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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](mailto:psa@ansi.org)

\* Standard for consumer products

## Comment Deadline: December 4, 2016

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

#### Addenda

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

This addendum addresses plans for the treatment of waste materials originating from the development of a building project site.

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

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

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

#### Addenda

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

This addendum creates a new definition for plants that are suitable for inclusion in this standard.

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

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

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

#### Addenda

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

This addendum revises the lighting power density (LPD) requirements in Standard 189.1 for exterior parking area.

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

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

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

#### Addenda

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

This addendum adds requirements for testing, installation and commissioning of air curtains when they are installed in building entrances.

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

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This addendum revises the bi-level motion control requirements to better align with the recently approved Addendum AS to ASHRAE/IES 90.1-2013.

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

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

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This addendum revises Section 9.5 to reflect advancements in the implementation of life cycle assessment and to reference ASTM E2921, Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes and Rating Systems.

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

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This addendum modifies the provisions for electric vehicle charging infrastructure to include an additional option to provide electric conduit from electric service panels to parking lot spaces during new building construction.

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

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

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#### Addenda

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This addendum modifies the roof heat island mitigation section that was changed via addendum 'i'.

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

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

### New Standard

BSR/ASHRAE/ASHE Standard 189.3P-201x, Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities (new standard)

This proposed standard addresses the sustainability of healthcare facilities as a document paralleling, yet distinct from, ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High-Performance Green Buildings.

Healthcare facilities have a keen interest and, in many cases, the desire to develop in a sustainable manner. These facilities are often the largest and most energy-intensive buildings in a community, and their leadership recognizes that saving energy and operating costs are an opportunity to reflect smart decision-making, care, and stewardship of the environment and fiscal practicality.

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## NSF (NSF International)

### Revision

BSR/NSF 50-201x (i118r1), Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF 50-2016)

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

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

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

## NSF (NSF International)

### Revision

BSR/NSF 358-1-201x (i3), Polyethylene Pipe and Fittings for Water-Based Ground-Source "Geothermal" Heat Pump Systems (revision of ANSI/NSF 358-1-2014)

The physical and performance requirements in this Standard apply to plastic piping system components as well as non-plastic components of the ground loop heat exchanger including, but not limited to, pipes and fittings used in water-based ground-source heat pump systems.

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

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

## NSF (NSF International)

### Revision

BSR/NSF 363-201x (i4r2), Good Manufacturing Practices (GMP) for Pharmaceutical Excipients (revision of ANSI/NSF 363-2014)

The purpose of NSF/IPEC/ANSI 363 is to serve as an evaluation tool for analyzing pharmaceutical excipients. Certification to this Standard serves as a communication tool between manufacturers of excipients and finished product, pharmaceutical regulators, pharmacy organizations, and consumers. This Standard provides guidance to allow for the determination that a pharmaceutical excipient is within the specifications stated by the manufacturer, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients.

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

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Rachel Brooker, (734) 827-6866, [rbrooker@nsf.org](mailto:rbrooker@nsf.org)

## NSF (NSF International)

### Revision

BSR/NSF 363-201x (i9r1), Good Manufacturing Practices (GMP) for Pharmaceutical Excipients (revision of ANSI/NSF 363-2014)

The purpose of NSF/IPEC/ANSI 363 is to serve as an evaluation tool for analyzing pharmaceutical excipients. Certification to this Standard serves as a communication tool between manufacturers of excipients and finished product, pharmaceutical regulators, pharmacy organizations, and consumers. This Standard provides guidance to allow for the determination that a pharmaceutical excipient is within the specifications stated by the manufacturer, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients.

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Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Rachel Brooker, (734) 827-6866, [rbrooker@nsf.org](mailto:rbrooker@nsf.org)

## NSF (NSF International)

### Revision

BSR/NSF 363-201x (i10r1), Good Manufacturing Practices (GMP) for Pharmaceutical Excipients (revision of ANSI/NSF 363-2014)

The purpose of NSF/IPEC/ANSI 363 is to serve as an evaluation tool for analyzing pharmaceutical excipients. Certification to this Standard serves as a communication tool between manufacturers of excipients and finished product, pharmaceutical regulators, pharmacy organizations, and consumers. This Standard provides guidance to allow for the determination that a pharmaceutical excipient is within the specifications stated by the manufacturer, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients.

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

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Rachel Brooker, (734) 827-6866, [rbrooker@nsf.org](mailto:rbrooker@nsf.org)

## RVIA (Recreational Vehicle Industry Association)

### Revision

BSR/RVIA LV-201x, Standard for Low Voltage Systems in Conversion and Recreational Vehicles (revision of ANSI/RVIA LV-2013)

This standard covers the installation of low voltage electrical systems and devices within conversion and recreational vehicles. In the absence of specific instructions from the automotive OEM, this standard also covers any additions, deletions, or modifications to any part of the original equipment chassis manufacturer's electrical system.

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Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Kent Perkins, (703) 620-6003, [kperkins@rvia.org](mailto:kperkins@rvia.org)

## UL (Underwriters Laboratories, Inc.)

### Revision

BSR/UL 746B-201x, Standard for Safety for Polymeric Materials - Long Term Property Evaluations (revision of ANSI/UL 746B-2013)

The following topics are covered in this recirculated proposal for UL 746B: (a) Assignment of a generic thermal index temperature of 85°C to PPA in Table 7.1 and (b) a fixed temperature evaluation for exceptionally durable materials specified in Paragraph 13.4, new Table 13.2, and new Paragraph 13.4.1.

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

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

BSR/UL 1026-201X, Standard for Safety for Household Electric Cooking and Food Serving Appliances (Proposals dated 11/4/16) (revision of ANSI/UL 1026-2016)

Smart enabled toaster ovens.

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

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

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

BSR/UL 1703-201x, Standard for Flat-Plate Photovoltaic Modules and Panels (revision of ANSI/UL 1703-2016)

1. Clarification for the use of coatings at the interconnection of a module and a junction box.

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Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Susan Malohn, (847) 664-1725, [Susan.P.Malohn@ul.com](mailto:Susan.P.Malohn@ul.com)

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

BSR/UL 2250-201X, Standard for Safety for Instrumentation Tray Cable (Proposal dated 11/4/16) (revision of ANSI/UL 2250-2009a (R2014))

Metal covering. Proposed changes to 17.1.1(e) and 17.3.1, and new 17.3.3.

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

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

**Comment Deadline: December 19, 2016****ADA (American Dental Association)****Reaffirmation**

BSR/ADA Specification No. 47-2006 (R201x), Dental Units (reaffirmation of ANSI/ADA 47-2006)

This standard specifies requirements and test methods for dental units, regardless of whether or not they are electrically powered. Requirements and test methods for the materials and design and construction of the water and air supply within dental units are also included in order to ensure that the pressurized water and air supplied via the dental unit are of appropriate quality. Provisions for the prevention of retraction of oral fluids into the water supply of the dental unit are included as well. This specification does not address prevention of contamination and/or proliferation of hazardous microorganisms (for example, bacteria, viruses) in the dental unit.

Single copy price: \$55.00

Obtain an electronic copy from: [standards@ada.org](mailto:standards@ada.org)

Order from: Kathy Medic, (312) 440-2533, [medick@ada.org](mailto:medick@ada.org)

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

**ANS (American Nuclear Society)****Reaffirmation**

BSR/ANS 58.14-2011 (R201x), Safety and Pressure Integrity Classification Criteria for Light Water Reactors (reaffirmation of ANSI/ANS 58.14-2011)

This standard specifies deterministic criteria for the safety classification of items (i.e., SSCs and parts (including consumables)) in a LWR NPP as either safety-related (Q), supplemented grade (S), or non-safety-related (N). Criteria provide and establish a procurement subclassification within Class Q, called commercial grade (C). In addition, pressure integrity classification criteria provide for the assignment of Classes 1 to 5 to the pressure-retaining portion of items.

Single copy price: \$194.00

Obtain an electronic copy from: [scook@ans.org](mailto:scook@ans.org)

Order from: Sue Cook, (708) 579-8210, [orders@ans.org](mailto:orders@ans.org); [scook@ans.org](mailto:scook@ans.org)

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Patricia Schroeder, (708) 579-8269, [pschroeder@ans.org](mailto:pschroeder@ans.org)

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

BSR/ASHRAE Addendum p to ANSI/ASHRAE Standard 135.1-2013, Method of Test for Conformance to BACnet (addenda to ANSI/ASHRAE Standard 135.1-2013)

This addendum fixes the EPICS Consistency Tests, removes EPICS Database Templates, and adds a test for Use of Error Code BUSY with Command Object.

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

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

This addendum updates the normative references in Section 11 and the informative references in Appendix G.

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

This addendum updates requirements for functional performance testing and building systems commissioning in Standard 189.1-2014.

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

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This addendum updates the acoustical requirements of 189.1 in comparison with the International Green Construction Code, Acoustical Society of America, Facilities Guideline Institute, LEED, and benefited from the participation of ASHRAE Technical Committee TC 2.6 Sound and Vibration Control.

Single copy price: \$35.00

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

BSR/ASHRAE/IES Standard 90.2-2007 (R201x), Energy Efficient Design of Low-Rise Residential Buildings (revision and redesignation of ANSI/ASHRAE Standard 90.2-2007)

This Standard represents a new approach in residential building energy performance. It seeks to deliver residential building energy performance that is at least 50% more efficient than the energy efficiency defined by the 2006 IECC. By establishing a clearly defined rules set for energy performance modeling, users such as home builders, can easily assess various designs, material options, orientations, and other variables to evaluate predicted energy performance. This analytical flexibility also enables users such as utilities and beyond-code program developers to have a reliable and repeatable tool for helping to establish program targets and ensure program compliance.

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

BSR/ASTM WK15822-201x, Test Method for Measuring Force Reduction, Vertical Deformation, and Energy Restitution of Synthetic Turf Systems using the Advanced Artificial Athlete (new standard)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

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

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

BSR/ASTM WK42675-201x, Specification for Metallic Press-Connect Fittings for Piping and Tubing Systems (new standard)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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

BSR/ASTM WK52150-201x, Guide for Impregnation of Graphite with Molten Salt (new standard)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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

BSR/ASTM WK54425-201x, Guide for Nondestructive Evaluation of Nuclear Grade Graphite (new standard)

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**ASTM (ASTM International)****Revision**

BSR/ASTM D1655-201x, Specification for Aviation Turbine Fuels (revision of ANSI/ASTM D1655-2016B)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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

**ASTM (ASTM International)****Revision**

BSR/ASTM D4171-201x, Specification for Fuel System Icing Inhibitors (revision of ANSI/ASTM D4171-2016)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM D7719-201x, Specification for High Aromatic Content Unleaded Hydrocarbon Aviation Gasoline (revision of ANSI/ASTM D7719-2016)

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**ASTM (ASTM International)****Revision**

BSR/ASTM D7959-201x, Test Method for Chloride Content Determination (revision of ANSI/ASTM D7959-2015)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM E662-201x, Test Method for Specific Optical Density of Smoke Generated by Solid Materials (revision of ANSI/ASTM E662-2015A)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM E970-201x, Test Method for Critical Radiant Flux of Exposed Attic Floor Insulation Using a Radiant Heat Energy Source (revision of ANSI/ASTM E970-2014)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM E1995-201x, Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single Closed Chamber, with the Test Specimen Oriented Horizontally (revision of ANSI/ASTM E1995-2012)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM E2061-201x, Guide for Fire Hazard Assessment of Rail Transportation Vehicles (revision of ANSI/ASTM E2061-2015)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM F1114-201x, Specification for Heat Sanitizing Commercial Pot, Pan, and Utensil Stationary Rack Type Water-Driven Rotary Spray (revision of ANSI/ASTM F1114-2011)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM F1150-201x, Specification for Commercial Food Waste Pulper and Waterpress Assembly (revision of ANSI/ASTM F1150-2011)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM F1202-201x, Specification for Washing Machines, Heat Sanitizing, Commercial, Pot, Pan, and Utensil Vertically Oscillating Arm Type (revision of ANSI/ASTM F1202-2011)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM F1203-201x, Specification for Washing Machines - Pot, Pan, and Utensil, Heat Sanitizing, Commercial Rotary Conveyor Type (revision of ANSI/ASTM F1203-2011)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM F2645-201x, Specification for Bun Slicing Machines (revision of ANSI/ASTM F2645-2007(2011))

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Revision**

BSR/ASTM F2646-201x, Specification for Bread Slicing Machines (revision of ANSI/ASTM F2646-2007(2011))

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**ASTM (ASTM International)****Withdrawal**

ANSI/ASTM D7592-2015a, Specification for Specification for Grade 94 Unleaded Aviation Gasoline Certification and Test Fuel (withdrawal of ANSI/ASTM D7592-2015a)

[http://www.astm.org/ANSI\\_SA](http://www.astm.org/ANSI_SA)

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**CSA (CSA Group)****Reaffirmation**

BSR Z21.40.1-1996 (R201x) and Z21.40.1a-1997 (R201x), Gas-Fired Heat-Activated Air Conditioning and Heat Pump Appliances (reaffirmation of ANSI Z21.40.1-1996 (R2012) and Z21.40.1a-1997 (R2012))

Details test and examination criteria for gas-fired, heat-activated air-conditioning and heat-pump appliances that make use of the thermal output of fuel gas combustion of natural, manufactured, and mixed gases; liquefied petroleum gases; and LP gas-air mixtures for providing their heating, cooling, or dehumidifying effect. These appliances supply conditioned air; heated and/or cooled liquid; or refrigerants, gases, solids, or liquids to spaces remote from or adjacent to the appliance.

Single copy price: Free

Obtain an electronic copy from: [cathy.rake@csa-america.org](mailto:cathy.rake@csa-america.org)

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

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**CSA (CSA Group)****Reaffirmation**

BSR Z21.40.2-1996 (R201x) and Z21.40.2a-1997 (R201x), Air-Conditioning and Heat Pump Appliances (Internal Combustion) (reaffirmation of ANSI Z21.40.2-1996 (R2012) and Z21.40.2a-1997 (R2012))

Details test and examination criteria for gas-fired engine-driven air-conditioning and heat-pump appliances that make use of internal combustion for use with natural, manufactured, and mixed gases; liquefied petroleum gases; and LP gas-air mixtures. Consisting of sections installed indoor, outdoor, or both, these appliances supply conditioned air, chilled liquid, or refrigerant to spaces remote from or adjacent to the appliance.

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**CSA (CSA Group)****Reaffirmation**

BSR Z21.40.4-1996 (R201x) and Z21.40.4a-1998 (R201x), Performance Testing and Rating of Gas-Fired Air Conditioning and Heat Pump Appliances (reaffirmation of ANSI Z21.40.4-1996 (R2012) and Z21.40.4a-1998 (R2012))

Details methods of testing and rating gas-fired air-conditioning and heat-pump appliances that utilize natural, manufactured, and mixed gases; liquefied petroleum gases; and LP gas-air mixtures. This includes engine-driven heat pumps, absorption-cycle heat pumps, desiccant-type heat pumps, and other gas-fired heat pumps. The heat pumps may provide the functions of year-round space conditioning either by direct heating and cooling of air or indirectly by production of heated and chilled water.

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**NEMA (ASC C119) (National Electrical Manufacturers Association)****Revision**

BSR C119.5-201x, Insulation Piercing Connector Systems, Rated 600 Volts or Less (Low-Voltage Aerial Bundled Cables and Insulated and Non-Insulated Line Wires) (revision of ANSI C119.5-2009)

This standard covers insulation piercing connectors used for making electrical connections between insulated, insulated-to-bare, and bare-to-bare conductors rated 600 V or less and 90°C (low-voltage aerial bundled cables and bare and insulated line wires) on overhead distribution lines for electric utilities. Underground insulation piercing connector systems rated at 600 V are covered by ANSI C119.1.

Single copy price: \$83.00

Obtain an electronic copy from: [Pau\\_orr@nema.org](mailto:Pau_orr@nema.org)

Order from: Paul Orr, (703) 841-3227, [Pau\\_orr@nema.org](mailto:Pau_orr@nema.org)

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**NEMA (ASC C8) (National Electrical Manufacturers Association)****New Standard**

BSR ICEA T-32-645-201x, Test Method for Establishing Volume Resistivity Compatibility of Water Blocking Components with Extruded Semiconducting Shield Materials (new standard)

This test method provides procedures for establishing volume resistivity compatibility of water blocking components with extruded semiconducting shields utilized in MV, HV, or EHV power cables. The compatibility test is designed to verify that the electrical properties of a semiconducting material used as a conductor or insulation shield are not adversely affected when exposed to a water-blocking component. These water-blocking components can be incorporated in a conductor, over a conductor, over an insulation shield, or around a metallic shield or concentric neutral. It describes a test method of demonstrating that the volume resistivity and volume resistivity stability remain within their specified limits when a semiconducting material is exposed to a water-blocking component at the emergency operating temperature of the cable.

Single copy price: \$97.00

Obtain an electronic copy from: [Kevin.Connelly@Nema.org](mailto:Kevin.Connelly@Nema.org)

Order from: Kevin Connelly, (703) 841-3299, [Kevin.Connelly@Nema.org](mailto:Kevin.Connelly@Nema.org)

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**NEMA (ASC C8) (National Electrical Manufacturers Association)****Reaffirmation**

BSR ICEA S-115-730-2012 (R201x), Standard for Multi-Dwelling Unit (MDU) Optical Fiber Cable (reaffirmation of ANSI ICEA S-115-730-2012)

Multi Dwelling Unit (MDU) cables covered by this standard include two classes of cables using single mode fiber. The first class includes cables used for distribution and delivery of optical fiber from a demarcation point starting at a conventional optical fiber cable, optical fiber splitter or active optical device through an aesthetic duct or less rigorous routing path. This class of cable may consist of an indoor-only rated cable, the Compact Drop or Small Form Factor Compact Drop. The second class of cable is defined to be more rugged and is described as cables that usually terminate at the customer electronics, or Optical Network Terminal (ONT). The rugged cable class may be stapled, routed around corners under tension, and coiled in a tight diameter. Examples include the Rugged Indoor Drop or Indoor/Outdoor Rugged Drop. See clause 1.4 for a more detailed definition of these cable types. Fiber mechanical reliability requires that a cable classified as Rugged shall meet the enhanced mechanical reliability requirements set forth in this document. Cables containing Multimode fibers are not covered by this standard. MDU cables using Multimode fibers should follow the intent herein using optical limits given by ICEA 596 where appropriate.

Single copy price: \$160.00

Obtain an electronic copy from: [Kevin.Connelly@Nema.org](mailto:Kevin.Connelly@Nema.org)

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**NEMA (ASC C8) (National Electrical Manufacturers Association)****Reaffirmation**

BSR ICEA S-86-634-2011 (R201x), Buried Telecommunications Wire, Filled, Polyolefin Insulated, Copper Conductor, Technical Requirements (reaffirmation of ANSI/ICEA S-86-634-2011)

This Standard covers mechanical and electrical requirements for filled, polyolefin-insulated, copper-conductor, buried telecommunications wire. It provides alternative choices for type of insulation, type of filling compound, sheath design (shielding materials, single or double jackets, and jacket type and thickness) and armoring. Buried wire is used to extend buried telephone plant from the distribution cable to the subscriber.

Single copy price: \$144.00

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**RESNET (Residential Energy Services Network, Inc.)****Revision**

BSR/RESNET/ICC 301-2014, Addendum E-201x, Index Adjustment Factors (revision of ANSI/RESNET 301-2014)

Modification of ANSI/RESNET/ICC 301-2014 to incorporate new provisions for calculating energy rating indexes that adjust for size and configuration. This is the first public review draft, PDS-02, of the proposed amendment, BSR/RESNET/ICC 301-2014 Addendum E-201x. Comments will be accepted on the substantive changes indicated by strike/underline in the proposed amendment.

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Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Comments are submitted via RESNET's online comment form. See the links from webpage: <http://www.resnet.us/professional/standards/consensus>



**RESNET (Residential Energy Services Network, Inc.)****Revision**

BSR/RESNET/ICC 301-2014, Addendum F-201x, Normative Appendix A, Minimum Rated Features, Insulation Installation Grading Section (revision of ANSI/RESNET 301-2014)

Revise Standard ANSI/RESNET/ICC 301-2014 to add Normative Appendix A, Minimum Rated Features, including insulation installation grading criteria, to replace references to other documents.

Single copy price: \$55.00

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Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Comments are submitted via RESNET's online comment form. See the links from webpage: <http://www.resnet.us/professional/standards/consensus>

**SCTE (Society of Cable Telecommunications Engineers)****Revision**

BSR/SCTE 31-201x, Test Method for Measuring Diameter Over Core (revision of ANSI/SCTE 31 2007)

To document sample preparation, sample testing and test procedure for measurement of min, max, average core diameter of finished goods coaxial cable.

Single copy price: \$50.00

Obtain an electronic copy from: [standards@scte.org](mailto:standards@scte.org)

Order from: Global Engineering Documents, (800) 854-7179, [www.global.ihs.com](http://www.global.ihs.com)

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

**SCTE (Society of Cable Telecommunications Engineers)****Revision**

BSR/SCTE 33-201x, Test Method for Diameter of Drop Cable (revision of ANSI/SCTE 33-2010)

To determine one or more of the following characteristics relating to flexible coaxial drop cables. This method is intended to make use of relatively inexpensive equipment. For more precise methods using laser micrometers and the like, see ANSI/SCTE 31-2007.

Single copy price: \$50.00

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**SCTE (Society of Cable Telecommunications Engineers)****Revision**

BSR/SCTE 79-1-201x, DOCSIS 2.0 Part 1: Radio Frequency Interface (revision of ANSI/SCTE 79-1-2009)

This document defines the second generation of radio-frequency interface specifications for high-speed data-over-cable systems. They were developed for the benefit of the cable industry, including contributions by operators and vendors from North America, Europe, and other regions.

Single copy price: \$50.00

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**SCTE (Society of Cable Telecommunications Engineers)****Revision**

BSR/SCTE 79-2-201x, DOCSIS 2.0 Part 2: Operations Support System Interface (revision of ANSI/SCTE 79-2-2009)

This specification defines the Network Management requirements to support a DOCSIS 2.0 environment. More specifically, the specification details the SNMPv3 protocol and how it coexists with SNMP v1/v2. The RFCs and Management Information Base (MIB) requirements are detailed as well as interface numbering, filtering, event notifications, etc. Basic network-management principles such as account, configuration, fault, and performance management are incorporated in this specification for better understanding of managing a high-speed cable modem environment.

Single copy price: \$50.00

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**SCTE (Society of Cable Telecommunications Engineers)****Revision**

BSR/SCTE 158-201x, Recommended Environmental Condition Ranges for Broadband Communications Equipment (revision of ANSI/SCTE 158-2009)

This document specifies the recommended environmental conditions (temperature, humidity, altitude, and vibration) for the operation, storage, and shipment of broadband communications equipment.

Single copy price: \$50.00

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**TIA (Telecommunications Industry Association)****New Standard**

BSR/TIA 920.120-B-201x, Telecommunications - Communications Products - Transmission Requirements for Digital Interface Communications Devices with Speakerphone (new standard)

This standard establishes audio transmission performance requirements for speakerphone equipped digital telephones regardless of protocol or digital format. Transmission may be over any digital interface including Local or Wide Area Networks, Universal Serial Bus (USB), Firewire/IEEE Std 1394, public ISDN or digital over twisted pair wire. This includes TDM-based and packet-based (e.g., VoIP) telephones. These telephones may be connected through modems, voice gateways, wireless access points, or PBXs, or they may be personal computer-based telephones. This revision will add updated requirements for narrowband (300 to 3400 Hz) telephones with speakerphones.

Single copy price: \$116.00

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

**TIA (Telecommunications Industry Association)****Revision**

BSR/TIA 470.120-D-201x, Telecommunications - Telephone Terminal Equipment - Transmission Requirements for Analog Speakerphones (revision and redesignation of ANSI/TIA 470.120-C-2011)

Revise the current test methods and specifications. Update document structure and bring format up to date.

Single copy price: \$112.00

Obtain an electronic copy from: [standards@tiaonline.org](mailto:standards@tiaonline.org)

Order from: TIA, [standards@tiaonline.org](mailto:standards@tiaonline.org)

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

**TIA (Telecommunications Industry Association)****Revision**

BSR/TIA 4953-B-201x, Telecommunications - Communications Products - Amplified Telephone Measurement Procedures and Performance Requirements (revision and redesignation of ANSI/TIA 4953-A-2015)

Revise the moderate and severe hearing-loss categories.

Single copy price: \$116.00

Obtain an electronic copy from: [standards@tiaonline.org](mailto:standards@tiaonline.org)

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

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

BSR/UL 1416-2012 (R201x), Standard for Safety for Overcurrent and Overtemperature Protectors for Radio- and Television-Type Appliances (reaffirmation of ANSI/UL 1416-2012)

Reaffirm UL 1416 as an American National Standard. UL 1416 covers overtemperature protectors, and overcurrent protectors to be employed in radio- and television-type appliances in applications where the protectors are relied upon to limit power, current, or both.

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

BSR/UL 1666-2012 (R201x), Standard for Safety for Test for Flame Propagation Height of Electrical and Optical-Fiber Cables Installed Vertically in Shafts (Proposal dated 11/4/16) (reaffirmation of ANSI/UL 1666-2012)

This is a fire test for determining values of flame propagation height for electrical and optical-fiber cables that are for installation vertically in shafts or in vertical runs that penetrate one or more floors. The purpose of this test is to determine whether the flame propagation characteristics of these riser cables are in accordance with the National Electrical Code.

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

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

BSR/UL 399-201X, Standard for Safety for Drinking Water Coolers (Proposal dated 11-4-16) (revision of ANSI/UL 399-2013)

This proposal includes: (1) Addition of parameters for alternative capacitor requirements in UL 60384-14; (2) Addition of start-to-discharge test to allow pressure relief valves, other than ASME stamped valves, on pressurized product systems; (3) Clarification of requirements involving ultraviolet radiation lamps; (4) Align controls requirements with water heater controls requirements and add alternate protective electronic controls requirements; (5) Revisions to Supplement SB for drinking water coolers employing a flammable refrigerant; (6) Addition of requirements for remotely operated drinking water coolers; and (7) Clarification of test enclosure requirements.

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**Comment Deadline: January 3, 2017****ASME (American Society of Mechanical Engineers)****Revision**

BSR/ASME B18.18-201x, Quality Assurance for Fasteners (revision of ANSI/ASME B18.18-2011)

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; and

(c) Category 4 — Includes all of the requirements of Category 2 plus 100% inspection for a specific feature or features.

Single copy price: Free

Order from: Mayra Santiago, (212) 591-8521, [ansibox@asme.org](mailto:ansibox@asme.org)

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

**UL (Underwriters Laboratories, Inc.)****New National Adoption**

BSR/UL 61215-1-201x, Standard for Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1: Test requirements (identical national adoption of IEC 61215-1)

(1) First edition of the UL IEC-based Standard for Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1: Test requirements, UL 61215-1, with no US national differences.

Single copy price: Contact comm2000 for pricing and delivery options

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

Order from: comm2000

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Susan Malohn, (847) 664-1725, [Susan.P.Malohn@ul.com](mailto:Susan.P.Malohn@ul.com)

**UL (Underwriters Laboratories, Inc.)*****New National Adoption***

BSR/UL 61215-2-201x, Standard for Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 2: Test procedures (identical national adoption of IEC 61215-2)

(1) First edition of the UL IEC-based Standard for Terrestrial photovoltaic (PV) modules - Design Qualification and Type Approval - Part 2: Test Procedures, UL 61215-2, with no US national differences.

Single copy price: Contact comm2000 for pricing and delivery options

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

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Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Susan Malohn, (847) 664-1725, [Susan.P.Malohn@ul.com](mailto:Susan.P.Malohn@ul.com)

**UL (Underwriters Laboratories, Inc.)*****New National Adoption***

BSR/UL 61215-1-1-201x, Standard for Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-1: Special requirements for testing of crystalline silicon photovoltaic (PV) modules (identical national adoption of IEC 61215-1-1)

(1) First edition of the UL IEC-based Standard for Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval - Part 1-1: Special Requirements for Testing of Crystalline Silicon Photovoltaic (PV) Modules, UL 61215-1-1, with no US national differences.

Single copy price: Contact comm2000 for pricing and delivery options

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

Order from: comm2000

Send comments (with copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Susan Malohn, (847) 664-1725, [Susan.P.Malohn@ul.com](mailto:Susan.P.Malohn@ul.com)

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

BSR/UL 498C-201x, Standard for Safety for Appliance and Flatiron Plugs (new standard)

UL 498C covers flatiron and appliance plugs intended for use on cord-connected portable cooking or heating appliances rated up to 20 A, 250 Volts or less, intended for use in ordinary non-hazardous locations - all intended for connection to a branch circuit for use in accordance with the National Electrical Code, NFPA 70, and the Canadian Electrical Code, Part I, CSA C22.1-15.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: [www.comm-2000.com](http://www.comm-2000.com)

Order from: comm2000

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

**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:

**ASTM (ASTM International)**

BSR/ASTM WK47806-201x, New Specification for Characterization of Safety Surface Systems for Use in Indoor Play Areas (new standard)

Inquiries may be directed to Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

**ASTM (ASTM International)**

BSR/ASTM WK52589-201x, New Test Method for Detection of FAME in Aviation Turbine Fuel by Colorimetry (new standard)

Inquiries may be directed to Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

**ASTM (ASTM International)**

BSR/ASTM WK52590-201x, New Test Method for Detection of Salt in Liquid Hydrocarbon Fuels by Colorimetry (new standard)

Inquiries may be directed to Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

**ASTM (ASTM International)**

BSR/ASTM WK52716-201x, New Practice for Specimen Preparation of Fenestration Profiles Intended to Support Non-Combustible In-Fill Materials (new standard)

Inquiries may be directed to Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

**ASTM (ASTM International)**

BSR/ASTM WK54409-201x, New Test Method for Determining Impact Attenuation of Surfacing Materials within the Use Zone of Playground Equipment as Tested in the Field (new standard)

Inquiries may be directed to Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

**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.

**ASTM (ASTM International)**

ANSI/ASTM F1543-2003 (R2007), Specification for Shock Attenuation Properties of Fencing Surfaces

Questions may be directed to: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

**ASTM (ASTM International)**

ANSI/ASTM F2442-2006, Guide for Layout of Ice Arena

Questions may be directed to: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

# Call for Members (ANS Consensus Bodies)

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

## ASA (ASC S2) (Acoustical Society of America)

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

**Contact:** Neil Stremmel

**Phone:** (631) 390-0215

**Fax:** (631) 923-2875

**E-mail:** nstremmel@acousticalsociety.org

BSR ASA S2.75-201x/Part 2, Shaft Alignment Methodology, Part 2:  
Terminology (new standard)

## IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)

**Office:** 18927 Hickory Creek Dr Suite 220  
Mokena, IL 60448

**Contact:** Conrad Jahrling

**Phone:** (708) 995-3017

**Fax:** (708) 479-6139

**E-mail:** conrad.jahrling@asse-plumbing.org

BSR/ASSE 1023-201x, Performance Requirements for How Water  
Dispensers Household Storage Type - Electrical (new standard)

## NEMA (ASC C119) (National Electrical Manufacturers Association)

**Office:** 1300 North 17th Street  
Suite 900  
Rosslyn, VA 22209

**Contact:** Paul Orr

**Phone:** (703) 841-3227

**Fax:** (703) 841-3327

**E-mail:** Pau\_orr@nema.org

BSR C119.5-201x, Insulation Piercing Connector Systems, Rated 600  
Volts or Less (Low-Voltage Aerial Bundled Cables and Insulated and  
Non-Insulated Line Wires) (revision of ANSI C119.5-2009)

## NSF (NSF International)

**Office:** 789 N. Dixboro Road  
Ann Arbor, MI 48105-9723

**Contact:** Rachel Brooker

**Phone:** (734) 827-6866

**E-mail:** rbrooker@nsf.org

BSR/NSF 363-201x (i4r2), Good Manufacturing Practices (GMP) for  
Pharmaceutical Excipients (revision of ANSI/NSF 363-2014)

## SI (Simon Institute)

**Office:** 4760 S. Highland Drive  
#323  
Salt Lake City, UT 84117

**Contact:** James Ginnaty

**Phone:** (907) 738-8747

**E-mail:** jim@simoninstitute.org

BSR/SI-0001-201x, Safe Use of Cleaning Chemicals (new standard)  
The Call for Comment notice for **BSR/SI-0001-201x**, Safe Use of  
Cleaning Chemicals (new standard) announced in Standards Action,  
October 28, 2016 was published in error and is hereby withdrawn.

## TIA (Telecommunications Industry Association)

**Office:** 1320 North Courthouse Road  
Suite 200  
Arlington, VA 22201

**Contact:** Teesha Jenkins

**Phone:** (703) 907-7706

**Fax:** (703) 907-7727

**E-mail:** standards@tiaonline.org

BSR/TIA 470.110-E-201x, Telecommunications - Telephone Terminal  
Equipment - Transmission Requirements for Analog Telephones with  
Handsets (revision and redesignation of ANSI/TIA 470.110-D-2014)

BSR/TIA 470.120-D-201x, Telecommunications - Telephone Terminal  
Equipment - Transmission Requirements for Analog Speakerphones  
(revision and redesignation of ANSI/TIA 470.120-C-2011)

BSR/TIA 470.230-D-201x, Telecommunications - Telephone Terminal  
Equipment - Network Signaling Performance Requirements (revision  
and redesignation of ANSI/TIA 470.230-C-2005 (R2012))

BSR/TIA 920.120-B-201x, Telecommunications - Communications  
Products - Transmission Requirements for Digital Interface  
Communications Devices with Speakerphone (new standard)

BSR/TIA 920.123-201x, Transmission Requirements for Digital Interface  
Communications Devices with Group Speakerphone (new standard)

BSR/TIA 4953-B-201x, Telecommunications - Communications  
Products - Amplified Telephone Measurement Procedures and  
Performance Requirements (revision and redesignation of ANSI/TIA  
4953-A-2015)

BSR/TIA 5050-201x, Telecommunications - Communications Products -  
Receive Volume Control Requirements for Wireless (Mobile) Devices  
(new standard)

## **Call for Members (ANS Consensus Bodies)**

### **Alliance for Telecommunications Industry Solutions (ATIS)**

ATIS, an ANSI-accredited SDO, brings together the top global ICT companies to advance the industry's most pressing business priorities. ATIS is currently working to address the All-IP transition, network functions virtualization, big data analytics, device solutions, emergency services, M2M, cyber security, network evolution, quality of service, billing support, operations, and much more. ATIS member companies encompass a broad scope of Communications Service Providers, Network Suppliers, Power Suppliers, Subsystems Suppliers, Government Agencies, Associations, Consumer Products Suppliers and Application/OTT Providers.

ATIS is currently seeking to broaden the membership base of its ANSI consensus bodies and is interested in new members to participate in its initiatives, including emergency services, sustainability, energy efficiency, network reliability, and network administration. Of particular interest is membership from the government, academia, and user (communications service provider) communities. Membership and participation in ATIS' activities is open to all organizations as defined in ATIS' operating procedures. More information is available at [www.atis.org](http://www.atis.org) or by e-mail from [membership@atis.org](mailto:membership@atis.org).

## **Call for Members (ANS Consensus Bodies)**

### **Call for Committee Members**

#### **ASC O1 – Safety Requirements for Woodworking Machinery**

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

- General Interest
- Government
- Producer
- User

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

## ACCA (Air Conditioning Contractors of America)

### Revision

ANSI/ACCA 1 Manual D-2016, Residential Duct Systems (revision of ANSI/ACCA 1 Manual D-2014): 10/21/2016

## AIAA (American Institute of Aeronautics and Astronautics)

### New Standard

ANSI/AIAA S-142-2016, Standard/Handbook for Multipactor Breakdown Prevention in Spacecraft Components (new standard): 10/21/2016

## ASME (American Society of Mechanical Engineers)

### Revision

ANSI/ASME B16.11-2016, Forged Fittings, Socket-Welding and Threaded (revision of ANSI/ASME B16.11-2011): 10/21/2016

ANSI/ASME B16.23-2016, Cast Copper Alloy Solder Joint Drainage Fittings: DWV (revision of ANSI/ASME B16.23-2011): 10/21/2016

### Withdrawal

ANSI/ASME B1.20.2M-2006, Pipe Threads, 60 Deg. General Purpose (withdrawal of ANSI/ASME B1.20.2M-2006 (R2011)): 10/21/2016

## ASTM (ASTM International)

### New Standard

ANSI/ASTM D8073-2016, Test Method for Determination of Water Separation Characteristics of Aviation Turbine Fuel by Small Scale Water Separation Instrument (new standard): 10/18/2016

ANSI/ASTM F3215-2016, Specification for Food Waste Dehydrators (new standard): 10/18/2016

ANSI/ASTM F3216-2016, Test Method for Standard Test Method for the Performance of Retherm Ovens (new standard): 10/18/2016

### Reaffirmation

ANSI/ASTM C611-2005 (R2016), Test Method for Electrical Resistivity of Manufactured Carbon and Graphite Articles at Room Temperature (reaffirmation of ANSI/ASTM C611-2005 (R2010)): 10/18/2016

ANSI/ASTM D6986-2010 (R2016), Test Method for Free Water, Particulate and Other Contamination in Aviation Fuels (Visual Inspection Procedures) (reaffirmation of ANSI/ASTM D6986-2010): 10/18/2016

ANSI/ASTM E2144-2011 (R2016), Practice for Personal Sampling and Analysis of Endotoxin in Metalworking Fluid Aerosols in Workplace Atmospheres (reaffirmation of ANSI/ASTM E2144-2011): 10/18/2016

ANSI/ASTM F555-2006 (R2016), Test Method for Motor Life Evaluation of an Upright Vacuum Cleaner (reaffirmation of ANSI/ASTM F555-2006 (R2011)): 10/18/2016

ANSI/ASTM F884-2011 (R2016), Test Method for Motor Life Evaluation of a Built-In (Central Vacuum) Vacuum Cleaner (reaffirmation of ANSI/ASTM F884-2011): 10/18/2016

ANSI/ASTM F922-2011 (R2016), Test Method for Motor Life Evaluation of an Electric Motorized Nozzle (reaffirmation of ANSI/ASTM F922-2011): 10/18/2016

ANSI/ASTM F1038-1999 (R2016), Test Method for Motor Life Evaluation of a Canister, Hand-Held, Stick, and Utility Type Vacuum Cleaner without a Driven Agitator (reaffirmation of ANSI/ASTM F1038-1999 (R2011)): 10/18/2016

ANSI/ASTM F1601-2011 (R2016), Test Method for Motor Life Evaluation of an Electric Motorized Nozzle for Central Vacuum Cleaning Systems (reaffirmation of ANSI/ASTM F1601-2011): 10/18/2016

ANSI/ASTM F1692-2011 (R2016), Test Method for Life Evaluation of a Turbine-Powered Nozzle for Household Central Vacuum Cleaning Systems (reaffirmation of ANSI/ASTM F1692-2011): 10/18/2016

ANSI/ASTM F1786-1997 (R2016), Test Method for Performance of Braising Pans (reaffirmation of ANSI/ASTM F1786-1997 (R2010)): 10/18/2016

ANSI/ASTM F1991-2006 (R2016), Test Method for Performance of Chinese (Wok) Ranges (reaffirmation of ANSI/ASTM F1991-2006 (R2010)): 10/18/2016

ANSI/ASTM F2144-2009 (R2016), Test Method for Performance of Large Open Vat Fryers (reaffirmation of ANSI/ASTM F2144-2009): 10/18/2016

ANSI/ASTM F2158-2008 (R2016), Specification for Residential Central-Vacuum Tube and Fittings (reaffirmation of ANSI/ASTM F2158-2008 (R2013)): 10/18/2016

ANSI/ASTM F2239-2010 (R2016), Test Method for Performance of Conveyor Broilers (reaffirmation of ANSI/ASTM F2239-2010): 10/18/2016

ANSI/ASTM F2273-2011 (R2016), Test Methods for Bicycle Forks (reaffirmation of ANSI/ASTM F2273-2011): 10/18/2016

ANSI/ASTM F2274-2011 (R2016), Specification for Condition 3 Bicycle Forks (reaffirmation of ANSI/ASTM F2274-2011): 10/18/2016

ANSI/ASTM F2379-2004 (R2016), Test Method for Energy Performance of Powered Open Warewashing Sinks (reaffirmation of ANSI/ASTM F2379-2004 (R2010)): 10/18/2016

ANSI/ASTM F2380-2004 (R2016), Test Method for Performance of Conveyor Toasters (reaffirmation of ANSI/ASTM F2380-2004 (R2010)): 10/18/2016

ANSI/ASTM F2472-2005 (R2016), Test Method for Performance of Staff-Serve Hot Deli Cases (reaffirmation of ANSI/ASTM F2472-2005 (R2010)): 10/18/2016

ANSI/ASTM F2647-2007 (R2016), Guide for Approved Methods of Installing a CVS (Central Vacuum System) (reaffirmation of ANSI/ASTM F2647-2007 (R2013)): 10/18/2016

ANSI/ASTM F2756-2011 (R2016), Test Method for Determining Energy Consumption of Vacuum Cleaners (reaffirmation of ANSI/ASTM F2756-2011): 10/18/2016

ANSI/ASTM F2863-2011 (R2016), Specification for Central Vacuum Hose Inlet Valve Socket Dimensions (reaffirmation of ANSI/ASTM F2863-2011): 10/18/2016

ANSI/ASTM F2899-2011 (R2016), Specification for Condition 1 Bicycle Forks (reaffirmation of ANSI/ASTM F2899-2011): 10/18/2016

### Revision

ANSI/ASTM D910-2016a, Specification for Leaded Aviation Gasolines (revision of ANSI/ASTM D910-2016): 10/18/2016

ANSI/ASTM D5677-2016, Specification for Fiberglass (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe and Pipe Fittings, Adhesive Bonded Joint Type, for Aviation Jet Turbine Fuel Lines (revision of ANSI/ASTM D5677-2005 (R2010)): 9/20/2016

ANSI/ASTM D7797-2016a, Test Method for Determination of the Fatty Acid Methyl Esters Content of Aviation Turbine Fuel Using Flow Analysis by Fourier Transform Infrared Spectroscopy Rapid Screening Method (revision of ANSI/ASTM D7797-2016): 10/18/2016

ANSI/ASTM E691-2016, Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method (revision of ANSI/ASTM E691-2015): 10/18/2016

ANSI/ASTM E1700-2016, Classification for Serviceability of an Office Facility for Structure and Building Envelope (revision of ANSI/ASTM E1700-2013): 10/18/2016

ANSI/ASTM E2148-2016, Guide for Using Documents Related to Metalworking or Metal Removal Fluid Health and Safety (revision of ANSI/ASTM E2148-2011): 10/18/2016

ANSI/ASTM E2657-2016, Test Method for Determination of Endotoxin Concentrations in Water-Miscible Metalworking Fluids (revision of ANSI/ASTM E2657-2011): 10/18/2016

ANSI/ASTM E2694-2016, Test Method for Measurement of Adenosine Triphosphate in Water-Miscible Metalworking Fluids (revision of ANSI/ASTM E2694-2011): 10/18/2016

ANSI/ASTM F820-2016, Test Method for Measuring Air Performance Characteristics of Central Vacuum Cleaning Systems (revision of ANSI/ASTM F820-2011): 10/18/2016

ANSI/ASTM F1045-2016, Performance Specification for Ice Hockey Helmets (revision of ANSI/ASTM F1045-2015): 10/18/2016

ANSI/ASTM F2105-2016, Test Method for Measuring Air Performance Characteristics of Vacuum Cleaner Motor/Fan Systems (revision of ANSI/ASTM F2105-2011): 10/18/2016

ANSI/ASTM F2337-2016, Test Method for Treestand Fall Arrest System (revision of ANSI/ASTM F2337-2011): 10/18/2016

ANSI/ASTM F3021-2016, Specification for Universal Design of Fitness Equipment for Inclusive Use by Persons with Functional Limitations and Impairments (revision of ANSI/ASTM F3021-2015): 10/18/2016

ANSI/ASTM F3022-2016, Test Method for Evaluating the Universal Design of Fitness Equipment for Inclusive Use by Persons with Functional Limitations and Impairments (revision of ANSI/ASTM F3022-2015): 10/18/2016

#### **Withdrawal**

ANSI/ASTM F2416-2006, Specification for Protective Headgear Used in Electric Personal Assistive Mobility Devices (withdrawal of ANSI/ASTM F2416-2006 (R2011)): 10/18/2016

#### **CPLSO (Crane Power Line Safety Organization)**

##### **New Standard**

ANSI/CPLSO-14-2016, Crane Insulators (new standard): 10/19/2016

#### **KCMA (Kitchen Cabinet Manufacturers Association)**

##### **Revision**

- \* ANSI/KCMA A161.1-2017, Performance and Construction Standard for Kitchen and Vanity Cabinets (revision of ANSI/KCMA A161.1-2012): 10/21/2016

#### **NECA (National Electrical Contractors Association)**

##### **Revision**

- \* ANSI/NECA 700-2016, Standard for Installing Overcurrent Protection to Achieve Selective Coordination (revision of ANSI/NECA 700-2010): 10/25/2016

#### **NSF (NSF International)**

##### **Revision**

- \* ANSI/NSF 4-2016 (i24r4), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2014): 10/23/2016

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

##### **Revision**

- ANSI A108.01-2016, General Requirements: Subsurfaces and Preparations by Other Trades (revision of ANSI A108.01-2013): 10/21/2016
- ANSI A108.02-2016, General Requirements: Materials, Environmental, and Workmanship (revision of ANSI A108.02-2013): 10/21/2016

#### **TIA (Telecommunications Industry Association)**

##### **Addenda**

- ANSI/TIA 569-D-1-2016, Telecommunications - Pathways and Spaces: Addendum 1 - Revised Temperature and Humidity Requirements for Telecommunications Spaces (addenda to ANSI/TIA 569-D-2015): 10/21/2016

##### **Revision**

- ANSI/TIA 568.3-D-2016, Optical Fiber Cabling Component Standard (revision and redesignation of ANSI/TIA 568-C.3-2008): 10/25/2016

#### **UAMA (ASC B74) (Unified Abrasives Manufacturers' Association)**

##### **New Standard**

- ANSI B74.24-2016, Specification for Abrasive Materials for Blasting (new standard): 10/21/2016

##### **Reaffirmation**

- ANSI B74.20-2004 (R2016), Specification for Diamond and CBN Powders in Sub-Sieve Sizes (reaffirmation of ANSI B74.20-2004 (R2010)): 10/21/2016

##### **Revision**

- ANSI B74.13-2016, Markings for Identifying Grinding Wheels and Other Bonded Abrasives (revision of ANSI B74.13-1990 (R2007)): 10/21/2016

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

##### **Revision**

- ANSI/UL 489-2016, Standard for Safety for Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures (revision of ANSI/UL 489-2014): 10/24/2016
- ANSI/UL 489-2016a, Standard for Safety for Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures (revision of ANSI/UL 489-2014): 10/24/2016
- ANSI/UL 555-2016, Standard for Safety for Fire Dampers (Proposal dated 08-19-16) (revision of ANSI/UL 555-2013): 10/21/2016
- ANSI/UL 746A-2016, Standard for Safety for Polymeric Materials - Short Term Property Evaluations (revision of ANSI/UL 746A-2016): 10/19/2016
- \* ANSI/UL 1081-2016a, Standard for Safety for Swimming Pool Pumps, Filters, and Chlorinators (revision of ANSI/UL 1081-2016): 10/21/2016
- \* ANSI/UL 8750-2016, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2015): 10/21/2016



\* ANSI/UL 8750-2016a, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2015): 10/21/2016

## Correction

### Incorrect Designation

#### **ANSI/ASME B29.24-2002 (R2016)**

In the Final Actions section of the October 21, 2016 issue of Standards Action, there was an error in the designation of ANSI/ASME B29.24-2002 (R2016). The correct listing should read:

ANSI/ASME B29.24-2002 (R2016), Roller Load Chains for Overhead Hoists (reaffirmation of ANSI/ASME B29.24-2002 (R2009)):  
10/12/2016

# Project Initiation Notification System (PINS)

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

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit [www.NSSN.org](http://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.

## AHRI (Air-Conditioning, Heating, and Refrigeration Institute)

**Office:** 2121 Wilson Blvd  
Suite 500  
Arlington, VA 22201

**Contact:** *Ladan Bulookbashi*

**E-mail:** [lbulookbashi@ahrinet.org](mailto:lbulookbashi@ahrinet.org)

- \* BSR/AHRI Standard 1380 (I-P)-201x, Methods for Coordinated Energy Management in Residential Applications (new standard)

**Stakeholders:** This standard is intended for the guidance of the industry, including manufacturers, designers, installers, contractors, users, and demand-side management programs.

**Project Need:** The purpose of this standard is to identify HVAC systems that are capable of supporting energy management strategies. The standard will establish a suite of methods designed to facilitate coordination and communication between end-users, manufacturers, utilities, DSM program implementers, and other energy service organizations in energy management strategies for HVAC equipment applied in residential and small-building settings and to provide a standardized definition of a connected HVAC system.

This standard applies to HVAC equipment functionality, minimum communications and information-sharing capabilities, infrastructure, software, and data sharing, as they relate to the implementation of energy management strategies for HVAC equipment installed in residential applications and small business settings.

- \* BSR/AHRI Standard 1381 (SI)-201x, Methods for Coordinated Energy Management in Residential Applications (new standard)

**Stakeholders:** This standard is intended for the guidance of the industry, including manufacturers, designers, installers, contractors, users, and demand-side management programs.

**Project Need:** The purpose of this standard is to identify HVAC systems that are capable of supporting energy management strategies. The standard will establish a suite of methods designed to facilitate coordination and communication between end-users, manufacturers, utilities, DSM program implementers, and other energy service organizations in energy management strategies for HVAC equipment applied in residential and small building settings and to provide a standardized definition of a connected HVAC system.

This standard applies to HVAC equipment functionality, minimum communications and information-sharing capabilities, infrastructure, software, and data sharing, as they relate to the implementation of energy management strategies for HVAC equipment installed in residential applications and small business settings.

## AISC (American Institute of Steel Construction)

**Office:** 130 E. Randolph Street, Suite 2000  
Chicago, IL 60601

**Contact:** *Margaret Matthew*

**E-mail:** [matthew@aisc.org](mailto:matthew@aisc.org)

- BSR/AISC 358-S1-201x, Prequalified Connections for Special and Intermediate Steel Moment Frames for Seismic Applications (supplement to ANSI/AISC 358-2016)

**Stakeholders:** Structural engineers, steel fabrication industry, researchers, and academics.

**Project Need:** Add additional prequalified connections to the main standard and expand/revise existing prequalified connections.

This standard specifies design, detailing, fabrication, and quality criteria for structural steel connections that are prequalified in accordance with the AISC Seismic Provisions for Structural Steel Buildings (AISC 341) for use with special moment frames (SMF) and intermediate moment frames (IMF). This supplement will add an additional prequalified connection, the SSDA Slotted Web connection, expand the SidePlate moment connection chapter, and revise the ConXL moment connection.

## ANS (American Nuclear Society)

**Office:** 555 North Kensington Avenue  
La Grange Park, IL 60526

**Contact:** *Kathryn Murdoch*

**Fax:** (708) 579-8248

**E-mail:** [kmurdoch@ans.org](mailto:kmurdoch@ans.org)

- BSR/ANS 8.7-201x, Nuclear Criticality Safety in the Storage of Fissile Materials (revision of ANSI/ANS 8.7-1998 (R2012))

**Stakeholders:** NRC-licensed Special Nuclear Material (SNM) facilities, DOE SNM facilities.

**Project Need:** This general revision will incorporate 2012 reaffirmation comments and will incorporate changes to ensure consistency with ANSI/ANS-8.1-2014.

This standard is applicable to the storage of fissile materials. Mass and spacing limits are tabulated for uranium containing greater than 30 wt % <sup>235</sup>U, and for plutonium as metals and oxides. Criteria for the range of application of these limits are provided.

**ASA (ASC S2) (Acoustical Society of America)**

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BSR ASA S2.75-201x/Part 2, Shaft Alignment Methodology, Part 2:  
Terminology (new standard)

Stakeholders: Owners and users of rotating machines, engineering and architectural companies, coupling manufacturers, alignment measurement tooling manufacturers, training organizations, service companies, trade unions and schools, alignment correction product manufacturers, etc.

Project Need: There is currently no industry standard for shaft alignment methods or metrics. Shaft alignment of rotating machinery is a required assembly, maintenance, and corrective practice in every industry necessary to commission, safely operate, and extend the useful life of machines. The lack of standards creates the environment where neither the provider nor user of services has a defensible position or common reference. This project is envisioned to be a series of standards.

The purpose of this standard is to define terminology unique to the alignment of machinery that has been in common use among engineers and technicians working in the field. Words and phrases are presented in alphabetical order. This vocabulary is intended to be used with the ANSI/ASA S2.75 series Shaft Alignment Methodology.

**ASTM (ASTM International)**

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BSR/ASTM WK56273-201x, New Guide for Measurement of Molten Salt Permeability in Nuclear-Grade Graphite (new standard)

Stakeholders: Manufactured Carbon and Graphite Products industry.

Project Need: This guide will provide a standardized set of considerations and approaches for evaluating the level of permeability of graphite when in direct contact with molten salt at elevated temperatures.

<https://www.astm.org/DATABASE.CART/WORKITEMS/WK56273.htm>

BSR/ASTM WK56275-201x, New Guide for the Measurement of Gas Permeability in Nuclear-Grade Graphite (new standard)

Stakeholders: Manufactured Carbon and Graphite Products industry.

Project Need: Guide for considerations and techniques regarding the measurement of gas (air) permeability of graphite used in nuclear applications.

<https://www.astm.org/DATABASE.CART/WORKITEMS/WK56275.htm>

BSR/ASTM WK56289-201x, New Specification for rapid pull down refrigerators (blast chillers), freezers (blast freezers), combination refrigerator/freezer (blast chiller/freezers), and quick chillers for commercial use (new standard)

Stakeholders: Storage and Dispensing Equipment industry.

Project Need: This specification covers basic design and function of rapid pull down refrigerators, freezers and/or the combination of both, sometimes referred to as blast chillers, blast freezers, or quick chillers.

<https://www.astm.org/DATABASE.CART/WORKITEMS/WK56289.htm>

**IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)**

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\* BSR/ASSE 1023-201x, Performance Requirements for How Water Dispensers Household Storage Type - Electrical (new standard)

Stakeholders: Plumbing industry, household appliance manufacturers.

Project Need: Revise technical content to reflect current practice and public need.

Devices are hot water dispensers which are designed for household use and which are installed at the sink and supplied with water from the kitchen sink water supply. They are storage types and are heated electrically.

**IEEE (Institute of Electrical and Electronics Engineers)**

**Office:** 445 Hoes Lane  
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BSR/IEEE 1627-201x, Standard for Transient Overvoltage Protection of DC Electrification Systems by Application of Surge Arrestors (new standard)

Stakeholders: Rail Transit Systems and manufacturers of transient overvoltage protection devices.

Project Need: Currently there are no published technical guidelines for proper selection of the MOV dc surge arrester. Application uses guesswork without reviewing MOV surge arrester's published data as test data by the manufacturer. This standard will provide technical guidance for proper application of MOV surge arrester to protection dc rail transit system from transient overvoltage protection.

This standard covers practices for the application of surge arrestors in overhead and third-rail contact systems used in the electrification of heavy-rail, light-rail, streetcar, and trolley bus systems.

BSR/IEEE 1667-201x, Standard for Discovery, Authentication, and Authorization in Host Attachments of Storage Devices (revision of ANSI/IEEE 1667-2009)

Stakeholders: Computer systems and storage devices.

Project Need: There is a continuing need to enhance IEEE 1667 capability to keep up with industry requirements. The nature of the proposed project is to ensure that IEEE 1667 devices have an upward, highly compatible growth path to ensure that new functions developed by the computer industry will have a standardization vehicle.

This standard defines discovery, authentication, and authorization protocols between hosts and storage devices over multiple transports.

BSR/IEEE 1815.1-201x/Cor 1-201x, Standard for Exchanging Information between Networks Implementing IEC 61850 and IEEE Std 1815(TM) (Distributed Network Protocol - DNP3) - Corrigendum 1 (new standard)

Stakeholders: Electric utility industry participants including utilities, suppliers, consultants.

Project Need: To provide the correct version of Figure 52. An incorrect version of Figure 52 was provided in the initial ballot version 4.00. The figure was then accidentally deleted in subsequent versions.

To insert the correct Figure 52 - SBO control, normal security, Use Case (a) - negative case, no status change into Section 8.11.6.1.6 - Negative Case - no status update detected.

BSR/IEEE 2410-201x, Standard for Biometric Open Protocol (new standard)

Stakeholders: Consumer electronic and mobile product developers, banking, including ATMs, Point of Sale, and Automotive. Basically any system needing identity or end-to-end security.

Project Need: Convenience drives consumers toward the biometrics-based access management solutions. Biometric technologies provide consumer with convenience to securely enter into the cyberspace on the front-end. The Biometric Open Standards protects digital assets and digital identities on the back-end.

The Biometric Open Protocol Standard (BOPS) provides identity assertion, role gathering, multilevel access control, assurance, and auditing. The BOPS implementation includes software running on a client device, a trusted BOPS Server, and an intrusion detection system (IDS). The BOPS implementation allows pluggable components to replace existing components' functionality, accepting integration into the current operating environments in a short period of time. The BOPS Accountability is the mechanism that proves a service-level guarantee of security. The BOPS implementation allows the systems to meet security needs by using the application programming interface (API).

BSR/IEEE 2720-201x, Rail Potential Management Guide for Direct Current Traction Electrification Systems (new standard)

Stakeholders: Electrified transportation industry.

Project Need: At present there are no standards, codes, or guide documents in North America that define the permissible limits and management of rail-to-ground voltages (rail potential) for rail transit systems that are powered by direct current (dc).

This guide provides a description of the concepts, applicable standards, and methods used for the calculation and management of rail potential on dc-electrified rail transit systems.

BSR/IEEE 2740-201x, Guide for the Selection and Installation of Flexible Electrical Cables and Systems in Hazardous (Classified) Locations on Land Drilling Rigs (new standard)

Stakeholders: This document will provide owners, designers, specifiers, builders, and installers with the latest technologies and methods with respect to the selection, performance, application, and installation of electrical cable systems for use on land drilling rigs.

Project Need: There are no governing codes or standards that currently address cables and cable systems for use on land drilling rigs. There are a number of applications where the flexibility or other limits of the available options is insufficient. For example, users are relying on API 14F and 14FZ for installation methods, which are not appropriate since they specifically address offshore facilities. The proposed guide will broaden the available options of cable designs and material technology to be used.

This guide covers the appropriate selection, performance requirements and procedures for flexible electrical cable systems installed in Hazardous (Classified) Locations on Land Drilling Rigs.

BSR/IEEE C57.12.90-2015/Cor 1-20XX, Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers - Corrigendum 1: Editorial and Technical Corrections (new standard)

Stakeholders: Users, manufacturers, engineers, and consultants involved in the testing of liquid-immersed power and distribution transformers.

Project Need: To correct editorial mistake in Equation 2 and correct line terminal rated voltage in 10.8.2 to maintain consistency.

In clause 8.3, correct definition of constant k for Equation 2, and in Clause 10.8.2, correct the line terminal rated voltage in the last paragraph.

BSR/IEEE C57.164-201x, Guide for Establishing Short Circuit Withstand Capabilities of Liquid Immersed Power Transformers, Regulators, and Reactors (new standard)

Stakeholders: Power transformer manufacturers, users, academics, consultants.

Project Need: There are presently no IEEE Standards that address short circuit design criteria. It was agreed by the TF and Performance Characteristics Subcommittee that there is a need for such an IEEE guide, especially since few users are having actual short circuit testing completed at test facility or factory. This new guide will not be mandatory and will not set out how transformers must be designed but give guidance on design.

This Guide describes theoretical and practical ways to evaluate liquid immersed power transformers, regulators, and reactors capabilities to withstand short circuit currents. The equipment capabilities will be assessed based on calculations, design characteristics, construction techniques, and material properties. The methods described are not mandatory and will not set forth requirements on how the transformer must be designed.

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BSR/TIA 470.110-E-201x, Telecommunications - Telephone Terminal Equipment - Transmission Requirements for Analog Telephones with Handsets (revision and redesignation of ANSI/TIA 470.110-D -2014)

Stakeholders: Manufacturers and users of analog speakerphone design, production, and purchasing.

Project Need: Provide updates for an existing standard.

Revision to include changing document structure, establishing nominal volume control for all test loops, Add receive output level tests, retain SLR and RLR as a normative annex with reference in main text that allows it to be used. Change frequency response from ERP to Free field, Add 2.7km loop SDNR testing. Address 0km 25-35ma testing for ATA usage, Add reference to TIA-5047 in an informative annex, update references.

BSR/TIA 470.230-D-201x, Telecommunications - Telephone Terminal Equipment - Network Signaling Performance Requirements (revision and redesignation of ANSI/TIA 470.230-C-2005 (R2012))

Stakeholders: Manufacturers and users of terminal equipment design, production, and purchasing.

Project Need: Provide updates for an existing standard.

Update outdated references and document structure.

BSR/TIA 920.123-201x, Transmission Requirements for Digital Interface Communications Devices with Group Speakerphone (new standard)

Stakeholders: Manufacturers, specifiers, and users of digital telephones and other communications devices providing voice transmission, regardless of protocol or digital format. Specifiers may include retail equipment buyers, enterprise and government procurement officers, etc.

Project Need: Create new standard.

Establishes transmission performance requirements for group speakerphone devices that function as narrowband (300 to 3400 Hz) or wideband (100 to 7000 Hz) digital interface communications devices, or both. Group speakerphones are devices used for 1 or more individuals in a small to large setting with users at a distance further away (up to 2 meters or more) than those for personal devices. Typically, the speaker and microphone are located in the base unit together, but may have satellite microphones that extending out from the center base unit.

BSR/TIA 5050-201x, Telecommunications - Communications Products  
- Receive Volume Control Requirements for Wireless (Mobile)  
Devices (new standard)

Stakeholders: Manufacturers, users, distributors of wireless mobile devices.

Project Need: Create new standard.

This Standard establishes receive volume control requirements and testing methods for narrowband, wideband, super-wideband, and fullband wireless (mobile) handsets. Current volume control requirements for these devices are included in different standards documents with different requirements. The method in this standard uses conversational gain, the acoustic output signal from a device relative to the signal level that would be present in a face-to-face conversation at a distance of 1 meter.

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BSR/UL 486G-201x, Standard for Safety for Sealed Twist-On  
Connecting Devices (new standard)

Stakeholders: Wire and cable industry. Electrical and electronics manufacturers.

Project Need: Development of New American National Standard to cover twist-on style splicing sealed wire connectors.

The wire connectors covered by these requirements are intended for use with copper conductor in accordance with installations covered by the National Electrical Code, NFPA 70; the Canadian Electrical Code, Part I, C22.1; and NOM 001 SEDE, Standard for Electrical Installations. The requirements in this standard cover twist-on style splicing sealed wire connectors.

# 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](http://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](http://www.ansi.org/publicreview).

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at [psa@ansi.org](mailto: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](mailto:standact@ansi.org).

<p><b>ACCA</b> Air Conditioning Contractors of America 2800 Shirlington Road, Suite 300 Arlington, VA 22206 Phone: (703) 824-8865 Fax: (703) 575-9147 Web: <a href="http://www.acca.org">www.acca.org</a></p>	<p><b>ASHRAE</b> American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle NE Atlanta, GA 30329 Phone: (678) 539-1111 Fax: (678) 539-2111 Web: <a href="http://www.ashrae.org">www.ashrae.org</a></p>	<p><b>KCMA</b> Kitchen Cabinet Manufacturers Association 1899 Preston White Drive Reston, VA 20191 Phone: (703) 264-1690 Web: <a href="http://www.kcma.org">www.kcma.org</a></p>	<p><b>RVIA</b> Recreational Vehicle Industry Association 1896 Preston White Drive P.O. Box 2999 Reston, VA 20191-4363 Phone: (703) 620-6003 Fax: (703) 620-5071 Web: <a href="http://www.rvia.org">www.rvia.org</a></p>
<p><b>ADA (Organization)</b> American Dental Association 211 E. Chicago Ave Chicago, IL 60611 Phone: (312) 440-2533 Fax: (312) 440-2529 Web: <a href="http://www.ada.org">www.ada.org</a></p>	<p><b>ASME</b> American Society of Mechanical Engineers Two Park Avenue New York, NY 10016 Phone: (212) 591-8521 Fax: (212) 591-8501 Web: <a href="http://www.asme.org">www.asme.org</a></p>	<p><b>NECA</b> National Electrical Contractors Association 3 Bethesda Metro Center Suite 1100 Bethesda, MD 20814 Phone: (301) 215-4549 Fax: (301) 215-4500 Web: <a href="http://www.neca-neis.org">www.neca-neis.org</a></p>	<p><b>SCTE</b> Society of Cable Telecommunications Engineers 140 Phillips Rd Exton, PA 19341 Phone: (484) 252-2330 Web: <a href="http://www.scte.org">www.scte.org</a></p>
<p><b>AHRI</b> Air-Conditioning, Heating, and Refrigeration Institute 2121 Wilson Blvd Suite 500 Arlington, VA 22201 Phone: (703) 600-0327 Web: <a href="http://www.ahrinet.org">www.ahrinet.org</a></p>	<p><b>ASTM</b> ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9744 Fax: (610) 834-3683 Web: <a href="http://www.astm.org">www.astm.org</a></p>	<p><b>NEMA (ASC C12)</b> National Electrical Manufacturers Association 1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3227 Fax: (703) 841-3327 Web: <a href="http://www.nema.org">www.nema.org</a></p>	<p><b>TCNA (ASC A108)</b> Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 Phone: (864) 646-8453 Fax: (864) 646-2821 Web: <a href="http://www.tileusa.com">www.tileusa.com</a></p>
<p><b>AIAA</b> American Institute of Aeronautics and Astronautics 12700 Sunrise Valley Drive, Suite 200 Reston, VA 20191-5807 Phone: (703) 264-7546 Web: <a href="http://www.aiaa.org">www.aiaa.org</a></p>	<p><b>CPLSO</b> Crane Power Line Safety Organization The Marchioness Building, Commercial Road Bristol BS16TG, UK BS1 6TG Phone: (078) 796-2989</p>	<p><b>NEMA (ASC C8)</b> National Electrical Manufacturers Association 1300 North 17th Street Rosslyn, VA 22209 Phone: (703) 841-3299 Web: <a href="http://www.nema.org">www.nema.org</a></p>	<p><b>TIA</b> Telecommunications Industry Association 1320 North Courthouse Road Suite 200 Arlington, VA 22201 Phone: (703) 907-7706 Fax: (703) 907-7727 Web: <a href="http://www.tiaonline.org">www.tiaonline.org</a></p>
<p><b>AISC</b> American Institute of Steel Construction 130 E. Randolph Street, Suite 2000 Chicago, IL 60601 Phone: (314) 601-5420 Web: <a href="http://www.aisc.org">www.aisc.org</a></p>	<p><b>CSA</b> CSA Group 8501 East Pleasant Valley Rd. Cleveland, OH 44131 Phone: (216) 524-4990 x88321 Fax: (216) 520-8979 Web: <a href="http://www.csa-america.org">www.csa-america.org</a></p>	<p><b>NSF</b> NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 769-5197 Web: <a href="http://www.nsf.org">www.nsf.org</a></p>	<p><b>UAMA (ASC B74)</b> Unified Abrasive Manufacturers' Association 30200 Detroit Road Cleveland, OH 44145-1967 Phone: (440) 899-0010 Fax: (440) 892-1404 Web: <a href="http://www.uama.org">www.uama.org</a></p>
<p><b>ANS</b> American Nuclear Society 555 North Kensington Avenue La Grange Park, IL 60526 Phone: (708) 579-8268 Fax: (708) 579-8248 Web: <a href="http://www.ans.org">www.ans.org</a></p>	<p><b>IAPMO (ASSE Chapter)</b> ASSE International Chapter of IAPMO 18927 Hickory Creek Dr Suite 220 Mokena, IL 60448 Phone: (708) 995-3017 Fax: (708) 479-6139 Web: <a href="http://www.asse-plumbing.org">www.asse-plumbing.org</a></p>	<p><b>RESNET</b> Residential Energy Services Network, Inc. 4867 Patina Court Oceanside, CA 92057 Phone: (760) 408-5860 Fax: (760) 806-9449 Web: <a href="http://www.resnet.us.com">www.resnet.us.com</a></p>	<p><b>UL</b> Underwriters Laboratories, Inc. 333 Pfingsten Road Northbrook, IL 60062-2096 Phone: (847) 664-2850 Fax: (847) 664-2850 Web: <a href="http://www.ul.com">www.ul.com</a></p>
<p><b>ASA (ASC S2)</b> Acoustical Society of America 1305 Walt Whitman Road Suite 300 Melville, NY 11747 Phone: (631) 390-0215 Fax: (631) 923-2875 Web: <a href="http://www.acousticalsociety.org">www.acousticalsociety.org</a></p>	<p><b>IEEE</b> Institute of Electrical and Electronics Engineers 445 Hoes Lane Piscataway, NJ 08854-4141 Phone: (732) 981-2864 Web: <a href="http://www.ieee.org">www.ieee.org</a></p>		



# ISO & IEC Draft International Standards

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

## Comments

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); 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

### **ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)**

ISO 10079-1/DAmD1, Medical suction equipment - Part 1: Electrically powered suction equipment - Amendment 1: Changes to requirements for operating at extremes of temperature - 10/22/2016, \$29.00

ISO/DIS 80601-2-61, Medical electrical equipment - Part 2-61: Particular requirements for basic safety and essential performance of pulse oximeter equipment - 11/16/2016, \$165.00

### **BIOGAS (TC 255)**

ISO/DIS 20675, Biogas - Biogas production, conditioning, upgrading and utilization - Terms, definitions and classification scheme - 11/19/2016, \$71.00

### **CLEANROOMS AND ASSOCIATED CONTROLLED ENVIRONMENTS (TC 209)**

ISO/DIS 14644-12, Cleanrooms and associated controlled environments - Part 12: Classification of air cleanliness by nanoscale particle concentration - 11/6/2003, \$62.00

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

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

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

### **FINE BUBBLE TECHNOLOGY (TC 281)**

ISO/DIS 20480-1, Fine bubble technology - General principles for usage and measurement of fine bubbles - Part 1: Terminology - 11/17/2016, \$40.00

### **GRAPHIC TECHNOLOGY (TC 130)**

ISO/DIS 17972-4, Graphic technology - Colour data exchange format (CxF/X) - Part 4: Spot colour characterisation data (CxF/X-4) - 1/18/2017, \$62.00

### **GRAPHICAL SYMBOLS (TC 145)**

ISO 7010/DAmD188, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 188: Safety sign E021: Protection shelter - 1/21/2017, \$29.00

ISO 7010/DAmD189, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 189: Safety sign P044: Use of smart glasses prohibited - 1/21/2017, \$29.00

ISO 7010/DAmD190, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 190: Safety sign F007: Fire protection door - 1/21/2017, \$29.00

ISO 7010/DAmD191, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 191: Safety sign M050: Alighting from toboggan to the left - 1/21/2017, \$29.00

ISO 7010/DAmD192, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 192: Safety sign M051: Alighting from toboggan to the right - 1/21/2017, \$29.00

ISO 7010/DAmD193, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 193: Safety sign M052: Keep distance between toboggans - 1/21/2017, \$29.00

ISO 7010/DAmD195, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 195: Safety sign P046: Do not stretch out of toboggan - 1/21/2017, \$29.00

ISO 7010/DAmD196, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 196: Safety sign P047: Do not ram into toboggans - 1/21/2017, \$29.00

ISO 7010/DAmD197, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 197: Safety sign W042: Warning; Arc flash - 1/21/2017, \$29.00

ISO 7010/DAmD198, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 198: Safety sign P043: Not for people in the state of intoxication - 1/21/2017, \$29.00

ISO/DIS 16069, Graphical symbols - Safety signs - Safety way guidance systems (SWGS) - 11/18/2016, \$112.00

### **MINING (TC 82)**

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

### **NUCLEAR ENERGY (TC 85)**

ISO 16793/DAmD1, Nuclear fuel technology - Guide for ceramographic preparation of UO<sub>2</sub> sintered pellets for microstructure examination - Amendment 1 - 1/15/2017, \$53.00



**OTHER**

ISO/DIS 14271, Resistance welding - Vickers hardness testing (low-force and microhardness) of resistance spot, projection, and seam welds - 11/17/2016, \$46.00

**PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)**

ISO/DIS 16900-2, Respiratory protective devices - Methods of test and test equipment - Part 2: Determination of breathing resistance - 1/15/2017, \$46.00

**PETROLEUM PRODUCTS AND LUBRICANTS (TC 28)**

ISO/DIS 6578, Refrigerated hydrocarbon liquids - Static measurement - Calculation procedure - 1/19/2017, \$88.00

**PLASTICS (TC 61)**

ISO/DIS 19821, Determination of span rating for natural fiber-reinforced plastic composite (NFC) deck boards - 1/20/2017, \$53.00

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

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

**SAFETY OF TOYS (TC 181)**

ISO 8124-4/DAMd1, Safety of toys - Part 4: Swings, slides and similar activity toys for indoor and outdoor family domestic use - Amendment 1 - 1/18/2017, \$29.00

**SHIPS AND MARINE TECHNOLOGY (TC 8)**

ISO/DIS 20154, Ships and marine technology - Guidelines on vibration isolation design method for shipboard auxiliary machinery - 1/20/2017, \$62.00

ISO/DIS 20155, Ships and marine technology - Test method of flow induced in-pipe noise source characteristics for a ship-used pump - 1/20/2017, \$88.00

**STEEL (TC 17)**

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

ISO/DIS 9328-2, Steel flat products for pressure purposes - Technical delivery conditions - Part 2: Non-alloy and alloy steels with specified elevated temperature properties - 1/15/2017, \$93.00

ISO/DIS 9328-3, Steel flat products for pressure purposes - Technical delivery conditions - Part 3: Weldable fine grain steels, normalized - 1/15/2017, \$77.00

ISO/DIS 9328-4, Steel flat products for pressure purposes - Technical delivery conditions - Part 4: Nickel-alloy steels with specified low temperature properties - 1/15/2017, \$62.00

ISO/DIS 9328-5, Steel flat products for pressure purposes - Technical delivery conditions - Part 5: Weldable fine grain steels, thermomechanically rolled - 1/15/2017, \$67.00

ISO/DIS 9328-6, Steel flat products for pressure purposes - Technical delivery conditions - Part 6: Weldable fine grain steels, quenched and tempered - 1/15/2017, \$67.00

ISO/DIS 9328-7, Steel flat products for pressure purposes - Technical delivery conditions - Part 7: Stainless steels - 1/15/2017, \$125.00

**TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)**

ISO/DIS 18841, Interpreting services - General requirements and recommendations - 11/18/2016, \$67.00

ISO/DIS 20228, Legal interpreting - 11/18/2016, \$77.00

**THERMAL INSULATION (TC 163)**

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

**ISO/IEC JTC 1, Information Technology**

ISO/IEC DIS 14165-151, Information technology - Fibre channel - Part 151: BaseT - 1/14/2017, \$155.00

**OTHER**

ISO/IEC DIS 17025, General requirements for the competence of testing and calibration laboratories - 1/21/2017, \$93.00

**IEC Standards**

1/2316/FDIS, IEC 60050-811: International electrotechnical vocabulary - Part 811: Electric traction, 12/09/2016

1/2317/FDIS, IEC 60050-821: International electrotechnical vocabulary - Part 821: Signalling and security apparatus for railways, 12/09/2016

1/2318/CD, IEC 60050-171 Ed. 1.0: International Electrotechnical Vocabulary. Part 171: Digital technology - Fundamental concepts, 01/20/2017

9/2190A/CDV, IEC 62928 Ed.1: Railway applications - Rolling stock equipment - Onboard lithium-ion traction batteries, 11/25/2016

21A/611/CD, IEC 61960-4: Secondary cells and batteries containing alkaline or other non-acid electrolytes - Part 4 - Coin type secondary lithium cells and batteries, 01/20/2017

40/2481/CDV, IEC 60286-1 Ed.3: Packaging of components for automatic handling - Part 1: Tape packaging of components with axial leads on continuous tapes, 01/20/2017

45/817/CD, IEC 63047 Ed.1: Nuclear instrumentation - Data format for list-mode digital data acquisition used in radiation detection and measurement, 01/20/2017

46C/1060/CD, IEC 61156-11: Multicore and symmetrical pair/quad cables for digital communications - Part 11: Cables for 1 Gb/s over one pair - Sectional specification, 01/20/2017

47/2321/CDV, IEC 62969-2 Ed.1: Semiconductor devices - Semiconductor interface for automotive vehicles - Part 2: Efficiency evaluation methods of wireless power transmission using resonance for automotive vehicles sensors, 01/20/2017

47/2325/CD, IEC 60749-41 Ed.1: Semiconductor devices - mechanical and climatic test methods - Part 41: Reliability testing methods of non-volatile memory devices, 12/23/2016

47A/996/CD, IEC 63011-1 Ed.1: Integrated circuits - Three dimensional integrated circuits - Part 1: General conditions and definitions, 01/20/2017

47A/997/CD, IEC 63011-2 Ed.1: Integrated circuits - Three dimensional integrated circuits - Part 3: A model and measurement conditions of through silicon via, 01/20/2017

47F/266/FDIS, IEC 62047-28 Ed.1: Semiconductor devices - Micro-electromechanical devices - Part 28: Performance testing method of vibration-driven MEMS electret energy harvesting devices, 12/09/2016

55/1587/CD, IEC 60317-73/Ed1: Specifications for particular types of winding wires - Part 73: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular aluminium wire, class 200, 01/20/2017

55/1588/CD, IEC 60317-74/Ed1: Specifications for particular types of winding wires - Part 74: Polyesterimide enamelled rectangular aluminium wire, class 180, 01/20/2017

- 59/665/CD, IEC 60704-3 Ed.3: Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 3: Procedure for determining and verifying declared noise emission values, 01/20/2017
- 59/666/DTS, IEC 62950 TS Ed.1: Household and similar electrical appliances - Specifying smart capabilities of appliances and devices - General aspects, 01/20/2017
- 61B/576/CD, IEC 60335-2-110/A1/Ed1: Household and similar electrical appliances - Safety - Part 2-110: Particular requirements for commercial microwave appliances with insertion or contacting applicators, 01/20/2017
- 61B/577/CD, IEC 60335-2-25/f2/Ed7: Household and similar electrical appliances - Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens, 12/23/2016
- 61B/578/CD, IEC 60335-2-25/f3/Ed7: Household and similar electrical appliances - Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens, 12/23/2016
- 61B/579/CD, IEC 60335-2-25/f4/Ed7: Household and similar electrical appliances - Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens, 12/23/2016
- 61B/580/CD, IEC 60335-2-90-A1-f2 Ed 4.0: Household and similar electrical appliances - Safety - Part 2-90: Particular requirements for commercial microwave ovens, 12/23/2016
- 69/467/NP, IEC 61851-23-2, Electric vehicle conductive charging system - Part 23-2: DC charging system for small energy capacity, 01/20/2017
- 77A/936/CDV, IEC 61000-3-2 (f1): Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current  $\leq 16$  A per phase), 01/20/2017
- 80/824/CD, IEC 62923-1 Ed.1: Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 1: Operational and performance requirements, methods of testing and required test results, 12/23/2016
- 80/825/NP, Maritime navigation and radiocommunication equipment and systems - Bridge alert management - Part 2: Alert and cluster identifiers and other additional features (proposed as IEC 62923-2 Ed.1), 01/20/2017
- 86B/4020/CDV, IEC 62005-9-4/Ed1: Fibre optic interconnecting devices and passive components - Reliability - Part 9-4: High power qualification of passive optical components for environmental category C, 01/20/2017
- 88/609/NP, Wind energy generating systems - Part 26-4: Reliability for wind energy generating systems (proposed IEC TS 61400-26-4), 01/20/2017
- 91/1394/CDV, IEC 62090 Ed.2: Product package labels for electronic components using bar code and two-dimensional symbologies, 01/20/2017
- 100/2774/NP, IEC 63080 Ed1: "Accessibility terms and definitions", 01/20/2017
- 100/2775/CDV, IEC 63080 Ed1, Accessibility terms and definitions, 01/20/2017
- 100/2818/DTS, IEC 622229: Multimedia systems and equipment - Multimedia e-publishing and e-book - Conceptual model for multimedia e-publishing, Ed. 2, 01/20/2017
- 100/2819/DTS, IEC/TD 63033-1 Ed.1: Car Multimedia Systems and Equipment - Drive Monitor System - Part 1: General (TC100), 01/20/2017
- 107/292/DC, Draft IEC Technical Report for comments: IEC 62396-7 TR, Process management for avionics - Atmospheric radiation effects - Part 7: Management of SEE analysis process in avionics design, 01/20/2017
- 110/809/CD, IEC 62906-5-4 Ed.1: Laser display devices Part 5-4: Optical measuring methods of colour speckle, 12/23/2016
- 111/449/CD, IEC 62959: Environmentally Conscious Design (ECD) - Principles, requirements and guidance, 01/20/2017
- 113/344/NP, IEC TS 62607-8-1: Nanomanufacturing - Key Control Characteristics - Part 8-1: Nano-enabled metal-oxide interfacial devices - Test method for defect states by thermally stimulated current, 01/20/2017
- 120/89/DTS, IEC/TS 62933-5-1 Ed.1: Electrical Energy Storage (ESS) Systems - Part 5-1: Safety considerations related to grid integrated electrical energy storage (EES) systems, 01/20/2017
- 121A/115/DTR, IEC/TR 63054 Ed.1: Low-voltage switchgear and controlgear - Fire risk analysis and risk reduction measures, 12/23/2016



# Newly Published ISO & IEC Standards

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

## ISO Standards

### BUILDING CONSTRUCTION (TC 59)

[ISO 19208:2016](#), Framework for specifying performance in buildings, \$149.00

### CARBON DIOXIDE CAPTURE, TRANSPORTATION, AND GEOLOGICAL STORAGE (TC 265)

[ISO 27913:2016](#), Carbon dioxide capture, transportation and geological storage - Pipeline transportation systems, \$173.00

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

[ISO 22870:2016](#), Point-of-care testing (POCT) - Requirements for quality and competence, \$88.00

### DENTISTRY (TC 106)

[ISO 14801:2016](#), Dentistry - Implants - Dynamic loading test for endosseous dental implants, \$123.00

### EARTH-MOVING MACHINERY (TC 127)

[ISO 14990-1:2016](#), Earth-moving machinery - Electrical safety of machines utilizing electric drives and related components and systems - Part 1: General requirements, \$240.00

[ISO 14990-2:2016](#), Earth-moving machinery - Electrical safety of machines utilizing electric drives and related components and systems - Part 2: Particular requirements for externally-powered machines, \$123.00

[ISO 14990-3:2016](#), Earth-moving machinery - Electrical safety of machines utilizing electric drives and related components and systems - Part 3: Particular requirements for self-powered machines, \$123.00

### ENERGY MANAGEMENT AND ENERGY SAVINGS (TC 301)

[ISO 50047:2016](#), Energy savings - Determination of energy savings in organizations, \$200.00

### ESSENTIAL OILS (TC 54)

[ISO 3848:2016](#), Essential oil of citronella, Java type, \$88.00

### FLUID POWER SYSTEMS (TC 131)

[ISO 21018-4:2016](#), Hydraulic fluid power - Monitoring the level of particulate contamination in the fluid - Part 4: Use of the light extinction technique, \$88.00

### GEOTECHNICS (TC 182)

[ISO 17892-4:2016](#), Geotechnical investigation and testing - Laboratory testing of soil - Part 4: Determination of particle size distribution, \$173.00

### INDUSTRIAL TRUCKS (TC 110)

[ISO 18063-1:2016](#), Rough-terrain trucks - Visibility - Test methods and their verification - Part 1: Variable-reach trucks, \$123.00

### MECHANICAL TESTING OF METALS (TC 164)

[ISO 14577-4:2016](#), Metallic materials - Instrumented indentation test for hardness and materials parameters - Part 4: Test method for metallic and non-metallic coatings, \$149.00

### OPTICS AND OPTICAL INSTRUMENTS (TC 172)

[IEC 80601-2-58/Amd1:2016](#), Medical electrical equipment -- Part 2-58: Particular requirements for basic safety and essential performance of lens removal devices and vitrectomy devices for ophthalmic surgery - Amendment 1: Proposed Horizontal Standard, \$22.00

[ISO 12870:2016](#), Ophthalmic optics - Spectacle frames - Requirements and test methods, \$149.00

### POWDER METALLURGY (TC 119)

[ISO 3928:2016](#), Sintered metal materials, excluding hardmetals - Fatigue test pieces, \$88.00

### ROAD VEHICLES (TC 22)

[ISO 16380/Amd1:2016](#), Road vehicles - Blended fuels refuelling connector - Amendment 1, \$22.00

[ISO 16845-1:2016](#), Road vehicles - Controller area network (CAN) conformance test plan - Part 1: Data link layer and physical signalling, \$265.00

### RUBBER AND RUBBER PRODUCTS (TC 45)

[ISO 1401:2016](#), Rubber hoses for agricultural spraying, \$88.00

[ISO 1434:2016](#), Natural rubber in bales - Amount of bale coating - Determination, \$51.00

[ISO 2398:2016](#), Rubber hoses, textile-reinforced, for compressed air - Specification, \$88.00

[ISO 7751:2016](#), Rubber and plastics hoses and hose assemblies - Ratios of proof and burst pressure to maximum working pressure, \$51.00

[ISO 8331:2016](#), Rubber and plastics hoses and hose assemblies - Guidelines for selection, storage, use and maintenance, \$123.00

[ISO 23337:2016](#), Rubber, vulcanized or thermoplastic - Determination of abrasion resistance using the Improved Lambourn test machine, \$88.00

[ISO 23529:2016](#), Rubber - General procedures for preparing and conditioning test pieces for physical test methods, \$123.00

### SMALL TOOLS (TC 29)

[ISO 235:2016](#), Parallel shank jobber and stub series drills and Morse taper shank drills, \$149.00

[ISO 2540:2016](#), Centre drills for centre holes with protecting chamfer - Type B, \$51.00

[ISO 2541:2016](#), Centre drills for centre holes with radius form - Type R, \$51.00

[ISO 3291:2016](#), Extra-long Morse taper shank twist drills, \$51.00

[ISO 4202:2016](#), Reduction sleeves with external 7/24 taper for tools with Morse taper shanks, \$51.00

[ISO 4205:2016](#), Countersinks, 90°, with parallel shanks and solid pilots, \$51.00

[ISO 4207:2016](#), Counterbores with Morse taper shanks and detachable pilots, \$51.00

[ISO 12197:2016](#), Woodruff keyseat cutters - Dimensions, \$51.00

#### **TECHNICAL DRAWINGS, PRODUCT DEFINITION AND RELATED DOCUMENTATION (TC 10)**

[ISO 12756:2016](#), Drawing and writing instruments - Ball point pens and roller ball pens - Vocabulary, \$51.00

#### **TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)**

[ISO 5395-2/Amd1:2016](#), Garden equipment - Safety requirements for combustion-engine-powered lawnmowers - Part 2: Pedestrian-controlled lawnmowers - Amendment 1: OPC, cutting means, pressurized hoses, \$22.00

## **ISO Technical Reports**

#### **ROAD VEHICLES (TC 22)**

[ISO/TR 7637-5:2016](#), Road vehicles - Electrical disturbances from conduction and coupling - Part 5: Enhanced definitions and verification methods for harmonization of pulse generators according to ISO 7637, \$200.00

#### **STEEL (TC 17)**

[ISO/TR 21074:2016](#), Application of ISO 5725 for the determination of repeatability and reproducibility of precision tests performed in standardization work for chemical analysis of steel, \$123.00

## **ISO Technical Specifications**

#### **STEEL (TC 17)**

[ISO/TS 4949:2016](#), Steel names based on letter symbols, \$88.00

## **ISO/IEC JTC 1, Information Technology**

[ISO/IEC 17839-3:2016](#), Information technology - Identification cards - Biometric System-on-Card - Part 3: Logical information interchange mechanism, \$123.00

[ISO/IEC 27035-1:2016](#), Information technology - Security techniques - Information security incident management - Part 1: Principles of incident management, \$149.00

[ISO/IEC 27035-2:2016](#), Information technology - Security techniques - Information security incident management - Part 2: Guidelines to plan and prepare for incident response, \$240.00

[ISO/IEC 29500-1:2016](#), Information technology - Document description and processing languages - Office Open XML File Formats - Part 1: Fundamentals and Markup Language Reference, \$265.00

[ISO/IEC 29500-4:2016](#), Information technology - Document description and processing languages - Office Open XML File Formats - Part 4: Transitional Migration Features, \$265.00

## **IEC Standards**

#### **CABLES, WIRES, WAVEGUIDES, R.F. CONNECTORS, AND ACCESSORIES FOR COMMUNICATION AND SIGNALLING (TC 46)**

[IEC 60966-2-5 Ed. 4.0 b:2016](#), Radio frequency and coaxial cable assemblies - Part 2-5: Detail specification for cable assemblies for radio and TV receivers - Frequency range 0 MHz to 1 000 MHz, IEC 61169-2 connectors, \$31.00

[IEC 60966-2-6 Ed. 4.0 b:2016](#), Radio frequency and coaxial cable assemblies - Part 2-6: Detail specification for cable assemblies for radio and TV receivers - Frequency range 0 MHz to 3 000 MHz, IEC 61169-24 connectors, \$36.00

[IEC 62153-4-16 Ed. 1.0 en:2016](#), Metallic communication cable test methods - Part 4-16: Electromagnetic compatibility (EMC) - Extension of the frequency range to higher frequencies for transfer impedance and to lower frequencies for screening attenuation measurements using the triaxial set-up, \$121.00

#### **ELECTRICAL EQUIPMENT IN MEDICAL PRACTICE (TC 62)**

[IEC 82304-1 Ed. 1.0 b:2016](#), Health software - Part 1: General requirements for product safety, \$206.00

#### **FIBRE OPTICS (TC 86)**

[IEC 60793-2-40 Ed. 4.0 b:2015](#), Optical fibres - Part 2-40: Product specifications - Sectional specification for category A4 multimode fibres, \$230.00

#### **MAGNETIC COMPONENTS AND FERRITE MATERIALS (TC 51)**

[IEC 61605 Ed. 3.0 en:2016](#), Fixed inductors for use in electronic and telecommunication equipment - Marking codes, \$61.00

#### **MARITIME NAVIGATION AND RADIOCOMMUNICATION EQUIPMENT AND SYSTEMS (TC 80)**

[IEC 62940 Ed. 1.0 en:2016](#), Maritime navigation and radiocommunication equipment and systems - Integrated communication system (ICS) - Operational and performance requirements, methods of testing and required test results, \$303.00

[IEC 62320-2 Ed. 2.0 en:2016](#), Maritime navigation and radiocommunication equipment and systems - Automatic identification system (AIS) - Part 2: AIS AtoN Stations - Operational and performance requirements, methods of testing and required test results, \$375.00

[S+ IEC 62320-2 Ed. 2.0 en:2016 \(Redline version\)](#), Maritime navigation and radiocommunication equipment and systems - Automatic identification system (AIS) - Part 2: AIS AtoN Stations - Operational and performance requirements, methods of testing and required test results, \$446.00

#### **NUCLEAR INSTRUMENTATION (TC 45)**

[IEC 62859 Ed. 1.0 b:2016](#), Nuclear power plants - Instrumentation and control systems - Requirements for coordinating safety and cybersecurity, \$182.00

#### **OTHER**

[CISPR 25 Ed. 4.0 b:2016](#), Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers, \$399.00

[CISPR 14-1 Ed. 6.0 b cor.1:2016](#), Corrigendum 1 - Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission, \$0.00

#### **PERFORMANCE OF HOUSEHOLD ELECTRICAL APPLIANCES (TC 59)**

[IEC 60704-2-13 Ed. 3.0 b:2016](#), Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-13: Particular requirements for range hoods and other cooking fume extractors, \$85.00

#### **POWER ELECTRONICS (TC 22)**

[IEC 61204-3 Ed. 3.0 b:2016](#), Low-voltage switch mode power supplies - Part 3: Electromagnetic compatibility (EMC), \$278.00

[IEC 62040-5-3 Ed. 1.0 b:2016](#), Uninterruptible power systems (UPS) - Part 5-3: DC output UPS - Performance and test requirements, \$339.00

[S+ IEC 61204-3 Ed. 3.0 en:2016 \(Redline version\)](#), Low-voltage switch mode power supplies - Part 3: Electromagnetic compatibility (EMC), \$334.00

#### **SURGE ARRESTERS (TC 37)**

[IEC 61643-351 Ed. 1.0 b:2016](#), Components for low-voltage surge protective devices - Part 351: Performance requirements and test methods for telecommunications and signalling network surge isolation transformers (SIT), \$206.00

#### **SWITCHGEAR AND CONTROLGEAR (TC 17)**

[IEC 62271-SER Ed. 1.0 b:2016](#), High-voltage switchgear and controlgear - ALL PARTS, \$9445.00

[IEC 62271-212 Ed. 1.0 b:2016](#), High-voltage switchgear and controlgear - Part 212: Compact Equipment Assembly for Distribution Substation (CEADS), \$339.00

### **IEC Technical Reports**

#### **INSTRUMENT TRANSFORMERS (TC 38)**

[IEC/TR 62689-100 Ed. 1.0 en:2016](#), Current and voltage sensors or detectors, to be used for fault passage indication purposes - Part 100: Requirements and proposals for the IEC 61850 series data model extensions to support fault passage indicators applications, \$387.00

### **IEC Technical Specifications**

#### **FIBRE OPTICS (TC 86)**

[IEC/TS 62965 Ed. 1.0 b:2016](#), Fibre optic interconnecting devices and passive components - Ferrule assembly and fusion splicer interface dimensions for a fusion splice on connector, \$55.00

#### **INSULATORS (TC 36)**

[IEC/TS 60815-4 Ed. 1.0 en:2016](#), Selection and dimensioning of high-voltage insulators intended for use in polluted conditions - Part 4: Insulators for d.c. systems, \$206.00

# Registration of Organization Names in the United States

The Procedures for Registration of Organization Names in the United States of America (document ISSB 989) require that alphanumeric organization names be subject to a 90-day Public Review period prior to registration. For further information, please contact the Registration Coordinator at (212) 642-4975.

The following is a list of alphanumeric organization names that have been submitted to ANSI for registration. Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

## PUBLIC REVIEW

### ISSQUARED

Public Review: August 26 to November 26, 2016

NOTE: Challenged alphanumeric names are underlined. The Procedures for Registration provide for a challenge process, which follows in brief. For complete details, see Section 6.4 of the Procedures.

A challenge is initiated when a letter from an interested entity is received by the Registration Coordinator. The letter shall identify the alphanumeric organization name being challenged and state the rationale supporting the challenge. A challenge fee shall accompany the letter. After receipt of the challenge, the alphanumeric organization name shall be marked as challenged in the Public Review list. The Registration Coordinator shall take no further action to register the challenged name until the challenge is resolved among the disputing parties.

# 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](mailto:ncsci@nist.gov) or [notifyus@nist.gov](mailto:notifyus@nist.gov).

# Information Concerning

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## American National Standards

### Call for Members

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

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

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

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

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

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

### Society of Cable Telecommunications

#### ANSI Accredited Standards Developer

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

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

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

## ANSI Accredited Standards Developers

### Approval of Reaccreditation

#### Association of Home Appliance Manufacturers (AHAM)

The reaccreditation of the Association of Home Appliance Manufacturers (AHAM), an ANSI Member and Accredited Standards Developer, has been approved at the direction of ANSI's Executive Standards Council under its recently revised operating procedures for documenting consensus on AHAM-sponsored American National Standards, effective November 1, 2016. For additional information, please contact: Mr. Matthew B. Williams, Director, Standards, Association of Home Appliance Manufacturers, 1111 19th Street, NW, Suite 402, Washington, DC 20036; phone: 202.872.5955, ext. 317; e-mail: [mwilliams@aham.org](mailto:mwilliams@aham.org).

#### Conveyor Equipment Manufacturers Association (CEMA)

The reaccreditation of the Conveyor Equipment Manufacturers Association (CEMA), an ANSI Member and Accredited Standards Developer, has been approved at the direction of ANSI's Executive Standards Council under its recently revised operating procedures for documenting consensus on CEMA-sponsored American National Standards, effective November 2, 2016. For additional information, please contact: Mr. Philip Hannigan, Executive Secretary, Conveyor Equipment Manufacturers Association, 5672 Strand Court, Suite 2, Naples, FL 34110; phone: 239.514.3441; e-mail: [phil@cemanet.org](mailto:phil@cemanet.org).

### FM Approvals

ANSI's Executive Standards Council has approved the reaccreditation of FM Approvals, an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on FM Approvals-sponsored American National Standards, effective November 2, 2016. For additional information, please contact: Ms. Josephine Mahnken, Senior Business Process Specialist, FM Approvals, P.O. Box 9102, 1151 Boston-Providence Turnpike, Norwood, MA 02062; phone: 781.255.4813; e-mail: [josephine.mahnken@fmapprovals.com](mailto:josephine.mahnken@fmapprovals.com).

# International Organization for Standardization (ISO)

## ISO Proposal for a New Field of ISO Technical Activity

### Medicinal Plants

**Comment Deadline: December 2, 2016**

ISIRI, the ISO member body for Iran, has submitted to ISO a proposal for a new field of ISO technical activity on Medicinal Plants, with the following scope statement:

Standardization in the field of medicinal plants as well as medicinal plants propagation materials, in particular terminology, sampling, test methods and analysis, product specifications, safety and quality requirements for packaging, storage and transportation. Medicinal plants substances with regard to safety and quality such as content of active material, values for physical, chemical specifications and microbial contaminants, chemical residues and heavy metals etc., must be based on recognized international standards or deliverables and should be laid down in written form.

Excluded from its scope are products covered by ISO/TC 54 Essential oils, ISO/TC 245 Traditional Chinese Medicine and ISO/TC 215 Health Informatics.

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

## International Workshop Agreement Proposal Resource-Oriented Sanitation Systems

**Comment Deadline: December 1, 2016**

ANSI, working with the Bill and Melinda Gates Foundation, intends to submit to ISO an International Workshop Agreement Proposal on the subject of community based resource oriented sanitation treatment systems, with the following scope statement:

The goal of this International Workshop Agreement is to provide an efficient starting point for international standardization on a system to safely process human waste and possibly household waste and recover valuable resources such as water, energy, and/or nutrients through economically sustainable technologies in an off-grid and non-sewered environment.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team ([isot@ansi.org](mailto:isot@ansi.org)) with submission of comments to Steve Cornish ([scornish@ansi.org](mailto:scornish@ansi.org)) by close of business on December 1, 2016.

## Meeting Notice

### U.S. TAG to TC 301 – Energy Management and Energy Savings

The U.S. TAG to TC 301 Energy Management and Energy Savings will be meeting at 1899 L St NW, Washington, DC 20036 on November 29-30, 2016. For those interested in attending, please contact either Melody McElWee at [melody.McElwee@innovate.gatech.edu](mailto:melody.McElwee@innovate.gatech.edu) or Deann Desai at [deann.desai@gatech.edu](mailto:deann.desai@gatech.edu).



# Public Review Draft

Proposed Addendum ae to Standard 189.1-2014

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

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

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## FOREWORD

This new section addresses plans for the treatment of waste materials originating from the development of a building project site.

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### Addendum ae to 189.1-2014

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Add 5.3.8 as follows:

#### **5.3.8 Building Site Waste Management**

**5.3.8.1 Building Site Waste Management Plan.** A building site waste management plan shall be developed and implemented for excavated soil, rock and land-clearing debris. Land-clearing debris is limited to stumps and vegetation. Diverted land-clearing debris and removed rock and soil shall not be sent to sites where development activity is prohibited by Sec. 5.3.1.2 or to *greenfield* sites other than those being used for agricultural purposes or being developed as part of a building project.

Not less than 90 percent of the land-clearing debris, excluding invasive plant materials, shall be diverted from disposal in landfills and incinerators, other than waste to energy systems with an energy recovery efficiency rate higher than 60 percent. Land-clearing debris calculations shall be based on either weight or volume, but not both. Receipts or other documentation related to diversion shall be maintained through the course of construction

The plan shall address all of the following:

1. Land-clearing debris, rock and soil to be diverted from disposal by composting, recycling or reuse.
2. Waste materials that will be diverted on site.
3. The locations to which waste materials will be diverted offsite.

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4. Soils to be stockpiled for future use at any location.
5. Woody waste to be used as fuel.
6. The destruction and disposal of *invasive plant* materials.
7. The methods of removal of any contaminated soils.
8. The treatment of vegetation to comply with the rules of government designated quarantine zones for invasive insect species.

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## **FOREWORD**

*This addendum creates a new definition for plants that are suitable for inclusion in this standard. It is to replace “adapted plants” in Chapter 6 as to better define the desired vegetation and not conflict with Chapter 6 use of the term “adapted plants. The definition for “ETc compatible plants” includes measurable means to determine if the non-native plant meets the requirements of the standard.*

*The “ETc compatible plants” water needs are based on the assigned ETc, minus a 20% water need because the ETc is based on maximum biomass production (not required for plant maintenance). Essentially, the plant is approved as long as its water needs (expressed in ETc) do not exceed 20% of the average precipitation in the local climate. Since frequent irrigation of “ETc compatible plants” past the establishment period is not needed, there is no need for a permanent irrigation system to be installed.*

*Chapter 3 already contains the following definitions that relate to this addendum:*

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

**ETc:** *evapotranspiration of the plant material derived by multiplying ETo by the appropriate plant coefficient.*

**ETo:** *maximum evapotranspiration as defined by the standardized Penman-Monteith equation or from the National Weather Service, where available.*

**water, alternate on-site sources of:** *alternate on-site sources of water include, but are not limited to*

- a. rainwater or stormwater harvesting,*
- b. air conditioner condensate,*
- c. gray water from interior applications and treated as required,*

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- d. swimming pool filter backwash water,*
- e. cooling tower blowdown water,*
- f. foundation drain water,*
- g. industrial process water, and*
- h. on-site wastewater treatment plant effluent.*

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## **Addendum ag to Standard 189.1-2014**

*Add new definition to Chapter 3 as follows:*

### ***Plants:***

*a. **adapted plants:** plants that reliably grow well in a given habitat with minimal attention from humans in the form of winter protection, pest protection, water irrigation, or fertilization once root systems are established in the soil. Adapted plants are considered to be low maintenance but not invasive.*

***b. ETc compatible plants:** plants with documented *ETc* rates, and having all of the following characteristics: (a) not native nor invasive to the local geographic area of the site; (b) after the *landscape establishment period* does not require supplemental annual irrigation based on the 10-year average annual rainfall of the local climate and based on 80% of the plant's *ETc*.*

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**bc. *invasive plants*:** species of *plants* that are not native to the *building project site* and that cause or are likely to cause environmental harm. At a minimum, the list of invasive species for a *building project site* includes *plants* included in city, county, and regional lists and state and federal noxious weeds laws.

**ed. *native plants*:** *plants* that adapted to a given area during a defined time period and are not invasive. In America, the term often refers to *plants* growing in a region prior to the time of settlement by people of European descent.

**Revise Section 6 as follows:**

### **6.3.1 Site Water Use Reduction**

**6.3.1.1 Landscape Design.** A minimum of 60% of the area of the *improved landscape* shall be in *biodiverse planting of native plants and ~~adapted plants~~ ETc compatible plants other than turfgrass.*

#### **Exceptions to 6.3.1.1:**

1. The area of dedicated athletic fields, golf courses, and driving ranges shall be excluded from the calculation of the *improved landscape* for schools, *residential* common areas, or public recreational facilities.
2. Landscape areas irrigated solely with *alternate on-site sources of water*.

**6.3.1.3 Controls.** Where any ~~Any~~ irrigation system for the project site uses an automatic controller, the system shall be controlled by a qualifying *smart controller* that uses *evapotranspiration (ET)* and weather data to adjust irrigation schedules and that complies with the minimum requirements or an on-site rain or moisture sensor that automatically shuts the system off after a predetermined amount of rainfall or sensed moisture in the soil. Qualifying *smart controllers* shall meet the minimum requirements, as listed below, when tested in accordance with IA SWAT Climatological- Based Controllers 8th Draft Testing Protocol. *Smart controllers* that use *ET* shall use the following inputs for calculating appropriate irrigation amounts:

- a. *Irrigation adequacy*—80% minimum *ETc*.
- b. *Irrigation excess*—not to exceed 10%.

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

**6.3.1.4 Irrigation of *ETc compatible plants*.** The use of *potable water* or *reclaimed water* for irrigation for *adapted plants* are prohibited after the *landscape establishment period*. *In-ground irrigation systems for *ETc compatible plants* using potable or off-site treated reclaimed water* are prohibited. *After the landscape establishment period of adapted plants, the irrigation system using potable water or reclaimed water shall be permanently disabled or removed from site.*



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Proposed Addendum ah to Standard 189.1-2014

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## Foreword

The purpose of this addendum is to revise the lighting power density (LPD) requirements in Standard 189.1 for exterior parking area. The ratio of the target LPD to that in Addendum CG to 90.1-2013 is proposed for LPD factors in ASHRAE Standard 189.1 Table 7.4.6.1C. The following table shows the target premium efficiency LDP achievable with current lighting technologies with an emphasis on the use of LED luminaires. The LPD are developed based on the same analysis methodology used by the 90.1 Lighting Subcommittee and higher efficacy fixtures than those used to develop the Addendum CG to 90.1.

Table 1. LPD requirements for Exterior Parking in 90.1 Addendum CG and the 189.1 proposal

<b>Application</b>	<b>90.1-2013 Addendum LPD (W/sf)</b>	<b>Target Premium Efficiency for 189.1 LPD (W/sf)</b>	<b>189.1 Proposed Ratio</b>
Uncovered Parking Areas and Drives, LZ0	Not allowed	Not allowed	Not Allowed
Uncovered Parking Areas and Drives, LZ1	0.03	0.03	1.00
Uncovered Parking Areas and Drives, LZ2	0.04	0.03	0.75
Uncovered Parking Areas and Drives, LZ3	0.06	0.05	0.83
Uncovered Parking Areas and Drives, LZ4	0.08	0.05	0.63

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## Addendum ah to 189.1-2014

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Modify Table 7.4.6.1C by adding the following entries:

**TABLE 7.4.6.1C Lighting Power Allowance Factors**

	<i>Lighting Zone</i>				
	<i>LZ0</i>	<i>LZ1</i>	<i>LZ2</i>	<i>LZ3</i>	<i>LZ4</i>
<u>For tradable areas, uncovered parking areas: parking areas and drives, with measured SRI&lt;29 or without SRI measurement</u>	<u>Not allowed</u>	<u>1</u>	<u>0.75</u>	<u>0.83</u>	<u>0.63</u>
<u>For tradable areas, uncovered parking areas: parking areas and drives, with new concrete without added color pigment or with measured SRI&gt;=29</u>	<u>Not allowed</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
<u>For tradable areas, others</u>	1.00	0.90	0.90	0.95	0.95
<u>For nontradable areas</u>	1.00	0.95	0.95	0.95	0.95

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### Foreword

*This addendum would add requirements for testing, installation and commissioning of air curtains when they are installed in building entrances. They are intended to ensure that air curtains function and operate properly as intended.*

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### **Addendum ai to 189.1-2014**

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*Add new Section 7.4.2.4 as follows:*

**7.4.2.4 Air curtains.** Where air curtains are provided at building entrances or building entrance vestibules, for the distance from the air curtain discharge nozzle to the floor, the air curtain unit shall produce a minimum velocity of 6.6 ft/s (2.0 m/s) in accordance with ANSI/AMCA 220 and be installed in accordance with manufacturer's instructions. Automatic controls shall be provided that will operate the air curtain with the opening and closing of the door. Air curtains and their controls shall comply with Section 10.3.1.2.4.

*Renumber existing section numbers as follows:*

7.4.2.4-5

7.4.2.56

7.4.2.67

7.4.2.78

7.4.2.89

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Modify Section 10.3.1.2.4 as follows:

**10.3.1.2.4 Systems.** The following systems and associated controls, if included in the building project, shall be commissioned:

- a. Heating, ventilating, air-conditioning, and refrigeration systems (mechanical and/or passive).
- b. *Building envelope* systems, components, and assemblies to verify the airtightness and thermal and moisture integrity.  
*Building envelope* airtightness commissioning shall also comply with Section 10.3.1.2.5.
- c. Air curtains systems.
- d.e. Lighting systems.
- e.d. Fenestration control systems: Automatic controls for shading devices and dynamic glazing.
- f.e. Irrigation.
- g.f. Plumbing.
- h.g. Domestic and process water pumping and mixing systems
- i.h. Service water heating systems.
- j.i. Renewable energy systems.
- k.j. Water measurement devices, as required in Section 6.3.3.
- l.k. Energy measurement devices, as required in Section 7.3.3.

Add to Chapter 11:

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Air Movement and Control Association International, Inc

30 West University Drive

Arlington Heights, IL 60004-1893, United States

1-847-394-0150; www.amca.org

ANSI/AMCA 220-05 (R2012)

Laboratory Methods of Testing Air Curtain Units for 7.4.2.4

Aerodynamic Performance Rating

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## Foreword

The purpose of this addendum is to revise the bi-level motion control requirements to better align with the recently approved Addendum AS to ASHRAE/IES 90.1-2013. Addendum AS increased the lighting power reduction from 30% to 50% for signs and most exterior lighting (except façade and landscape lighting) after business hours. This proposal matches the sign lighting power reduction levels in ASHRAE/IES 90.1.

Addendum AS also requires that parking lot lighting less than 24 feet mounting heights “automatically reduce the power of each luminaire by a minimum of 50% when no activity has been detected in the area illuminated by the controlled luminaires for a time of no longer than 15 minutes.” This relatively high level of power reduction for lighting parking lots represents the transition to LED technology, which can be dimmed more easily than legacy lighting systems. In comparison, Section 7.4.6.5 of Standard 189.1 “Parking Lighting,” has not been updated from a 40% power reduction. This proposal does not recommend striking this section, as Standard 189.1 has a lower wattage threshold for bi-level motion controls than ASHRAE 90.1 (50 W verse 78 W for Std 90.1).

This proposal also recommends that the bi-level motion controlled lighting requirement be expanded to open areas in Outdoor Sales Lots (but not street frontage for vehicle sales lots).

The defined areas of expansion of scope “open areas in outdoor retail sales” and the exemption for “street frontage for vehicle sales lots” are making use of terms that exist in ASHRAE/IES 90.1 Table 9.4.2-2 “TABLE 9.4.2-2 ”Individual Lighting Power Allowances for Building Exteriors.”

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## **Addendum aj to 189.1-2014**

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Modify Section 7.4.6.4 as follows:

**7.4.6.4 Controls for Exterior Sign Lighting.** This section supersedes Section 9.4.1.4 of ANSI/ASHRAE/IES Standard 90.1 for all exterior sign lighting. All exterior sign lighting, including internally illuminated signs and lighting on externally illuminated signs, shall comply with the requirements of Sections 7.4.6.5.1 or 7.4.6.5.2.

**Exceptions:**

1. Sign lighting that is specifically required by a health or life safety statute, ordinance, or regulation.
2. Signs in tunnels.

**7.4.6.4.1** All sign lighting that operates more than one hour per day during *daylight hours* shall include controls to automatically reduce the input power to a maximum of 35% of full power for a period from one hour after sunset to one hour before sunrise.

**Exception:** Sign lighting using ~~metal halide, high-pressure sodium, induction, cold cathode, or neon lamps that includes~~ with controls to automatically reduce the input power to a maximum of 70% of full power for a period from one hour after sunset to one hour before sunrise.

**7.4.6.4.2** All other sign lighting shall include the following:

- a. Controls to automatically reduce the input power to a maximum of ~~70%~~ 50% of full power for a period from midnight or within one hour of the end of business operations, whichever is later, until 6:00 am or business opening, whichever is earlier.
- b. Controls to automatically turn off during *daylight hours*.

Modify Section 7.4.6.5 as follows:

**7.4.6.5 Parking and Outdoor Sales Lighting.** This section supersedes Section 9.4.1.4 of ANSI/ASHRAE/IES Standard 90.1 for lighting serving uncovered parking areas and open areas in outdoor sales lots. Outdoor luminaires serving uncovered parking areas and open areas in outdoor sales lots shall be controlled by all of the following:

- a. Luminaires shall be controlled by a device that automatically turns off the luminaire during *daylight hours*.
- b. Luminaires shall be controlled by a timeclock or other control that automatically turns off the luminaire according to a timed schedule.
- c. For luminaires having a rated input wattage of more than 50 W and where the bottom of the luminaire is mounted 24 ft (7.3 m) or less above the ground, the luminaires shall be controlled by one or more devices that automatically reduce lighting power of each

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luminaire by a minimum of ~~40%~~ 50% when there is no activity detected in the controlled zone for a period no longer than 15 minutes. No more than 1500 input watts of lighting power shall be controlled together.

**Exceptions to 7.4.6.5(c):**

1. Lighting serving ~~uncovered parking areas does not include lighting for outdoor sales, including vehicle sales lots.~~ street frontage for vehicle sales lots.
2. Lighting for covered vehicle entrances or exits from buildings or parking structures where required for safety, security, or eye adaptation.

# Public Review Draft

Proposed Addendum ak to Standard 189.1-2014

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

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

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## FOREWORD

*This addendum revises Section 9.5 to reflect advancements in the implementation of life cycle assessment and to reference ASTM E2921: Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes and Rating Systems. ASTM E2921 provides a consistent framework and criteria for performing a whole building life cycle assessment while allowing the identification of specific inputs to meet the objectives of the performance path for Standard 189.1. The result is streamlined text that will deliver a robust performance option for the Materials and Resources section. It should be noted that some text has simply been relocated to another subsection, such as 9.5.1.2 a. and b. which remain unchanged from previous versions of Standard 189.1.*

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## Addendum ak to 189.1-2014

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*Revise Section 9.5 as follows:*

### 9.5 Performance Option

**9.5.1 Life-Cycle Assessment (LCA).** An LCA shall be performed in accordance with ASTM E2921 and ISO Standard 14044, as modified by this section, for a minimum of two building alternatives, ~~considering at least those material components included for consideration in Section 9.4.1,~~ both of which shall conform to the *owner's project*

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~~requirements (OPR). Each building alternative shall consist of a common design, construction, and materials for the locale, including building size and use, as commonly approved by the AHJ. Each building alternative shall comply with Sections 6, 7, and 8. The service life of the buildings shall be not less than that determined using Table 10.3.2.3, except that the design life of long-life buildings shall be no less than 75 years.~~

**9.5.1.1 LCA Performance Metric.** The LCA shall demonstrate that the final building design achieves the following minimum improvement over the reference building design assessed in the LCA: The building alternative chosen for the project shall have

a. a 10% improvement in a minimum of each of three impact categories, one of which must be global warming, or

b. a 5% improvement over the other building alternative assessed in the LCA in a minimum of each of two-four of the impact categories, one of which must be global warming.

The following impact categories are shall be used to determine compliance with this section and included in Section 9.5.1.3: land use (or habitat alteration), resource use, climate change global warming, ozone layer depletion, human health effects, ecotoxicity, smog, acidification, and eutrophication.

**9.5.1.2 Procedure.** The LCA shall be performed in accordance with the service lives, life cycle stages, study boundaries, and comparison methodologies of ASTM E2921 with include the following three steps modifications:

**Step 1:** ~~Perform a life cycle inventory (LCI). The LCI accounts for all the individual environmental flows to and from the material components in a building throughout its life cycle.~~

~~a. The LCI shall include the materials and energy consumed and the emissions to air, land, and water for each of the following stages:~~

- ~~1. Extracting and harvesting materials and fuel sources from nature.~~
- ~~2. Processing building materials and manufacturing building components.~~
- ~~3. Transporting materials and components.~~
- ~~4. Assembly and construction.~~
- ~~5. Maintenance, repair, and replacement during the design life with or without operational energy consumption.~~
- ~~6. Demolition, disposal, recycling, and reuse of the building at the end of its life cycle.~~

~~b. The LCI shall account for emissions to air for the following:~~

- ~~1. The six principal pollutants for which the USEPA has set National Ambient Air Quality Standards as required by the Clean Air Act and its amendments: carbon~~

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~~monoxide, nitrogen dioxide, lead, sulfur oxides, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and ozone.~~

~~2. Greenhouse gases (not including water vapor and ozone) as described in the Inventory of U.S. Greenhouse Gas Emissions and Sinks: carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, hydrochlorofluorocarbons, bromofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, sulfur dioxide, and VOCs.~~

~~3. Hazardous air pollutants listed in the Clean Air Act and its amendments.~~

~~**Step 2:** Compare the two building alternatives using a published third party impact indicator method that includes, at a minimum the impact categories listed in Section 9.5.1.1. An LCA report shall be prepared that meets the requirements for third party reporting in ISO Standard 14044 and also includes:~~

~~a. A description of the two building alternatives, including:~~

- ~~1. a description of the system boundary used,~~
- ~~2. the design life of each building, and~~
- ~~3. the physical differences between buildings.~~

~~b. The impact indicator method and impact categories used.~~

~~c. The results of the LCA indicating a minimum of 5% improvement in the proposed building compared to the other building alternative for a minimum of two impact categories, including an explanation of the rationale for the weighting and averaging of the impacts.~~

~~**Step 3:** Conduct a critical review by an external expert independent of those performing the LCA.~~

~~a. Each building alternative shall comply with Sections 6, 7, and 8 of this Standard.~~

~~b. The service life of the buildings shall be not less than that determined using Table 10.3.2.3, except that the service life of long-life buildings shall be no less than 75 years.~~

~~c. Operating energy consumption shall be included or excluded at the discretion of the project team.~~

~~d. The LCA tool(s) or software shall include a published third-party impact indicator method.~~

~~e. The estimate of structural system material quantities shall be verified by a *design professional* or other approved source.~~

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**9.5.1.3 Reporting.** ~~The following~~ A report that includes a description of the building alternatives and their physical differences shall be prepared and shall comply with the reporting requirements stated in ASTM E2921. The name and address of the *design professional* verifying structural system material quantities shall be included. A critical review shall be performed by an external expert independent of those performing the LCA.

The report shall be submitted to the AHJ:

- ~~a. The LCA report.~~
- ~~b. The including~~ documentation of critical peer review by a third party, ~~including the~~ results from the review, and the reviewer's name and contact information.

---

*Add the following reference to Section 11:*

ASTM International  
100 Barr Harbor Dr.  
West Conshohocken, PA 19428-2959, United States  
1-610-832-9585; www.astm.org

<u>ASTM E2921 – 2016</u>	<u>Standard Practice for Minimum Criteria for Comparing Whole Building Life Cycle Assessments for Use with Building Codes and Rating Systems</u>	<u>9.5</u>
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# Public Review Draft

Proposed Addendum al to Standard 189.1-2014

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

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

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## FOREWORD

*This addendum modifies the provisions for electric vehicle charging infrastructure to include an additional option to provide electric conduit from electric service panels to parking lot spaces during new building construction. This will support the future installation of electric vehicle charging infrastructure in the most cost effective manner possible. This language does not include the installation of circuit breakers or electric vehicle charging infrastructure, but it provides for the installation of the conduit and the proper sizing of the service panel.*

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### **Addendum al to 189.1-2014**

*Revise Section 5.3.7.3(b) as follows:*

**b. Provisions for electric vehicle charging infrastructure.** The building project shall comply with one of the following:

1. Two or more electric vehicle charging systems stations shall be available to the building occupants and shall be located not more than 1/4 mile (400 m) from the building project.
2. Electrical raceways shall be installed and extend from one or more of the building's electrical power distribution panels to the number of parking spaces specified in Table 5.3.7.3, to facilitate the future installation of vehicle charging stations. Electrical power distribution panels serving such raceways shall be sized to supply the future charging stations based on a design load of no

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less than 40 amperes per required parking space at a supply voltage of no less than 208/240 VAC.

**Table 5.3.7.3**

<u>Total number of actual parking spaces</u>	<u>Number of required spaces</u>
<u>0-9</u>	<u>0</u>
<u>10-25</u>	<u>1</u>
<u>26-50</u>	<u>2</u>
<u>51-75</u>	<u>4</u>
<u>76-100</u>	<u>5</u>
<u>101-150</u>	<u>7</u>
<u>151-200</u>	<u>10</u>
<u>201 and over</u>	<u>5% of total</u>

# Public Review Draft

Proposed Addendum am to Standard 189.1-2014

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

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## FOREWORD

*This addendum modifies the roof heat island mitigation section that was changed via addendum 'i'. The only change is to adjust the steep-slope roof SRI from 15 to 25, which matches the IgCC and is slightly less than the LEED V4 SRI of 32.*

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

### Addendum am to 189.1-2014

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*Revise Section 5.3.5.3 as follows:*

**5.3.5.3 Roofs.** This section applies to the building and covered parking *roof* surfaces for *building projects* in *Climate Zones* 1, 2, and 3. A minimum of 75% of the *roof* surface shall be covered with products that

- a. have a minimum three-year-aged *SRI* of 64 for a low-sloped *roof* in accordance with Section 5.3.5.4. A low-sloped *roof* has a slope of less than or equal to 2:12.
- b. have a minimum three-year-aged *SRI* of ~~15~~ 25 for a steep-sloped *roof* in accordance with Section 5.3.5.4. A steep-sloped *roof* has a slope of more than 2:12.

The area occupied by one or more of the following shall be excluded from the calculation to determine the roof surface area required to comply with this section:

1. *Roof* penetrations and associated equipment.
2. *On-site renewable energy systems*, including photovoltaics, solar thermal energy collectors and required access around the panels or collectors.
3. Portions of the *roof* used to capture heat for building energy technologies.
4. *Roof* decks and rooftop walkways.
5. Vegetated terrace and roofing systems complying with Section 5.3.5.5.

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### **Exceptions to 5.3.5.3:**

1. *Building projects* where an annual energy analysis simulation demonstrates that the total annual building energy cost and total annual  $CO_2e$ , as calculated in accordance with Sections 7.5.2 and 7.5.3, are both a minimum of 2% less for the proposed *roof* than for a *roof* material complying with the SRI requirements of Section 5.3.5.3(a).
2. *Roofs* used to shade or cover parking and *roofs* over *semiheated spaces*, provided that they have a minimum initial *SRI* of 29. A default *SRI* value of 35 for new concrete without added color pigment is allowed to be used instead of measurements.



BSR/ASHRAE/ASHE Standard 189.3P

**Public Review Draft**

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

**Fourth Public Review (October 2016)**  
**(Draft Shows Proposed Independent Substantive  
Changes to Previous Public Review Draft)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at [www.ashrae.org/standards-research--technology/public-review-drafts](http://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](http://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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BSR/ASHRAE/ASHE Standard 189.3P, *Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities*

Fourth Independent Substantive Change Public Review Draft

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

## FOREWORD

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

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

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

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

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

BSR/ASHRAE/ASHE Standard 189.3P, *Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities*

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*ically (Informative Appendices I, J and K) so they do not conflict with the appendices currently published in ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 (Appendices A through H).*

*A viewable version of ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 is available at [http://www.techstreet.com/ashrae/ashrae\\_standards.html](http://www.techstreet.com/ashrae/ashrae_standards.html).]*

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

**Revise Section 2.1 as shown below.**

**2.1** This standard applies to patient care areas and related support areas within health care facilities, including hospitals, nursing facilities, ~~and~~ outpatient facilities, and their site.

**Revise Section 4 as shown below. The remainder of Section 4 is unchanged.**

**4.1 General.** *Building projects* shall comply with Sections ~~5~~ through 11 of ANSI/ASHRAE/USGBC/IES Standard 189.1 as modified in this standard through deletions of, exceptions, or revisions to the provisions in ANSI/ASHRAE/USGBC/IES Standard 189.1 and/or the inclusion in this standard of provisions not included in ANSI/ASHRAE/USGBC/IES Standard 189.1. The addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1 referenced in Section 12 shall be applicable.

## **4.2 Application to Buildings**

**4.2.1 New Buildings.** New buildings shall comply with the provisions of Sections ~~5~~ through 12 as applicable.

**4.2.2 Additions to Existing Buildings.** Additions to existing buildings shall comply with the provisions of Sections ~~5~~ through 11 as applicable.

**4.2.3 Alterations of Existing Buildings.** Alterations of existing buildings shall comply with the provisions of Sections ~~5~~ through 11 as applicable to the scope of work associated with the alteration. Nothing in this standard shall require that any portion of an existing building not associated with the alteration be brought into compliance with this standard. Nothing in this standard shall require compliance with a provision of this standard if such compliance will result in the increase of energy or water consumption of the building or production of increased emissions or effluent of waste.

**Exception to 4.2.3:** Any building or portion thereof that has been specifically designated as historically significant by the adopting authority or is listed in The National Register of Historic Places or has been determined to be eligible for listing by the US Secretary of the Interior.

**Add Section 5 as shown below.**

## **5. SITE SUSTAINABILITY**

**5.1 Scope.** This section specifies requirements associated with the building *site* on which health care facilities are placed.



BSR/ASHRAE/ASHE Standard 189.3P, *Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities*

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**5.2 Compliance.** The *site* shall comply with the provisions of Section 5 of ANSI/ASHRAE/USGBC/IES Standard 189.1.

**Revise Section 6 as shown below. The remainder of Section 6 is unchanged.**

## 6. WATER USE EFFICIENCY

**6.1 Scope.** This section specifies requirements for *potable* and *non-potable water* use efficiency for both the *site* and the building, and water metering.

**6.2 Compliance.** The water systems shall comply with the provisions of Section 6 of AN-SI/ASHRAE/USGBC/IES Standard 189.1 ~~except as specifically deleted, excepted, modified or enhanced in accordance with 6.3 through 6.4.~~ *Site water use and b*Building water use are not required to use the same option, i.e. Prescriptive or Performance, for demonstrating compliance.

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

[...]

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

[...]

**7.4.3.10 Automatic Control of HVAC, ~~and~~ Lights, ~~and~~ Televisions in all Healthcare Exam Rooms and Hospital Patient Rooms.** In all healthcare buildings with more than 6 exam rooms, *automatic controls* for the lighting, ~~television~~, and HVAC equipment serving each exam room shall be configured to meet the provisions of Sections 7.4.3.10.1 through 7.4.3.10.4. In hospitals with more than 10 patient rooms, *automatic controls* for the lighting, ~~television~~, and HVAC equipment serving each patient room shall be configured to meet the provisions of Sections 7.4.3.10.1 through 7.4.3.10.4.

**7.4.3.10.1 Lighting Control.** Rooms shall be provided with automatic controls with override. Automatic controls shall configured to automatically shut off power for interior lighting within 30 minutes of after all staff or patients exiting the room. activities within the room are complete.

**7.4.3.10.2 Television Control.** ~~Rooms shall be provided with automatic controls configured to automatically shut off power to or place in sleep mode or standby power mode all entertainment monitors (“televisions”) within 30 minutes of all patients being discharged from the room.~~

**7.4.3.10.3 HVAC Setpoint Control.** Provide automatic controls configured to reset space temperature setpoint during unoccupied periods. Provide local override system to allow for unscheduled procedures. The offset above and below occupied space temperature setpoint shall be as follows:

1. Scheduled periods of vacancy greater than two hours shall reset cooling and heating temperature setpoints by at least 5°F (2.8°C), 10°F (5.6°C).
2. Periods of vacancy detected by a local occupant sensor or for scheduled periods of vacancy less than two hours shall reset cooling and heating temperature setpoints by 3°F (1.7°C).

[...]

BSR/ASHRAE/ASHE Standard 189.3P, *Standard for the Design, Construction and Operation of Sustainable High-Performance Health Care Facilities*

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**7.4.3.11 Automatic Control of HVAC, ~~and Lights, and Televisions~~ in Operating Rooms.** In all healthcare buildings with more than 2 operating rooms, *automatic controls* for the lighting, ~~television~~, and HVAC equipment serving each operating room shall be configured to meet the provisions of Sections 7.4.3.11.1 through 7.4.3.11.4. [...]

~~**7.4.3.11.2 Television Control.** Rooms shall be provided with automatic controls configured to automatically shut off power to or place in sleep mode or standby power mode all entertainment monitors (“televisions”) within 30 minutes after all staff activities within the room are complete.~~

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

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

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

**7.5.3 Annual Carbon Dioxide Equivalent (CO<sub>2</sub>e).** For a new *building project*, demonstrate that the annual CO<sub>2</sub>e is less than or equal to the annual CO<sub>2</sub>e of the baseline building performance rating. ~~Comparisons shall be made using the baseline building design as calculated in accordance with 7.5.2. To determine the CO<sub>2</sub>e value for each energy source supplied to the *building project*, multiply the energy consumption by the emissions factor. The *proposed design* shall have an annual CO<sub>2</sub>e equal to or less than the annual CO<sub>2</sub>e of the *baseline building design* 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. To determine the annual CO<sub>2</sub>e for each energy source in the *baseline building design* and *proposed design*, the energy consumption shall be multiplied by the CO<sub>2</sub>e emission factors from ANSI/ASHRAE/USGBC/IES Standard 189.1, Table 7.5.2B.~~

*Revise Section 9.3.1.1 as shown below.*

**9.3.1.1 Diversion.** A minimum of 75% of nonhazardous construction and demolition waste material generated prior to the issuance of the final certificate of occupancy as shall be diverted from disposal in landfills and incinerators by reuse, recycling, repurposing, and/or composting. Land-clearing debris and Construction & Demolition (C&D) materials used in alternative daily cover shall not count toward the 75% diversion requirement.

*Revise Section 10.3.2.1.4.5 as shown below.*

**10.3.2.1.4.5 Building Green Cleaning Plan.** A Green Cleaning Plan shall be developed for the *building project* in compliance with Green Seal Standard, GS-42, Section 2.2 and include the use of bathroom cleaners, degreasers, general purpose cleaners, and glass cleaners that comply with the appropriate standards set forth by EcoLogo, Green Seal, or the United States Environmental Protection Agency’s Design for the Environment Safer Choice Program (DFE), specifically Green Seal 34, Green Seal 37, Green Seal 40, EcoLogo CCD-148, UL EcoLogo 2759, UL EcoLogo 2777, UL EcoLogo 2792, UL EcoLogo 2794, UL EcoLogo 2795, as applicable.

**Exception:** *Dwelling units of a building project.*

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#### H.1.6.2 Procedure

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f) The constituents specified in Annex H, section H.1.3 b) shall be added simultaneously to the test water. Add an appropriate amount of the appropriate challenge organism to obtain a minimum of  $1.0 \times 10^6$  organisms per 100 mL of test water (~~not to exceed  $1.0 \times 10^7$  per 100 mL per each challenge organism~~).

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## **5.2 Polyethylene fittings**

Butt heat fusion polyethylene fittings shall comply with ASTM D3261.

Socket-type polyethylene fittings shall comply with ASTM D2683.

Electrofusion type polyethylene fittings shall comply with ASTM F1055.

U-bends containing assembled joints shall comply with the sustained pressure at elevated temperature requirements of 7.2.3 of ASTM D3261 ~~at a temperature of 176 °F (80 °C) for 170 h as identified in Option 3 of Table 8 of ASTM D3261.~~ Each test specimen shall contain assembled joints consistent with how the product is sold.

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## NSF/IPEC/ANSI Standard for Pharmaceutical Excipients –

# Good Manufacturing Practices (GMP) for Pharmaceutical Excipients

### 3 Definitions

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**3.X sanitary:** Cleanliness of facility and equipment and maintenance of hygienic conditions which minimize the risk of microbial contamination hazardous to health.

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## NSF/IPEC/ANSI Standard for Pharmaceutical Excipients –

# Good Manufacturing Practices (GMP) for Pharmaceutical Excipients

### **3 Definitions**

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**3.X data integrity:** The extent to which all data are complete, consistent, reliable and accurate throughout the data lifecycle.

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## NSF/IPEC/ANSI Standard for Pharmaceutical Excipients –

# Good Manufacturing Practices (GMP) for Pharmaceutical Excipients

### 3 Definitions

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**3.X backup:** A copy of one or more electronic files created as an alternative in case the original data or system are lost or become unusable and which is maintained securely throughout the record retention period.

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**Working Committee Comment Document (WCCD)**  
**2017 ANSI/RVIA LV**  
**Canvass Working Committee Action**

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**LV-1C, Log#1, (2-3 Auxiliary Battery Installation)**

**SUBMITTER:** Dale Jordal, Winnebago Industries

**COMMENT ON WCD PROPOSAL:** LV-1, Log#1

**RECOMMENDATION:** Adding the words "...hood or housing" as follows does not add anything to this requirement and conflicts with what has been acceptable.

Batteries shall not be installed in a compartment, hood or housing containing spark or flame producing equipment...

**SUBSTANTIATION:** Hood – batteries have been installed under car “hoods” for years, and the committee has always deemed this as an acceptable installation that does not require venting. Housing – The definition of housing “something that covers or protects: as a: case or enclosure.” This is already covered in the standard by the word “compartment” adding housing does not seem to add anything to the standard other than an extra word.

**WORKING COMMITTEE ACTION:** [Reject](#)

**WORKING COMMITTEE COMMENT:** [Agrees with the original substantiation for this revision that battery hoods and housings should not contain spark producing items. Hydrogen gas is lighter than air and could accumulate at the top of these areas. This terminology is consistent with that used in NFPA 1192 5.2.9 to address hoods and housings containing propane containers and not permit spark producers in these areas.](#)

**LV-2C, Log#2, (2-3 Auxiliary Battery Installation)**

**SUBMITTER:** Doug Pettifor, Arterra Distribution

**COMMENT ON WCD PROPOSAL:** LV-2, Log#2

**RECOMMENDATION:** **Revise to read as follows:**

Storage batteries shall be securely attached to the vehicle and protected against physical damage. If vented batteries (includes lead acid and sealed lead acid) or vented battery compartments are provided, the battery compartments ~~if provided~~ shall be vapor resistant to the interior and ventilated directly to the exterior of the vehicle. Battery compartments designed for vented batteries shall be ventilated with openings having a minimum area of 1.7 square inches (1097 mm<sup>2</sup>) within 2 inches (50.8 mm) of both the top and bottom. Battery compartments designed for vented batteries may be used with vented or non-vented batteries (including lithium) if the compartment is located where it will not impede the safe exit from the vehicle for the occupants should a failure occur in the non-vented battery. Vented ~~B~~-batteries shall not be installed in a compartment containing spark or flame producing equipment, except that they shall be permitted to be installed in the engine compartment, or generator compartment if the only charging source is from the engine generator. If provided, battery compartments designed for non-vented batteries only (including lithium) shall be designed such that ~~If non-vented batteries (including lithium) are provided~~ the mount or compartment shall be incapable of accepting a vented battery, or the system shall be designed electrically to prevent the operation of a vented battery. Non-vented battery installations shall contain a safety protection system.



Compartments identified or outfitted for the purpose of housing batteries, such as by the presence of battery cables, shall meet or have provisions for meeting the above requirements.

**SUBSTANTIATION:** The current code language does not consider new battery technologies such as lithium batteries that do not vent. The new language would allow these non-vented type batteries to be installed without meeting the same requirements as vented batteries as long as the installation is designed to prevent the use of a vented battery. This proposal also includes language to ensure the safety of these non-vented battery installations. The proposal from David Bailey, as it is currently worded, would appear to prohibit installation of a non-venting battery (including lithium) in a vented battery (lead acid and sealed lead acid) compartment.

**WORKING COMMITTEE ACTION:** [Accept](#)

**WORKING COMMITTEE COMMENT:** [These revisions provide additional needed safety criteria and also improves the clarity of these section.](#)

## BSR/UL 746B, Standard for Polymeric Materials – Long Term Property Evaluations

### PROPOSAL

#### 2. Assignment of a Generic Thermal Index Temperature of 85°C to PPA in Table 7.1

Table 7.1

Relative thermal indices based upon past field-test performance and chemical structure<sup>a</sup>

Material	ISO designation	Generic thermal index, °C
Polyamide <sup>b</sup>	PA	65
Polycarbonate <sup>b</sup>	PC	80
Polycarbonate/Siloxane Copolymer <sup>k</sup>	PC/Siloxane	80
Polyethylene terephthalate - molding resin <sup>b</sup>	PET	75
film (0.25 mm maximum)	PET	105
Polybutylene (polytetramethylene) terephthalate <sup>b</sup>	PBT	75
Polyphenylene Ether (including PS, PA, PP, or TPE modified) <sup>j</sup>	PPE	65
Polypropylene <sup>b,h</sup>	PP	65
Polyetherimide <sup>g</sup>	PEI	105
Polyethersulfone	PES	105
Polyether Ether Ketone	PEEK	130
Polyphthalamide Polyphthalamide <sup>m</sup>	PPA	<del>95</del> 85
Polyphenylene Sulfide <sup>b</sup>	PPS	130
Polyimide film (0.25 mm maximum)	PI	130
Molded phenolic <sup>c</sup>	PF	150
Molded melamine <sup>c,d</sup> and Molded melamine/phenolic <sup>c,d</sup> - specific gravity < 1.55		130
specific gravity ≥ 1.55		150
Polytetrafluoroethylene	PTFE	180
Polychlorotrifluoroethylene	PCTFE	150
Fluorinated ethylene propylene	FEP	150
Poly(tetrafluoroethylene, hexafluoropropylene, vinylidene fluoride) <sup>l</sup>	TFE/HFP/VDF	130

Ethylene/Tetrafluoroethylene	E/TFE	105
Urea Formaldehyde <sup>c</sup>	UF	100
Acrylonitrile - butadiene - styrene <sup>b</sup>	ABS	60
Silicone - molding resin <sup>c,d</sup>		150
Silicone rubber - molding resin	SIR	150
two-component, addition-cure, vinyl, platinum catalyzed		150
room-temperature vulcanizing, condensation or heat-cured paste	RTV	105
Epoxy - molding resin <sup>c,d</sup>		130
powder coating materials		105
casting or potting resin <sup>b,i</sup>	EP	90
Molded diallyl phthalate <sup>c,d</sup>		130
Molded unsaturated polyester <sup>c,d</sup> alkyd (AMC), bulk (BMC), dough (DMC), sheet (SMC), thick (TMC), and pultrusion molding compounds	UP	105 <sup>e</sup> (electrical) 130 (mechanical)
Liquid crystalline thermotropic aromatic polyester <sup>f</sup>	LCP	130
Ligno-cellulose laminate		60
Vulcanized fiber		90
Cold-molded phenolic, melamine or melamine-phenolic compounds <sup>d</sup> specific gravity < 1.55 specific gravity ≥ 1.55		130 150
Cold-molded inorganic (hydraulic-cement, etc.) compounds		200
Integrated mica, resin-bonded - epoxy, alkyd or polyester binder phenolic binder silicone binder		130 150 200

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<sup>a</sup> Generic thermal index is for homopolymer and for the compounding of the same type or relative resins, either grafted or ungrafted only, unless a specific copolymer or blend is indicated. In the case of alloys, the lowest generic index of any component shall be assigned to the composite. The term "grafted" means all of the monomer reacts to form a polymer, and the polymer chain forms a chemical bond. The term "ungrafted" means that the two types of polymer chains entwine with each other by mechanical blending to form a chemical composite.

<sup>b</sup> Includes glass-fiber reinforcement and/or talc, asbestos, mineral, calcium carbonate, compounding of the same type of resins, either grafted or ungrafted and other inorganic fillers.

<sup>c</sup> Includes only compounds molded by high-temperature and high-pressure processes such as injection, compression, pultrusion, and transfer molding and match-metal die molding; excludes compounds molded by open-mold or low-pressure molding processes such as hand lay-up spray-up, contact bag, filament winding, rotational molding, and powder coating (fluidized bed, electrostatic spray, hot dip, flow coating).

<sup>d</sup> Includes materials having filler systems of fibrous (other than synthetic organic) types but excludes fiber reinforcement systems using resins that are applied in liquid form. Synthetic organic fillers are to be considered acceptable at temperatures not greater than 105°C.

<sup>e</sup> Except 130°C generic thermal index if the material retains at least 50% of its unaged dielectric strength after a 504-hour exposure at 180°C in an air circulating oven. Specimens are to be tested in a dry, as molded, condition. Specimens that are removed from the oven are to be cooled over desiccant for at least 2 hours prior to testing.

<sup>f</sup> Includes only wholly aromatic liquid crystalline thermotropic polyesters; wholly aromatic polyester/amides and wholly aromatic polyester/ethers; excluding amorphous, lyotropic and liquid crystalline aliphatic-aromatic polyesters which are aliphatic in the backbone chain or main chain, and substituted aromatic polyesters (except for methyl or aromatic).

<sup>g</sup> Includes only polyetherimide molding resin.

<sup>h</sup> Includes polypropylene copolymers containing not more than 25% ethylene comonomer, by weight.

<sup>i</sup> Multi-part liquid epoxy materials incorporating acid anhydride or aromatic amine curing agents receive a 130°C generic thermal index.

<sup>j</sup> Includes only those polyphenylene ether materials (polystyrene, polyamide, polypropylene, or thermoplastic elastomer modified) in which the PPE component is not less than 30% of the total composition by weight and that have a Heat Deflection Temperature of at least 70°C at a load (fiber stress) of 1.80 MPa (264 psi).

<sup>k</sup> PC/Siloxane Copolymers in which siloxane comprises less than, or equal to, 5% of the total material composition by weight.

<sup>l</sup> Must have a minimum peak melting point of 160 °C, with less than 25% VDF monomer by weight and the remainder being fully fluorinated monomers.

<sup>m</sup> PPA definition according to ASTM D5336: polyphthalamide, PPA, n—a polyamide in which residues of terephthalic acid or isophthalic acid or a combination of the two comprise at least 55 molar percentage of the dicarboxylic acid portion of the repeating structural units in the polymer chain.

Additionally, this definition includes only those polyphthalamide materials that have a Glass Transition Temperature (T<sub>g</sub>) of at least 85°C, when determined through second-heat DSC testing in accordance with the Differential Scanning Calorimetry, Section 47 of the Standard for Polymeric Materials - Short Term Property Evaluations, UL 746A.

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### 3. Fixed Temperature Evaluation for Exceptionally Durable Materials Specified in Paragraph 13.4, new Table 13.2, and new Paragraph 13.4.1

#### PROPOSAL

13.4 If degradation cannot be accelerated because of transition points or threshold temperatures, and in consideration of the need for a spread between aging temperatures, it might be necessary to extend the low-temperature test (t<sub>4</sub> in Table 13.1) to well beyond the usual 5000-hour minimum value to obtain significant data. However, if the level of the evaluated property is still above the end point criteria within at 10,000-hours of aging this is considered sufficient evidence for its thermal performance. One of the options shown in 13.2 may be followed for analysis and evaluation.

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**BSR/UL 1026, Standard for Safety for Household Electric Cooking and Food Serving Appliances****PROPOSALS**

## Smart Enabled Toaster Ovens

SA3.3 With respect to SA3.2(c), a remote activation is not permitted for operating modes considered "attended", where the user is intended to be present with the equipment during the entire cooking function, such as a toaster, grill, broiler, table stove, etc. Remote operation is acceptable for other operations, considered "unattended", such as a slow cooker, baking, convection, etc., under all of the following conditions:

a) The user can remotely initiate and set up for an unattended cooking mode. The "Start" button on the physical appliance must be pressed within 5 minutes of programming in order to initiate the cooking mode, otherwise it shall be cancelled. Remote programming may include remote activation for heating function modes and remote cancellation times only.

*Exception: The "Start" button is not required to be pressed within 5 minutes of programming of an appliance for heating liquid based food product or a toaster oven that does not have if outer enclosure or exterior cooking surface temperature does not exceed exceeding 65°C (117°F) rise when tested in accordance with the Normal Temperature Test, Section 41.*

b) For appliances with a timer, the duration of operation shall be set before the appliance can be started, unless the appliance switches off automatically at the end of a cycle or it can operate continuously without giving rise to a hazard.

c) Remote cancellation of any unattended cooking mode by the user is allowed.

d) Remote uploading of proprietary cooking algorithms by the user is allowed. However, reprogramming of any protective function is prohibited.

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## BSR/UL 1703, Standard for Safety for Flat-Plate Photovoltaic Modules and Panels

### 1. Clarification for the Use of Coatings at the Interconnection of a Module and a Junction Box.

12.1 The spacings between uninsulated live parts not of the same potential and between a live part and an accessible metal part, shall not be less than the values specified in Tables 12.1 and 12.2.

*Exception No. 1: These spacing requirements do not apply to the inherent spacings of a component; such spacings shall comply with the requirements for the component in question.*

*Exception No. 2: These distances do not apply to solid insulation materials when used as cemented joints at the perimeter of a module. Those insulation properties can be assessed through the tests outlined in the General Section 18, and Cemented Joints, Section 42A.*

*Exception No. 3: These distances do not apply to insulation materials when used as coatings at the interconnection of a module and a junction box. A coating intended to be used on a module to provide a Pollution Degree 1 shall comply with the Standard for Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840, Section 15, Printed Wiring Board Coating Performance Test.*

NOTE 1: Minimum through distance for solid insulation at the perimeter of a module must be greater than or equal to the creepage distances defined in the Standard for Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840, Table 9.1, using Pollution Degree 1.

NOTE 2: Minimum through distance for coatings at the interconnection of a module and a junction box must be greater than or equal to the creepage distances defined in the Standard for Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment, UL 840, Table 9.1, using Pollution Degree 1.

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## BSR/UL 2250, Standard for Safety for Instrumentation Tray Cable

### PROPOSALS

Metal Covering, Proposed Changes to 17.1.1(e), 17.3.1, and New 17.3.3

#### 17 Metal Covering

##### 17.1 General

17.1.1 Interlocked metal armor, or a continuous metal sheath is acceptable over the jacket on any cable. See tests in Crushing Test for Cable Marked for Direct Burial, Section 30, Tension Test of Interlocked Steel or Aluminum Armor, Section 37, and Flexibility Test for Cable Having Interlocked Armor or a Smooth or Corrugated Metal Sheath, Section 38. Any metal covering that is provided shall be as follows:

- a) A smooth metal sheath shall comply with 17.1.2 and 17.2.1 - 17.2.3.
- b) A welded and corrugated metal sheath shall comply with 17.1.2, 17.1.3, 17.3.1, and 17.3.2.
- c) An extruded and corrugated metal sheath shall comply with 17.1.2, 17.1.3, 17.4.1, and 17.4.2.
- d) Interlocked metal armor shall comply with 17.1.2 and 17.5.1 - 17.5.9.

e) Wire armor or a metal braid applied over a jacket that complies with Cable Jacket, Section 16.

##### 17.3 Welded and corrugated metal sheath

17.3.1 A welded and corrugated metal sheath shall be of an aluminum-base alloy having a copper content of 0.40 percent or less, a stainless steel alloy having a chromium content of not less than 16 percent, a copper alloy or a bronze alloy. The sheath shall be tightly formed around the underlying cable and shall be welded and corrugated. See 17.2.3.

17.3.3 In the case of stainless steel sheathed cables, any outer jacket compound and any cable jacket, binder, separator or insulation material coming in direct contact with the stainless steel armor shall not contain chlorine.