<td>210</td>
<td>325</td>
</tr>
<tr>
<td>Backshelf/Passover</td>
<td>210</td>
<td>325</td>
<td>210</td>
<td>325</td>
</tr>
</tbody>
</table>

a. The total exhaust flow rate for all single-island hoods in a kitchen/dining facility shall be no more than 5000 cfm (2360 L/s).

7.4.3.7.1 For kitchen/dining facilities with total kitchen hood exhaust airflow rate greater than 2000 cfm (950 L/s), the maximum exhaust flow rate for each hood shall be determined in accordance with Table 7.4.3.7. For single hoods, or hood sections installed over appliances with different duty ratings, the maximum allowable exhaust flow rate for the hood or hood section shall be determined in accordance with Table 7.4.3.7 for the highest appliance duty rating under the hood or hood section. Refer to ASHRAE Standard 154 for definitions of hood type, appliance duty, and net exhaust flow rate.
Exception: When at least 75% of all the replacement air is transfer air that would otherwise be exhausted.

7.4.3.7.2 Kitchen/dining facilities with total kitchen hood exhaust airflow rate greater than 2000 cfm (950 L/s) shall comply with at least one of the following:
   a. At least 50% of all replacement air must be transfer air that would otherwise be exhausted.
   b. At least 75% of kitchen hood exhaust air shall be controlled by a demand ventilation system(s), which shall
      1. be capable of reducing exhaust and replacement air system airflow rates by no more than the larger of
         i. 50% of total design exhaust and replacement air system airflow rate or
         ii. the outdoor airflow and exhaust rates required to meet the ventilation and exhaust requirements of Sections 6.2 and 6.5 of ANSI/ASHRAE Standard 62.1 for the zone;
      2. include controls to modulate airflow in response to appliance operation and to maintain full capture and containment of smoke, effluent, and combustion products during cooking and idle;
      3. include controls that result in full flow when the demand ventilation system(s) fail to modulate airflow in response to appliance operation; and
      4. allow occupants to temporarily override the system(s) to full flow.
   c. Listed energy recovery devices with a sensible heat recovery effectiveness of not less than 40% shall be applied on at least 50% of the total exhaust airflow.
   d. In Climate Zones 1B, 2B, 3B, 4B, 5B, 6B, 7B, and 8B, when makeup air is uncooled or cooled without the use of mechanical cooling, the capacity of any nonmechanical cooling system(s) (for example, natural cooling or evaporative cooling) shall be demonstrated to be no less than the system capacity of a mechanical cooling system(s) necessary to meet the same loads under design conditions.
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

First Public Review (August 2016)
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FOREWORD

This addendum augments requirements for demand response, including modifications to changes made by Addenda b and ceto 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 underlining (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 Peak Automated Demand Response Reduction. 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 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 adjust upward the zone operating cooling set points by a minimum of 3°F (1.7°C).

b. The controls shall be programmed to remotely 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 adjust downward the zone operating cooling set points by a minimum of 2°F (1.1°C).

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 and as approved by the AHJ.
7.3.4.2 Variable Speed Equipment. For HVAC equipment with variable speed control, the controls shall be programmed to allow remote 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).
Foreword

This proposed change to Standard 189.1 changes the requirements for the permanent projections (such as balconies, overhangs, or shading devices). It deletes the requirements for permanent projection factors in Climate Zones 4 and 5 (the colder climate zones that include Chicago and New York). It also adds some requirements and exceptions that are similar to those in the IgCC.

Permanent projections are not required for Climate Zones 4 and 5 for three reasons. First, permanent projections result in the most energy savings in warm, cooling dominated seasons and these occur most frequently in warm, cooling dominated climates. Second, this requirement is one of the most frequently cited reasons in cold climates for projects and organizations that decide not to use 189.1 and jurisdictions that decide not to use 189.1. Third, permanent projections usually result in thermal bridging through the building envelope insulation. This thermal bridging results in more energy losses in colder climates and partially negates the benefit of the permanent projections during warm seasons in these climates.

This addendum also adds an exception for vertical fenestration within 18 in. of a lot line. Finally, it clarifies the wording of the exception for fenestration that receives low amounts of solar radiation.

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Addendum ad to 189.1-2014

7.4.2.5 Permanent Projections. For Climate Zones 04 through 35, the vertical fenestration on the west, south, and east shall be shaded by permanent projections that have an area-weighted average projection factor \( PF \) of not less than 0.50 for the first story above grade and 0.25 for other above grade stories. The building is allowed to be rotated up to 45 degrees to the nearest cardinal orientation for purposes of calculations and showing compliance. Where different windows or glass doors have different projection factor values, each shall be evaluated separately, or an area-weighted projection factor value shall be calculated and used for all windows and glass doors. Horizontal projections shall extend over the full width of the glazing.

Exceptions: Permanent projections are not required for the following buildings and fenestrations:

1. Where vertical fenestration is located within 18 inches (450 mm) of the lot line.

2. Where equivalent shading of the vertical fenestration is provided by buildings, structures, geological formations, or permanent exterior projections that are not horizontal, as determined by sun angle studies at the peak solar altitude on the summer solstice, and three hours before and after the peak solar altitude on the summer solstice.
Vertical fenestration that receives direct solar radiation for fewer than 250 hours per year because of shading by permanent external buildings, existing permanent infrastructure, or topography.

Vertical fenestration with automatically controlled shading devices capable of modulating in multiple steps the amount of solar gain and light transmitted into the space in response today light levels or solar intensity that comply with all of the following:

a. Exterior shading devices shall be capable of providing at least 90% coverage of the fenestration in the closed position.

b. Interior shading devices shall be capable of providing at least 90% coverage of the fenestration in the closed position and have a minimum solar reflectance of 0.50 for the surface facing the fenestration.

c. A manual override located in the same enclosed space as the vertical fenestration shall override operation of automatic controls no longer than four hours.

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

Vertical fenestration with automatically controlled dynamic glazing capable of modulating in multiple steps the amount of solar gain and light transmitted into the space in response to daylight levels or solar intensity that comply with all of the following:

a. Dynamic glazing shall have a lower labeled SHGC equal to or less than 0.12, lowest labeled visible transmittance (VT) no greater than 0.05, and highest labeled VT no less than 0.40.

b. A manual override located in the same enclosed space as the vertical fenestration shall override operation of automatic controls no longer than 4 hours.

c. Acceptance testing and commissioning shall be conducted as required by Section 10 to verify that automatic controls for dynamic glazing respond to changes in illumination or radiation intensity.

5. Existing buildings undergoing alteration, repair, relocation, or a change of occupancy.

8.4.1.3 Office Space Shading  Each west-, south-, and east-facing façade, shall be designed with a shading projection factor (PF). The PF shall be not less than 0.5 for the first story above grade and 0.25 for other above grade stories. Shading is allowed to be external or internal using the interior PF. The building is allowed to be rotated up to 45 degrees for purposes of calculations and showing compliance. Where different windows or glass doors have different projection factor values, each shall be evaluated separately, or an area-weighted projection factor value shall be calculated and used for all windows and glass doors. Horizontal projections shall extend over the full width of the glazing. The following shading devices are allowed to be used:
a. Louvers, sun shades, light shelves, and any other permanent device. Any vertical fenestration that employs a combination of interior and external shading is allowed to be separated into multiple segments for compliance purposes. Each segment shall comply with the requirements for either external or interior projection factor.

b. Building self-shading through roof overhangs or recessed windows.

Exceptions to 8.4.1.3: Permanent projections are not required for the following buildings and fenestrations:

1. Translucent panels and glazing systems with a measured haze value greater than 90%, tested according to ASTM D1003 (not withstanding its scope) or other test method approved by the AHJ, and that are entirely 8 ft (2.5 m) above the floor, do not require external shading devices.

2. Where equivalent shading of the vertical fenestration is provided by buildings, structures, geological formations, or permanent exterior projections that are not horizontal, as determined by sun angle studies at the peak solar altitude on the summer solstice, and three hours before and after the peak solar altitude on the summer solstice.

3. Vertical fenestration that receives direct solar radiation for less than 250 hours per year because of shading by permanent external buildings, existing permanent infrastructure, or topography.

4. Vertical fenestration with automatically controlled shading devices in compliance with Exception (2) of Section 7.4.2.5.

5. Vertical fenestration with automatically controlled dynamic glazing in compliance with Exception (3) of Section 7.4.2.5.

6. Existing buildings undergoing alteration, repair, relocation, or a change of occupancy.
Public Review Draft

Proposed Addendum v to Standard 189.1-2014

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

First Public Review (August 2016)
(Draft Shows Proposed Changes to Current Standard)

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FOREWORD

This addendum revises two paragraphs in the “Allowable Sites” section of the Site Sustainability chapter. The revisions reference ASTM standards that provide more precision than the requirements that currently exist in 189.1. The two paragraphs in 5.3.1.1, i.e., 5.3.1.1 e and 5.3.1.1 f are intended to encourage building in areas where occupants can walk to conduct errands or have ready access to public transit. The ASTM standards better focus these provisions on the criteria that are important to encouraging people to walk or use public transit, including distance over walkable pathways, safety, and quality of the transit.

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Addendum v to 189.1-2014

Modify Section 3.2 as follows:

**adequate transit service**: at least two buses (including bus rapid transit), streetcars, or **light rail** trains per hour on weekdays, operating between 6:00 a.m. and 9:00 a.m., and between 3:00 p.m. and 6:00 p.m., or at least five heavy passenger ferries operating between 6:00 a.m. and 9:00 a.m., and between 3:00 p.m. and 6:00 p.m.

**brownfield site**: a site documented as contaminated...(definition remains unchanged)

**greenfield site**: a site of which 20% or less...(definition remains unchanged)

**greyfield site**: a site of which more than 20%...(definition remains unchanged)

**lightrail**: a streetcar type vehicle that has step entry or level boarding entry and is operated on city streets, semiexclusive rights-of-way, or exclusive rights-of-way.

Modify Section 5.3.1.1 as follows:

**5.3.1.1 Allowable Sites**. The building project shall take place in or on one of the following:

a. An existing building envelope.
b. A **brownfield site**.

c. A **greenfield site**.

d. A **greenfield site** that is within 1/2 mi (800 m) of residential land that is developed, or that has one or more buildings under construction, with an average density of ten **dwelling units** per acre (4 units per ha) unless that site is **agricultural land** or **forest land**. Proximity is determined by drawing a circle with a 1/2 mi (800 m) radius around the center of the proposed site.

e. A **greenfield site** where the proposed building(s) complies with ASTM E2843-2015 is within 1/2 mi (800 m) of not less than ten basic services and that has pedestrian access between the building and the services, unless that site is **agricultural land** or **forest land**. Basic services include but are not limited to (1) financial institutions, (2) places of worship, (3) convenience or grocery stores, (4) day care facilities, (5) dry cleaners, (6) fire stations, (7) beauty shops, (8) hardware stores, (9) laundry facilities, (10) libraries, (11) medical/dental offices, (12) senior care facilities, (13) parks, (14) pharmacies, (15) post offices, (16) restaurants, (17) schools, (18) supermarkets, (19) theaters, (20) community centers, (21) fitness centers, (22) museums, and (23) local government facilities. Proximity is determined by drawing a circle with a 1/2 mi (800 m) radius around the center of the proposed site.

f. A **greenfield site** that where the proposed building(s) complies with ASTM E2844-15e1 is either within 1/2 mi (800 m) of an existing or planned and funded commuter rail, light rail, or subway station, or within 1/4 mi (400 m) of adequate transit service usable by building occupants, unless that site is **agricultural land** or **forest land**. Proximity is determined by drawing a circle with a 1/2 mi (800 m) radius around the center of the proposed site.

g. A **greenfield site** that is **agricultural land**, and the building’s purpose of the proposed building(s) is related to the agricultural use of the land.

h. A **greenfield site** that is **forest land**, and the building’s purpose of the proposed building(s) is related to the forestry use of the land.

i. A **greenfield site** that is **designated park land**, and the building’s purpose of the proposed building(s) is related to the use of the land as a park.

---

**Add to Chapter 11. Normative References:**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM E2843-2015</td>
<td>Standard Specification for Demonstrating That a Building is in Walkable Proximity to Neighborhood Assets</td>
</tr>
<tr>
<td>ASTM E2844-15e1</td>
<td>Standard Specification for Demonstrating That a Building’s Location Provides Access to Public Transit</td>
</tr>
</tbody>
</table>
Public Review Draft

Proposed Addendum w to Standard 189.1-2014

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

First Public Review (August 2016)
(Draft Shows Proposed Changes to Current Standard)

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FOREWORD

The purpose of this addendum is to update Performance Option A of Section 7.5.2 to be consistent with recent changes to the Performance Rating Method as published in the 2015 Supplement to Standard 90.1-2013.

Addendum x to Standard 189.1-2014 has also been proposed, which would delete Performance Option B of Section 7.5.2 in response to the structural changes made in addendum bm to Standard 90.1-2013.

The definitions of regulated energy use and unregulated energy use will be published in ANSI/ASHRAE/IES Standard 90.1-2016 and are included in addendum n to Standard 189.1-2014. They are reproduced here for information only.

regulated energy use: energy used by building systems and components with requirements prescribed in Sections 5 through 10. This includes energy used for HVAC, lighting, service water heating, motors, transformers, vertical transportation, refrigeration equipment, computer-room cooling equipment, and other building systems, components, and processes with requirements prescribed in Sections 5 through 10.

unregulated energy use: energy used by building systems and components that is not regulated energy use.

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First Public Review Draft

**Addendum w to 189.1-2014**

Modify Section 7.5.2 as follows:

### 7.5.2 Performance Option A

a. **Annual Energy Cost.** The proposed building Performance Cost Index (PCI) with consideration of renewables shall be calculated in accordance with Appendix G of Standard 90.1 and be equal to or less than the Performance Cost Target, as determined from the following equation:

\[
P_{\text{Target}} = \frac{BBUEC + (BBREC \times BPF) - REC}{BBUEC + BBREC}
\]

where

- \(P_{\text{Target}}\) The target performance cost index (PCI) required for achieving compliance with the standard, unitless.
- \(BBUEC\) The component of baseline building performance that is due to unregulated energy use, $.
- \(BBREC\) The component of baseline building performance that is due to regulated energy use, or, baseline building performance minus BBUEC, $.
- \(BPF\) Building performance factor taken from Table 7.5.2A, unitless.
- \(REC\) Renewable energy production determined from Section 7.4.1.1.1 and converted to cost, $.

The proposed building Performance Cost Index (PCI) without consideration of renewables shall comply with the requirements of Standard 90.1 Section 4.2.1.1.

The proposed building performance shall be equal to or less than the baseline building performance multiplied by one minus the percentage reduction in Table 7.5.2A using the Performance Rating Method in Normative Appendix G of ANSI/ASHRAE/IES Standard 90.1. On-site renewable energy systems in the proposed design shall be calculated using the procedures in Table C.1.1(15) of Normative Appendix C. For mixed-use buildings, the percent reduction shall be determined by weighting each building type by floor area.

b. **Annual Carbon Dioxide Equivalent (CO\(_2\)e).** The proposed design shall have an annual CO\(_2\)e equal to or less than the annual CO\(_2\)e of the baseline building design multiplied by the Performance Cost Index target determined from Table 7.5.2A, one minus the percentage reduction in Table 7.5.2A using the Performance Rating Method in Normative Appendix G of ANSI/ASHRAE/IES Standard 90.1. To determine the annual CO\(_2\)e for each energy source in the baseline building design and proposed design, the energy consumption shall be multiplied by the CO\(_2\)e emission factors from Table 7.5.2B.
### TABLE 7.5.2A Performance Option A: Energy Cost and CO₂e Reductions

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Building Performance Factor (BPF)</th>
<th>Percent Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multifamily</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>Healthcare/Hospital</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>Hotel/Motel</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>0.56</td>
<td></td>
</tr>
<tr>
<td>Restaurant</td>
<td>0.59</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>0.55</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>0.45</td>
<td></td>
</tr>
<tr>
<td>Semi-heated Warehouse(^a)</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>All Others</td>
<td>0.58</td>
<td></td>
</tr>
<tr>
<td>Apartments</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Restaurants</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Lodging</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Semi-heated Warehouses(^a)</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>Other(^b)</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Conditioned warehouses shall use the “Other” category.

\(^b\) When the modeled energy use that is not regulated energy use exceeds 35% of the total proposed building energy use, the reduction shall be calculated using the following equation: Percent reduction = 0.55 – 0.99 x Percent Non-Regulated Energy. The reduction shall be no lower than 5%.
Public Review Draft

Proposed Addendum y to Standard 189.1-2014

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

First Public Review (August 2016)
(Draft Shows Proposed Changes to Current Standard)

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

This addendum adds a requirement for an Indoor Environmental Quality (IEQ) occupant satisfaction survey to be included in the post occupancy plan for operation. Survey questions include satisfaction question for each IEQ category and diagnostic questions to help identify potential sources of dissatisfaction. Satisfaction questions and reporting reference ASHRAE Standard 55 and results are required to be benchmarked against IEQ survey databases. Section 10.3.2.1.5 is re-named to more accurately reflect that the section relates to air quality and not all IEQ factors, which are generally considered to also include thermal, acoustic, and lighting.

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

Addendum y to 189.1-2013

Make the following changes to section 10.3.2.1

10.3.2.1 High-Performance Building Operation Plan.
A master building plan for operation shall be developed that meets the requirements specified in Sections 10.3.2.1.1 through 10.3.2.1.4.

Rename section 10.3.2.1.4 as follows [remainder of section unchanged]

10.3.2.1.4 Indoor Environmental Air Quality.

Add a new section 10.3.2.1.5 at the end of section 10.3.2.1

10.3.2.1.5 Indoor Environmental Quality Survey. The plan for operation shall include an indoor environmental quality occupant survey complying with all of the following:

a. The survey shall be implemented within a period of 6 to 18 months after issuance of the certificate of occupancy. The survey shall be repeated not less often than once every three years.

b. The survey questions shall include satisfaction questions and diagnostic questions for indoor air quality, lighting, acoustics, and thermal comfort. The survey questions shall use a 7-point satisfaction scale and comply with ASHRAE Standard 55 section 7.3.1.1.

c. A plan for reporting the survey results shall be produced that includes the following:

  1. The survey report shall state where the response rate was less than the response rates specified in ASHRAE Standard 55, section 7.3.1.
2. The survey report shall indicate the percentage of satisfaction for each question in accordance with ASHRAE 55, section 7.4.1.a.

3. The percentage satisfaction results shall be compared to a nationally recognized survey benchmarking database where the building occupancy category is represented in the databases of nationally recognized organizations.

Add new reference to Appendix G as follows

Center for the Built Environment
Indoor Environmental Quality (IEQ) Survey™
http://www.cbe.berkeley.edu/research/survey.htm
Center for the Built Environment
University of California, 390 Wurster Hall #1839
Berkeley, CA 94720-1839
(510) 642-4950

Useable Buildings Trust
Occupant Satisfaction Evaluation Survey
http://www.busmethodology.org.uk/
info@busmethodology.org.uk
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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305
The purpose of this addendum is to revise the lighting power density (LPD) requirements in Standard 189.1 to include parking structures. The ratio of the target LPD to that in Addendum CH to 90.1-2013 is proposed for LPD factors in ASHRAE Standard 189.1 Tables 7.4.6.1A and B. The following table shows the target premium efficiency LPD achievable with current lighting technologies with an emphasis on the use of LED luminaires. The proposed LPD values are developed based on the same analysis methodology used by the 90.1 Lighting Subcommittee. It is possible to achieve this LPD using either greater efficacy luminaires or a slightly lower amount of light than the inputs in the analysis used to develop the Addendum CH to 90.1.

Table 1. LPD requirements for Parking Structure in 90.1 Addendum CH and the 189.1 proposal

<table>
<thead>
<tr>
<th>Application</th>
<th>90.1-2013 Addendum LPD (W/sf)</th>
<th>Target Premium Efficiency for 189.1 LPD (W/sf)</th>
<th>189.1 Proposed Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Garage - Whole Building Area Method</td>
<td>0.15</td>
<td>0.12</td>
<td>0.80</td>
</tr>
<tr>
<td>Parking Area, Interior - Space-by-Space Method</td>
<td>0.14</td>
<td>0.11</td>
<td>0.80</td>
</tr>
</tbody>
</table>

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Addendum z to 189.1-2014

Modify Tables 7.4.6.1A and 7.4.6.1B as follows:

**TABLE 7.4.6.1A LPD Factors when Using the Building Area Method**

<table>
<thead>
<tr>
<th>Building Area Type</th>
<th>LPD Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courthouse</td>
<td>0.95</td>
</tr>
<tr>
<td>Dining—Cafeteria/Fast Food</td>
<td>0.95</td>
</tr>
<tr>
<td>Dining—Family</td>
<td>0.95</td>
</tr>
<tr>
<td>Dormitory</td>
<td>0.95</td>
</tr>
<tr>
<td>Exercise Center</td>
<td>0.95</td>
</tr>
<tr>
<td>Healthcare Clinic</td>
<td>0.95</td>
</tr>
<tr>
<td>Hospital</td>
<td>0.95</td>
</tr>
<tr>
<td>Library</td>
<td>0.95</td>
</tr>
<tr>
<td>Multifamily</td>
<td>0.95</td>
</tr>
<tr>
<td>Office</td>
<td>0.95</td>
</tr>
<tr>
<td>Parking Garage</td>
<td>0.80</td>
</tr>
<tr>
<td>Penitentiary</td>
<td>0.95</td>
</tr>
<tr>
<td>Police Station</td>
<td>0.95</td>
</tr>
<tr>
<td>Religious Building</td>
<td>0.95</td>
</tr>
<tr>
<td>School/University</td>
<td>0.95</td>
</tr>
<tr>
<td>Town Hall</td>
<td>0.95</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.95</td>
</tr>
<tr>
<td>All Other Building Area Types</td>
<td>1.00</td>
</tr>
</tbody>
</table>
### TABLE 7.4.6.1B Lighting Power Density (LPD) Factors When Using the Space-by-Space Method

<table>
<thead>
<tr>
<th>Common Space Types</th>
<th>LPD Factor</th>
<th>Common Space Types</th>
<th>LPD Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audience seating area</td>
<td>1.00</td>
<td>Office</td>
<td>0.95</td>
</tr>
<tr>
<td>... in an auditorium</td>
<td>1.00</td>
<td>... enclosed</td>
<td>0.85</td>
</tr>
<tr>
<td>... in a convention center</td>
<td>1.00</td>
<td>... open plan</td>
<td>0.95</td>
</tr>
<tr>
<td>... in a gymnasium</td>
<td>0.85</td>
<td>Sales area</td>
<td>0.80</td>
</tr>
<tr>
<td>... in a motion picture theater</td>
<td>1.00</td>
<td>Parking area, interior</td>
<td>1.00</td>
</tr>
<tr>
<td>... in a penitentiary</td>
<td>1.00</td>
<td>All other common space types</td>
<td>1.00</td>
</tr>
<tr>
<td>... in a performing arts theater</td>
<td>1.00</td>
<td>Building-Type Specific Space Types</td>
<td></td>
</tr>
<tr>
<td>... in a religious building</td>
<td>1.00</td>
<td>Convention center — Exhibit space</td>
<td>0.85</td>
</tr>
<tr>
<td>... in a sports arena</td>
<td>1.00</td>
<td>Gymnasium/fitness center</td>
<td></td>
</tr>
<tr>
<td>... in all other audience seating areas</td>
<td>1.00</td>
<td>... in an exercise area</td>
<td>0.85</td>
</tr>
<tr>
<td>Classroom/lecture hall/training room</td>
<td>1.00</td>
<td>... in a playing area</td>
<td>1.00</td>
</tr>
<tr>
<td>... in a penitentiary</td>
<td>1.00</td>
<td>Healthcare facility</td>
<td></td>
</tr>
<tr>
<td>... in all other classrooms/lecture halls/training rooms</td>
<td>0.85</td>
<td>... in an exam/treatment room</td>
<td>0.85</td>
</tr>
<tr>
<td>Conference/meeting/multipurpose room</td>
<td>0.90</td>
<td>... in an imaging room</td>
<td>1.00</td>
</tr>
<tr>
<td>Corridor</td>
<td>0.85</td>
<td>... in a medical supply room</td>
<td>0.85</td>
</tr>
<tr>
<td>... in a facility for the visually impaired (and used primarily by residents)</td>
<td>1.00</td>
<td>... in a nursery</td>
<td>0.85</td>
</tr>
<tr>
<td>... in a hospital</td>
<td>1.00</td>
<td>... in a nurse’s station</td>
<td>0.90</td>
</tr>
<tr>
<td>... in a manufacturing facility</td>
<td>1.00</td>
<td>... in an operating room</td>
<td>1.00</td>
</tr>
<tr>
<td>... in all other corridors</td>
<td>0.85</td>
<td>... in a patient room</td>
<td>0.90</td>
</tr>
<tr>
<td>Courtroom</td>
<td>0.85</td>
<td>... in a physical therapy room</td>
<td>0.85</td>
</tr>
<tr>
<td>Dining area</td>
<td>0.85</td>
<td>... in a recovery room</td>
<td>1.00</td>
</tr>
<tr>
<td>... in a penitentiary</td>
<td>1.00</td>
<td>Library</td>
<td></td>
</tr>
<tr>
<td>... in a facility for the visually impaired (and used primarily by residents)</td>
<td>1.00</td>
<td>... in a reading area</td>
<td>1.00</td>
</tr>
<tr>
<td>... in bar/lounge or leisure dining</td>
<td>1.00</td>
<td>... in the stacks</td>
<td>0.95</td>
</tr>
<tr>
<td>... in cafeteria or fast food dining</td>
<td>1.00</td>
<td>Manufacturing facility</td>
<td></td>
</tr>
<tr>
<td>... in family dining</td>
<td>0.85</td>
<td>... in a detailed manufacturing area</td>
<td>1.00</td>
</tr>
<tr>
<td>... in all other dining areas</td>
<td>0.90</td>
<td>... in an equipment room</td>
<td>1.00</td>
</tr>
<tr>
<td>Laboratory</td>
<td>0.85</td>
<td>... in an extra high bay area</td>
<td>1.00</td>
</tr>
<tr>
<td>... in or as a classroom</td>
<td>1.00</td>
<td>... in a high bay area</td>
<td>0.85</td>
</tr>
<tr>
<td>... in all other laboratories</td>
<td>0.85</td>
<td>... in a low bay area</td>
<td>0.85</td>
</tr>
<tr>
<td>Laundry/washing area</td>
<td>0.95</td>
<td>Transportation facility</td>
<td></td>
</tr>
<tr>
<td>Lobby</td>
<td>0.85</td>
<td>... in a baggage/carousel area</td>
<td>0.90</td>
</tr>
<tr>
<td>... in a facility for the visually impaired (and used primarily by residents)</td>
<td>1.00</td>
<td>... in an airport concourse</td>
<td>0.90</td>
</tr>
<tr>
<td>... for an elevator</td>
<td>0.85</td>
<td>... at a terminal ticket counter</td>
<td>0.85</td>
</tr>
<tr>
<td>Category</td>
<td>Value</td>
<td>Description</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------</td>
<td>--------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>... in a hotel</td>
<td>1.00</td>
<td>Warehouse—Storage area</td>
<td></td>
</tr>
<tr>
<td>... in a motion picture theater</td>
<td>0.95</td>
<td>... for medium to bulky, palletized items</td>
<td>0.85</td>
</tr>
<tr>
<td>... in a performing arts theater</td>
<td>1.00</td>
<td>... for smaller, hand-carried items</td>
<td>1.00</td>
</tr>
<tr>
<td>... all other lobbies</td>
<td>0.95</td>
<td>All other building-type specific space types</td>
<td>1.00</td>
</tr>
<tr>
<td>Lounge/breakroom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... in a healthcare facility</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... in all other lounge/breakrooms</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROPOSED REVISION OF:

Forged Fittings, Socket-Welding and Threaded

Draft Date 07/2016

TENTATIVE SUBJECT TO REVISION OR WITHDRAWAL
Specific Authorization Required for Reproduction or Quotation
ASME Codes and Standards
Mandatory Appendix II
References

The following is a list of publications referenced in this Standard.

ASME B1.20.1, Pipe Threads, General Purpose (Inch)
ASME B16.34, Valves — Flanged, Threaded, and Welding End
ASME B36.10M, Welded and Seamless Wrought Steel Pipe
Publisher: The American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990; Order Department: 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007-2900 (www.asme.org)

ASTM A105/A105M-05, Specification for Carbon Steel Forgings for Piping Components
ASTM A182/A182M-08, Specification for Forged or Rolled Alloy and Stainless Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service
ASTM A234/A234M-07, Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service
ASTM A350/A350M-07, Specification for Carbon and Low-Alloy Steel Forgings, Requiring Notch Toughness Testing for Piping Components
ASTM A403/A403M-07A, Specification for Wrought Austenitic Stainless Steel Piping Fittings
ASTM A420/A420M-03, Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Low-Temperature Service

ASTM A815/A815M-08, Specification for Wrought Ferritic, Ferritic/Austenitic, and Martensitic Stainless Steel Piping Fittings
ASTM A960/A960M-07, Specification for Common Requirements for Wrought Steel Piping Fittings
ASTM B564-06a, Specification for Nickel Alloy Forgings
Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 9000:2005, Quality management systems — Fundamentals and vocabulary
ISO 9001:2008, Quality management systems — Requirements
ISO 9004:2009, Managing for the sustained success of an organization — A quality management approach
Publisher: International Organization for Standardization (ISO), Central Secretariat, 1, ch. de la Voie-Creuse, Case postale 56, CH-1211, Genève 20, Switzerland/Suisse (www.iso.org)

1 May also be obtained from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.

*Insert new reference:
ASTM A961/A961M-16, Standard Specification for Common Requirements for Steel Flanges, Forged Fittings, Valves, and Parts for Piping Applications
PROPOSED REVISION OF:

Cast Copper Alloy Solder Joint Drainage Fittings: DWV

Draft Date 07/2016
CAST COPPER ALLOY SOLDER JOINT DRAINAGE FITTINGS: DWV

1 SCOPE

This Standard establishes specifications for cast copper alloy solder joint drainage fittings, designed for use in drain, waste, and vent (DWV) systems. These fittings are designed for use with seamless copper tube conforming to ASTM B306, Copper Drainage Tube (DWV), as well as fittings intended to be assembled with soldering materials conforming to ASTM B32, or tapered pipe thread conforming to ANSI/ASME B1.20.1.

This Standard is allied with ASME B16.29, Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings — DWV.

It provides requirements for fitting ends suitable for soldering. This Standard covers

(a) description
(b) pitch (slope)
(c) abbreviations for end connections
(d) sizes and methods for designing openings for reducing fittings
(e) marking
(f) material
(g) dimensions and tolerances

2 GENERAL

2.1 Relevant Units

This Standard states values in both SI (Metric) and U.S. Customary units. These systems of units are to be regarded separately as standard. Within the text, the U.S. Customary units are shown in parentheses or in separate tables that appear in Mandatory Appendix I. The values stated in each system are not exact equivalents; therefore, it is required that each system of units be used independently of the other. Combining values from the two systems constitutes nonconformance with the Standard.

2.2 References

Standards and specifications adopted by reference in this Standard are shown in Mandatory Appendix II, which is part of this Standard. It is not considered practical to identify the specific edition of each standard and specification in the individual references. Instead, the specific edition reference is identified in Mandatory Appendix II.

2.3 Quality Systems

Requirements relating to the product manufacturer’s quality system programs are described in Nonmandatory Appendix A.

3 DESCRIPTION

(a) These fittings are designed for drainage and vent systems using the solder joint method of connection. The fitting cups, C, are provided with stops so that the ends of the tube, when assembled, meet the stops, thereby forming essentially smooth passageways.

(b) The sketches and designs of fittings are illustrative only. The dimensions specified herein shall govern in all cases.

4 PITCH (SLOPE)

All nominal 90-deg fittings shall be pitched to result in a slope of 21 mm/m (0.25 in./ft) (2.1%) of length of horizontal tube with reference to a horizontal plane (see Fig. 1).

5 ABBREVIATIONS

The following symbols are used to designate the type of fitting end:

C = solder-joint fitting end made to receive copper tube diameter (female)
F = internal ANSI Standard taper pipe thread (female) NPT
FTG = solder-joint fitting end made to copper tube diameter (male)
M = external ANSI Standard taper pipe thread (male) NPT
NPSM = standard straight mechanical pipe thread
SJ = end of fitting made to receive O.D. tube size

6 SIZE

(a) The size of the fittings scheduled in Tables 1 through 56 and Tables I-1 through I-56 corresponds to the drainage tube size shown in ASTM B306. The size of the threaded ends (except slip joints) corresponds to the nominal pipe size.
Table 3 Dimensions of Threaded Ends — DWV

<table>
<thead>
<tr>
<th>Nominal Thread Size (Note 3)</th>
<th>Minimum Dia. of Band or Across Flats of Polygon, A</th>
<th>Minimum Band Length, B</th>
<th>Minimum Dia. of Body Over Thread, C</th>
<th>Minimum Dia. of Recess, MM (Note 4)</th>
<th>Minimum Depth of Full Thread, V</th>
<th>Minimum, W</th>
<th>Minimum Length of Shoulder, YY ±1.5 (Note 4)</th>
<th>Minimum Thread End Wall, S (Note 5)</th>
<th>Minimum Thread End Bore, P (Note 6)</th>
<th>Maximum Length of Effective Thread, ZZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4</td>
<td>48.5</td>
<td>7.9</td>
<td>48.3</td>
<td>42.2</td>
<td>18.0</td>
<td>25.4</td>
<td>10.7</td>
<td>17.8</td>
<td>3.05</td>
<td>33.27</td>
</tr>
<tr>
<td>1/2</td>
<td>55.1</td>
<td>8.6</td>
<td>55.1</td>
<td>48.5</td>
<td>18.3</td>
<td>25.4</td>
<td>10.7</td>
<td>18.3</td>
<td>3.30</td>
<td>39.37</td>
</tr>
<tr>
<td>2</td>
<td>68.3</td>
<td>10.4</td>
<td>68.1</td>
<td>60.5</td>
<td>19.3</td>
<td>26.2</td>
<td>11.2</td>
<td>19.1</td>
<td>3.81</td>
<td>51.56</td>
</tr>
<tr>
<td>3</td>
<td>98.6</td>
<td>14.0</td>
<td>98.6</td>
<td>88.9</td>
<td>30.5</td>
<td>37.1</td>
<td>19.6</td>
<td>30.5</td>
<td>4.83</td>
<td>77.47</td>
</tr>
<tr>
<td>4</td>
<td>125.5</td>
<td>16.8</td>
<td>125.5</td>
<td>114.3</td>
<td>33.0</td>
<td>38.9</td>
<td>21.3</td>
<td>33.0</td>
<td>5.59</td>
<td>102.87</td>
</tr>
<tr>
<td>5</td>
<td>155.4</td>
<td>19.8</td>
<td>155.4</td>
<td>141.2</td>
<td>35.8</td>
<td>42.2</td>
<td>23.9</td>
<td>35.8</td>
<td>7.11</td>
<td>126.49</td>
</tr>
<tr>
<td>6</td>
<td>185.4</td>
<td>22.4</td>
<td>185.4</td>
<td>168.1</td>
<td>38.4</td>
<td>42.7</td>
<td>24.4</td>
<td>38.1</td>
<td>8.64</td>
<td>153.16</td>
</tr>
<tr>
<td>8</td>
<td>238.3</td>
<td>28.4</td>
<td>238.0</td>
<td>218.9</td>
<td>43.4</td>
<td>44.5</td>
<td>26.9</td>
<td>43.2</td>
<td>9.53</td>
<td>201.93</td>
</tr>
</tbody>
</table>

GENERAL NOTES:
(a) Dimensions are in millimeters.
(b) For threads of threaded ends, see section 11.

NOTES:
(1) For inside diameter of fitting, see Table 2.
(2) 1/4, 1/2, and 2 male threaded ends may have inside chamfer for slip nut connections.
(3) Thread size is American National Standard Pipe Threads, General Purpose (Inch), ANSI/ASME B1.20.1.
(4) Dimensions computed using formula $E_1 - h - 2T$.

\[
E_1 = \text{thread pitch diameter from ANSI/ASME B1.20.1} \\
T = \text{metal thickness from Table 2} \\
h = \text{height of thread from ANSI/ASME B1.20.1}
\]
(5) For initial thickness tolerance, see section 9.
### Table I-3  Dimensions of Threaded Ends — DWV

**Female Threaded End (F)**

<table>
<thead>
<tr>
<th>Nominal Thread Size</th>
<th>Minimum Dia. of Band or Across Flats of Polygon, A</th>
<th>Minimum Band Length, B</th>
<th>Minimum Dia. of Body Over Recess, C</th>
<th>Minimum Dia. of Full Thread, MM</th>
<th>Minimum Depth of Full Thread, V</th>
<th>Minimum, W</th>
<th>Minimum Length of Thread, Y</th>
<th>Minimum End To Shoulder, YY ±0.06</th>
<th>Minimum End Wall, S</th>
<th>Maximum End Bore, P</th>
<th>Minimum Length of Effective Thread, ZZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1(\frac{1}{4})</td>
<td>1.91</td>
<td>0.31</td>
<td>1.90</td>
<td>1.66</td>
<td>0.71</td>
<td>1.00</td>
<td>0.42</td>
<td>0.70</td>
<td>0.120</td>
<td>1.31</td>
<td>0.71</td>
</tr>
<tr>
<td>1(\frac{1}{2})</td>
<td>2.17</td>
<td>0.34</td>
<td>2.17</td>
<td>1.91</td>
<td>0.72</td>
<td>1.00</td>
<td>0.42</td>
<td>0.72</td>
<td>0.130</td>
<td>1.55</td>
<td>0.72</td>
</tr>
<tr>
<td>2</td>
<td>2.69</td>
<td>0.41</td>
<td>2.68</td>
<td>2.38</td>
<td>0.76</td>
<td>1.03</td>
<td>0.44</td>
<td>0.75</td>
<td>0.150</td>
<td>2.03</td>
<td>0.76</td>
</tr>
<tr>
<td>3</td>
<td>3.88</td>
<td>0.55</td>
<td>3.88</td>
<td>3.50</td>
<td>1.20</td>
<td>1.46</td>
<td>0.77</td>
<td>1.20</td>
<td>0.190</td>
<td>3.05</td>
<td>1.20</td>
</tr>
<tr>
<td>4</td>
<td>4.94</td>
<td>0.66</td>
<td>4.94</td>
<td>4.50</td>
<td>1.30</td>
<td>1.53</td>
<td>0.84</td>
<td>1.30</td>
<td>0.220</td>
<td>4.05</td>
<td>1.30</td>
</tr>
<tr>
<td>5</td>
<td>6.12</td>
<td>0.78</td>
<td>6.12</td>
<td>5.56</td>
<td>1.41</td>
<td>1.65</td>
<td>0.94</td>
<td>1.41</td>
<td>0.280</td>
<td>4.98</td>
<td>1.41</td>
</tr>
<tr>
<td>6</td>
<td>7.30</td>
<td>0.88</td>
<td>7.30</td>
<td>6.62</td>
<td>1.51</td>
<td>1.68</td>
<td>0.96</td>
<td>1.50</td>
<td>0.340</td>
<td>6.03</td>
<td>1.51</td>
</tr>
<tr>
<td>8</td>
<td>9.38</td>
<td>1.12</td>
<td>9.37</td>
<td>8.62</td>
<td>1.71</td>
<td>1.75</td>
<td>1.06</td>
<td>1.70</td>
<td>0.375</td>
<td>7.95</td>
<td>1.71</td>
</tr>
</tbody>
</table>

**Male Threaded End (M)**

**Notes:**

(a) Dimensions are in inches.

(b) For threads of threaded ends, see section 11.

NOTES:

1. For inside diameter of fitting, see Table I-2.
2. 1\(\frac{1}{4}\), 1\(\frac{1}{2}\), and 2 male threaded ends may have inside chamfer for slip nut connections.
4. Dimensions computed using formula

   \[ E_1 = \text{thread pitch diameter from ANSI/ASME B1.20.1} \]

   \[ h = \text{height of thread from ANSI/ASME B1.20.1} \]

   \[ T = \text{metal thickness from Table I-2} \]

5. For initial thickness tolerance, see section 9.
MANDATORY APPENDIX II
REFERENCES

The following is a list of publications referenced in this Standard. Unless otherwise stated, the latest edition of ASME publications shall apply:

- ANSI/ASME B1.20.1, Pipe Threads, General Purpose (Inch)
- ASME B16.12, Iron Threaded Drainage Fittings
- ASME B16.18, Cast Copper Alloy Solder Joint Pressure Fittings
- ASME B16.29, Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings — DWV

Publisher: The American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990; Order Department: 22 Law Drive, P.O. Box 2900, Fairfield, NJ 07007-2900 (www.asme.org)

- ASTM B62-2009, Standard Specification for Composition Bronze or Ounce Metal Castings

Publisher: ASTM International (ASTM), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

- ISO 9000:2005, Quality management systems — Fundamentals and vocabulary
- ISO 9001:2008, Quality management systems — Requirements

Publisher: International Organization for Standardization (ISO), Central Secretariat, 1, ch. de la Voié-Creuse, Case postale 56, CH-1211 Genève 20, Switzerland/Suisse (www.iso.org)

- MSS SP-25-2008, Standard Marking System for Valves, Fittings, Flanges and Unions

Publisher: Manufacturers Standardization Society of the Valve and Fittings Industry (MSS), 127 Park Street, NE, Vienna, VA 22180 (www.mss-hq.org)

1 May also be obtained from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.

The following is a list of standards and specifications referenced in this Standard. Products covered by each ASTM specification are listed for convenience. For ASME Codes and Standards referenced hereunder, up to and including the latest published edition in effect at the time this edition of this Standard is specified, may be used. (See specifications for exact titles and detailed contents.) Materials manufactured to other editions of the referenced ASTM specifications may be used to manufacture fittings meeting the requirements of this Standard as long as the fitting manufacturer verifies that the material meets the requirements of the referenced edition of the ASTM specification.

ISO documents are available from the American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036. Publications appearing above, which have been approved as American National Standards, may also be obtained from ANSI.
Table 9.6.1.5.1 – NPSH margin – petroleum (hydrocarbon) process pumps

As currently in ANSI Canvass draft:

<table>
<thead>
<tr>
<th>Pump Type</th>
<th>Power per Stage kW (hp)</th>
<th>POR NPSH Margin Ratio [Margin Minimum]</th>
<th>AOR NPSH Margin Ratio [Margin Minimum]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum/hydrocarbon</td>
<td>All</td>
<td>1.1 [1.0 m (3.3 ft)]</td>
<td>1.1 [1.0 m (3.3 ft)]</td>
</tr>
<tr>
<td>process</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As proposed in ANSI Canvass comment:

<table>
<thead>
<tr>
<th>Pump Type</th>
<th>Power per Stage kW (hp)</th>
<th>POR NPSH Margin Ratio [Margin Minimum]</th>
<th>AOR NPSH Margin Ratio [Margin Minimum]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum/hydrocarbon</td>
<td>&lt; 373 (500)</td>
<td>1.1 [1.0 m (3.3 ft)]</td>
<td>1.1 [1.0 m (3.3 ft)]</td>
</tr>
<tr>
<td>process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Petroleum/hydrocarbon</td>
<td>≥ 373 (500)</td>
<td>1.1 [1.0 m (3.3 ft)]</td>
<td>1.2 [1.0 m (3.3 ft)]</td>
</tr>
<tr>
<td>process</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.1 Normative references for plastic pipe and related components

ASME A112.18.6/CSA B125.6-2009 [R2014]. Flexible Water Connector


ANSI/AWWA C909-09. Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4 in and Larger through 24 in (100 mm through 600 mm), for Water, Wastewater, and Reclaimed Water Service
5 Design and construction

5.32 Height and width

The cabinet, excluding removable light fixtures, exhaust filter housings and guards, and adjustable legs or feet, shall be sized to fit through a 79 by 35 in (201 x 89 cm) doorway using commonly available furniture moving equipment (jacks and dollies) (see figure 10).
Figure 10 - Height and width

To be removed along with language
BSR/UL 827, Standard for Safety for Central-Station Alarm Services

PROPOSAL

1. Additional Requirements that Include Equivalent Options for Communication Services Providers

5.2.46 REDUNDANT SITE - A physical location that is able to provide all of the essential functions of a central station should an automated central station become unable to process signals. One or more physical locations that together can provide all the required functions of a central station should an automated central station become unable to process signals.

(REVISED)

Table 17.2

Summary of computer system configuration

(\textit{Format change only - the first and second columns have been reversed.})

<table>
<thead>
<tr>
<th>Maximum MEW$^x$</th>
<th>Type of automation system employed$^x$</th>
<th>First Fault failure failover accommodation</th>
<th>Second Fault failure failover accommodation</th>
<th>Section reference for details</th>
</tr>
</thead>
<tbody>
<tr>
<td>999</td>
<td>None - Manual Signal Processing</td>
<td>None</td>
<td>None</td>
<td>17.6.1</td>
</tr>
<tr>
<td>999</td>
<td>Susceptible to single fault failure</td>
<td>Manual</td>
<td>None</td>
<td>17.6.1</td>
</tr>
<tr>
<td>9,999</td>
<td>Single-fault tolerant Automation System</td>
<td>Manual</td>
<td>Manual</td>
<td>17.6.2</td>
</tr>
<tr>
<td>99,999</td>
<td>Two-fault tolerant Automation System</td>
<td>Automation System*</td>
<td>Automation System*</td>
<td>17.6.3</td>
</tr>
<tr>
<td>Unlimited</td>
<td>Two-fault tolerant with redundant site</td>
<td>Automation System</td>
<td>Automation System*</td>
<td>17.6.4</td>
</tr>
</tbody>
</table>

* Central Station not required to maintain manual signal handling capability

17.6.3.2 Within 6 hours of the fault described in 17.6.2.2, the computer system shall be returned to a state where it is capable of resuming signal processing within 90 seconds of a second fault in a surviving power supply, computational/CPU hardware node, data storage hardware component, software/operating system instance, or similar critical component that would affect the 90 (or 30) second switchover.

17.6.3.2.1 System components necessary to meet the requirement of 17.6.3.2 may be kept in an unenergized state and disconnected from all network, power supply, or other systems provided that:

a) The components are engaged and actively processing signals at least once in every consecutive thirty day period;

b) Associated database(s) are updated no less the every twenty-four hours.
BSR/UL 1083, Standard for Safety for Household Electric Skillets and Frying-Type Appliances

PROPOSALS

1. Use of Commercially Available Peanut Oil for Testing of Deep Fryers, Oil Fondues, and Skillets, Revised 31.2.2.1, 31.2.4.3, 31.2.10.1, 40.2, 46.3.1, 46.4.1

31.2.2.1 The fryer is to be filled with pure cold pressed commercially available peanut oil to the level indicated on the appliance or in the instruction manual. The fryer is to be preheated in accordance with 31.1.18 and then 3 batches of french fries are to be cooked, according to the manufacturer's instructions. Each batch is to be cooked to a medium brown color. A medium brown color is to be determined by use of the french fries color chart in Appendix B. Unloading and loading between batches is to be accomplished in 15 - 30 seconds. Each batch of french fries is to consist of the maximum load recommended. The french fries are to be made using fresh standard baking potatoes cut 3/8 - 1/2 inch (9.6 - 12.7 mm) on a side and are to be of any convenient length. See 31.1.5 for the cooking surface temperature test.

31.2.4.3 The appliance is to be operated continuously with the thermostat set at the maximum setting until thermal equilibrium is attained. The appliance is to be filled to a depth of 1/2 inch (13 mm) with pure cold pressed commercially available peanut oil as measured at the center of the pan. See 31.1.5 for the cooking surface temperature test.

31.2.10.1 The oil fondue appliance is to be operated continuously, set on high, or with the thermostat set at the maximum setting, if one is provided, until thermal equilibrium is obtained. The appliance is to be filled with pure cold pressed commercially available peanut oil to the level indicated in the instruction manual. See 31.1.5 for the cooking surface temperature test.

40.2 One sample of a deep fryer, cooker/fryer, or oil fondue appliance with basket is to be filled with pure cold pressed commercially available peanut oil to the level indicated on the appliance or in the instruction manual. The deep fryer, cooker/fryer, or oil fondue appliance is to be subjected to 100 cycles of operation. Each cycle is to consist of 30 minutes heating followed by 60 minutes cooling. During every 5th cycle, the appliance is to be operated in the cooking mode as described in Normal Temperature Test, Section 31. At the completion of every 5 cycles the appliance is to be drained and allowed to cool to the ambient room temperature.

Exception: Supplemental cooling may be used in lieu of the 60 minute cooling time specified for each cycle, provided the handles and feet of the deep fryer, cooker/fryer, or oil fondue appliance being tested is cooled to the ambient room temperature.

46.3.1 The appliance is to be operated with fresh unused pure cold pressed commercially available peanut oil at the recommended level, with the thermostat set at the position that gives maximum heat, and with the appliance initially at room temperature. An oil temperature higher than 390°C (734°F) at any time during the test is not acceptable. The test is then to be repeated with all oil drained from the appliance, but with a residual film of oil within the fat kettle. With reference to 31.1.14, the regulating thermostat is not to be defeated during this test. The cover, if provided, is not to be in place during these tests.

46.4.1 The appliance is to be tested as indicated in 46.3.1 except that initially 1/2 inch (12.7 mm) of pure cold pressed commercially available peanut oil is to be in the skillet.