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

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

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

* Standard for consumer products
Comment Deadline: October 23, 2016

**NSF (NSF International)**

**Revision**

BSR/NSF 4-201x (I24r4), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2014)

Equipment covered by this Standard includes, but is not limited to, ranges, ovens, fat/oil fryers, fat/oil filters, griddles, tilting griddle skillets, broilers, steam and pressure cookers, kettles, rotisseries, toasters, coffee makers and other hot beverage makers, component water heating equipment, proofing boxes and cabinets, hot-food holding equipment, rethermalization equipment, and hot-food transport cabinets.

Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Allan Rose, (734) 827-3817, arose@nsf.org

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

**Revision**


The following changes in requirements to the Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products, UL 8750, are being proposed: (1) Revise potting compound requirements.

Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Heather Sakellariou, (847) 664-2346, Heather.Sakellariou@ul.com

Comment Deadline: November 7, 2016

**AAMI (Association for the Advancement of Medical Instrumentation)**

**Supplement**


This amendment applies to the standard for the basic safety and essential performance of baby incubators. This standard can also be applied to baby incubators used for compensation or alleviation of disease, injury, or disability. This standard does not apply to heating devices intended for physiotherapy, radiant warmers, and transport incubators.

Single copy price: Free
Send comments (with copy to psa@ansi.org) to: Hae Choe; hchoe@aami.org

BSR/AAMI/IEC 60601-2-20/A1-201x, Medical electrical equipment - Part 2 -20: Particular requirements for the basic safety and essential performance of transport infant incubators, Amendment 1 (supplement to ANSI/AAMI/IEC 60601-2-20-2009 (R2014))

This amendment is for the standard which applies to the basic safety and essential performance of transport incubators. This standard does not apply to heating devices intended for physiotherapy, baby incubators, radiant warmers.

Single copy price: Free
Send comments (with copy to psa@ansi.org) to: Hae Choe; hchoe@aami.org

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

**Revision**

BSR/UL 1123-201X, Standard for Marine Buoyant Devices (revision of ANSI/UL 1123-2011)

This recirculation proposal provides revisions to the UL 1123 proposal dated 7-1-16.

Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Nicolette Allen, (919) 549-0973, Nicolette.Allen@ul.com

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

**Revision**

BSR/UL 1453-201x, Standard for Safety for Electric Booster and Commercial Storage Tank Water Heaters (revision of ANSI/UL 1453-2016)

This proposal covers the following topic: (1) Revision to polymeric material and thermal insulation requirements.

Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Marcia Kawate, (510) 319-4259, Marcia.M.Kawate@ul.com

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

**Revision**

BSR/UL 1558-201x, Standard for Safety for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear (revision of ANSI/UL 1558-2016)

This proposal involves increasing the voltage ratings of the products covered by UL 1558 to include 1000 V.

Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Derrick Martin, (510) 319-4271, Derrick.L.Martin@ul.com
AAMI (Association for the Advancement of Medical Instrumentation)

**Supplement**

BSR/AAMI/IEC 60601-2-21/A1-201x, Medical electrical equipment - Part 2
-21: Particular requirements for the basic safety and essential performance of infant radiant warmers, Amendment 1 (supplement to ANSI/AAMI/IEC 60601-2-21-2009 (R2014))

This amendment is for the standard which harmonizes with the third edition of IEC 60601-1 and specifies the safety and performance requirements for infant radiant warmers.

Single copy price: Free


Send comments (with copy to psa@ansi.org) to: Hae Choe; hchoe@aami.org

AAMI (Association for the Advancement of Medical Instrumentation)

**Supplement**

BSR/AAMI/IEC 60601-2-50/A1-201x, Medical electrical equipment - Part 2
-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment, Amendment 1 (supplement to ANSI/AAMI/IEC 60601-2-50-2009 (R2014))

This amendment is for the standard that specifies requirements for infant phototherapy equipment and can also be applied to infant phototherapy equipment used for compensation or alleviation of disease, injury, or disability.

Single copy price: Free


Send comments (with copy to psa@ansi.org) to: Hae Choe; hchoe@aami.org

AAMI (Association for the Advancement of Medical Instrumentation)

**Supplement**

BSR/AAMI/IEC 80601-2-35/A1-201x, Medical electrical equipment - Part 2
-35: Particular requirements for the basic safety and essential performance of heating devices using blankets, pads and mattresses intended for heating in medical use, Amendment 1 (supplement to ANSI/AAMI/IEC 80601-2-35-2011)

This is an amendment to a standard that specifies requirements for blankets, pads, and mattresses, including air-flotation mattresses and forced-air systems.

Single copy price: Free


Send comments (with copy to psa@ansi.org) to: Hae Choe; hchoe@aami.org

AARST (American Association of Radon Scientists and Technologists)

**Revision**

BSR/AARST MAMF-201x, Protocol for Conducting Measurements of Radon and Radon Decay Product in Multifamily Buildings (revision of ANSI/AARST MAMF-2012)

This standard of practice contains procedures, minimum requirements and general guidance for measurement of radon in buildings having more than one attached dwelling or other occupied unit that were under the same ownership or designated maintenance or management authority for the purpose of determining if radon mitigation is necessary in order to protect current or future occupants. These protocols address testing in multifamily structures that can include those with shared ownership or maintenance such as co-op units, townhouses, condominiums or vacation timeshare properties and structures, or a portion thereof that are used, for example, as apartment houses, dormitories, military congregate residences, fraternities and sororities, nontransient boarding houses, hotels, convents, monasteries, motels and live/work units. These protocols also address testing a single dwelling within a multifamily building.

Single copy price: TBD

Obtain an electronic copy from: www.radonstandards.us

Order from: Gary Hodgden, (202) 830-1110, standards@aarst.org

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

APA (APA - The Engineered Wood Association)

**Revision**

BSR/APA PRR 410-201x, Standard for Performance Rated Engineered Wood Rim Boards (revision of ANSI/APA PRR-410-2011)

This standard provides dimensions and tolerances, performance requirements, test methods, quality assurance, and trademarking for engineered wood rim boards.

Single copy price: Free

Obtain an electronic copy from: borjen.yeh@apawood.org

Order from: Borjen Yeh, (253) 620-7467, borjen.yeh@apawood.org

Send comments (with copy to psa@ansi.org) to: Borjen Yeh, (253) 620-7467, borjen.yeh@apawood.org

ASSE (ASC Z359) (American Society of Safety Engineers)

**Revision**

BSR/ASSE Z359.18-201x, Safety Requirements for Anchorage Connectors for Active Fall Protection Systems (new standard)

This standard specifies requirements for the performance, design, testing, marking, and instructions for use of anchorage connectors in travel restraint, fall arrest, rescue, positioning, rope access, and suspended component/tie-back line systems only.

Single copy price: $100.00

Obtain an electronic copy from: TFisher@ASSE.Org

Order from: Tim Fisher, (847) 768-3411, TFisher@ASSE.Org

Send comments (with copy to psa@ansi.org) to: Same
AWS (American Welding Society)

New Standard

BSR/AWS J1.2MJ1.2-201X, Guide to Installation and Maintenance of Resistance Welding Machines (new standard)

While resistance welding machines vary considerably in size and complexity, there are basic principles applicable to the installation, operation, maintenance, and troubleshooting. This document is intended to provide basic information to the users of the resistance welding equipment to supplement the instructions and recommendations of the equipment manufacturer. Where there is conflict, the equipment manufacturers' document shall take precedence.

Single copy price: $32.00
Obtain an electronic copy from: ababinski@aws.org
Order from: Annik Babinski, (800) 443-9353, ababinski@aws.org
Send comments (with copy to psa@ansi.org) to: adavis@aws.org

CSA (CSA Group)

New National Adoption

BSR/CSA FC 5.1-201x, Hydrogen generators using fuel processing technologies, Part 1: Safety (same as ISO 16110-1) (identical national adoption of ISO 16110-1)

This Standard applies to the safety of hydrogen generators using fuel-processing technologies intended for installation and use in accordance with the NFPA 2, Hydrogen technologies code.

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

AWWA (American Water Works Association)

Revision

BSR/AWWA C222-201x, Polyurethane Coatings for Steel Water Pipe and Fittings (revision, redesignation and consolidation of ANSI/AWWA C222-2008 and ANSI/AWWA C222a-2009)

This standard sets minimum requirements for shop- and field-applied polyurethane coatings and linings used in the water supply industry. Polyurethanes are used for steel water pipe, special sections, welded joints, connections, or fittings for steel water pipelines installed underground or underwater, operating under normal conditions.

Single copy price: $20.00
Obtain an electronic copy from: vdavid@awwa.org
Order from: Paul Olson, (303) 347-6178, polson@awwa.org; vdavid@awwa.org
Send comments (with copy to psa@ansi.org) to: Same

ISTA (International Safe Transit Association)

New Standard

BSR/ISTA Procedure 3E-201x, Similar Packaged-Products in Unitized Loads for Truckload Shipment (new standard)

Procedure 3E covers the testing of unitized loads, made up of either single or multiple products or packages of similar products prepared for shipment via a Full Truckload (FTL) delivery system carrier. FTL is defined as motor carrier shipment, where an entire trailer-load is filled with unitized packaged products, often of similar retail packaged products, intended for one destination.

Single copy price: Free (ISTA Members); $95.00 (Non-ISTA Members)
Obtain an electronic copy from: ehiser@ista.org
Order from: Eric Hiser, (517) 333-3437, ehiser@ista.org
Send comments (with copy to psa@ansi.org) to: Same

BICSI (Building Industry Consulting Service International)

Revision


This standard provides requirements, recommendations, and best practices for the design and implementation of information communication technology systems and their infrastructure for educational institutions and facilities.

Single copy price: Free
Obtain an electronic copy from: jsilveira@bicsi.org
Order from: Jeff Silveira, (813) 903-4712, jsilveira@bicsi.org
Send comments (with copy to psa@ansi.org) to: Jeff Silveira, (813) 903-4712, jsilveira@bicsi.org

NASBLA (National Association of State Boating Law Administrators)

New Standard

BSR/NASBLA 101-201X, Basic Boating Knowledge - Human-Propelled Boats (new standard)

This is the minimum standard that applies to all human-propelled boating courses in the United States and territories and DC. The purpose is to establish the national standard for course providers to meet the needs of recreational boaters for human-propelled boating knowledge in order to identify and reduce primary risk factors and mitigate their effects on recreational boating.

Single copy price: Free
Obtain an electronic copy from: pam@nasbla.org
Order from: Pamela Dillon, (859) 225-9487, pam@nasbla.org
Send comments (with copy to psa@ansi.org) to: Same

NECA (National Electrical Contractors Association)

Revision

BSR/NECA 121-201X, Standard for Installing Nonmetallic-Sheathed Cable (Type NM-B) and Underground Feeder and Branch-Circuit Cable (Type UF) (revision of ANSI/NECA 121-2007)

This standard describes installation procedures for nonmetallic-sheathed cable (Type NM) and underground feeder and branch-circuit cable (Type UF).

Single copy price: $40.00
Obtain an electronic copy from: neis@necanet.org
Order from: Sofia Arias, (301) 215-4549, sofia.arias@necanet.org
Send comments (with copy to psa@ansi.org) to: Same
**NEMA (ASC Z535) (National Electrical Manufacturers Association)**

**Revision**

BSR Z535.1-201x, Standard on Safety Colors (revision of ANSI Z535.1-2006 (R2011))

This standard sets forth the technical definitions, color standards, and color tolerances for safety colors.

Single copy price: $98.00
Obtain an electronic copy from: Kevin.Connelly@nema.org
Order from: Kevin.Connelly@nema.org
Send comments (with copy to psa@ansi.org) to: Same

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

**Revision**

BSR/SCTE 32-201x, Ampacity of Coaxial Telecommunications Cables (revision of ANSI/SCTE 32-2009)

This document provides the current carrying capacity or ampacity of coaxial cables used in the telecommunications industry. The method used to calculate the tabulated ampacities is a thermodynamic model of a cable installed indoors in air and considers the heat flow from the inner and outer conductor through the dielectric and jacket materials. It assumes that the conductors carrying current reach an operating temperature of 65°C based on the cables’ ability to dissipate heat.

Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (with copy to psa@ansi.org) to: standards@scte.org

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**TAPPI (Technical Association of the Pulp and Paper Industry)**

**New Standard**

BSR/TAPPI T 631 om-201x, Microbiological enumeration of process water and slush pulp (new standard)

The following procedure is recommended primarily for the microbiological examination of process water. It is also applicable to slush pulp. This method is adequate for classical, heterotrophic cell counts of unencapsulated, planktonic microorganisms. This method will not give an accurate measure of the numbers of encapsulated, slime-forming cells, or sessile microorganisms present. Because of the exacting technique required in microbiological procedures, reproducible results can be obtained only by a trained technician.

Single copy price: Free
Obtain an electronic copy from: standards@tappi.org
Order from: standards@tappi.org
Send comments (with copy to psa@ansi.org) to: Same

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**BSR/TAPPI T 211 om-201x, Ash in wood, pulp, paper and paperboard: combustion at 525 degrees C (revision of ANSI/TAPPI T 211 om-2012)**

This method for determination of ash can be applied to all types and grades of wood pulp paper, and paper products. For the determination of ash by combustion at 900°C, see TAPPI T 413, “Ash in Wood, Pulp, Paper and Paperboard: Combustion at 900°C”.

Single copy price: Free
Obtain an electronic copy from: standards@tappi.org
Order from: standards@tappi.org
Send comments (with copy to psa@ansi.org) to: Same

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

**Revision**


(1) Proposed 7th edition of UL 1446.

Single copy price: Contact comm2000 for pricing and delivery options
Order from: http://www.comm-2000.com
Send comments (with copy to psa@ansi.org) to: http://www.comm-2000.com
Standards Action - September 23, 2016 - Page 6 of 46 Pages

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 1637-201x, Standard for Safety for Home Health Care Signaling Equipment (revision of ANSI/UL 1637-2015)

These requirements cover individual units that comprise a home health care signaling equipment system intended for use in indoor residential locations, and a complete system in which a signal-initiating device may be connected to receiving equipment at a residence or to continuously monitored receiving equipment at a central supervising station. Components may include signal-initiating devices; control units; transmitters; digital communicators; and receiving, processing, and displaying equipment. A product that contains features that are new or different shall be evaluated using the appropriate component and end-product requirements to maintain the acceptable level of safety.

Single copy price: Free
Order from: comm2000
Send comments (with copy to psa@ansi.org) to: Anne Marie Jacobs, (919) 549-0954, annemarie.jacobs@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 2196-201x, Standard for Safety for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control, and Data Cables (revision of ANSI/UL 2196-2006 (R2012))

This covers the proposed second edition of the Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control, and Data Cables, UL 2196.

Single copy price: Contact comm2000 for pricing and delivery options
Order from: comm2000
Send comments (with copy to psa@ansi.org) to: Megan Sepper, (847) 664-3411, Megan.M.Sepper@ul.com

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME B31J-201x, Standard Test Method for Determining Stress Intensification Factors (i-Factors) for Metallic Piping Components (revision of ANSI/ASME B31J-2008 (R2013))

This standard provides a standardized method to develop the stress intensification factors (i-factors), flexibility factors (k-factors), and sustained stress factors used in B31 piping analysis of metallic piping components. Stress intensification and flexibility factor equations for common, metallic piping components are provided. The sustained-load test procedure can be used to determine more applicable nominal stress multipliers for use in sustained and occasional B31 analyses. The procedures for conducting burst tests of metallic piping components are included in other ASME documents and are considered outside the scope of this standard.

Single copy price: Free
Obtain an electronic copy from: http://cstools.asme.org/publicreview
Order from: Mayra Santiago, ASME; ansibox@asme.org
Send comments (with copy to psa@ansi.org) to: Richard Lucas, (212) 591-7541, lucasr@asme.org

Technical Reports Registered with ANSI

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

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

AAMI (Association for the Advancement of Medical Instrumentation)

AAMI/TIR35 (Ed.2)-2016, Sterilization of health care products - Radiation sterilization - Product adoption and alternative sampling plans for verification dose experiments and sterilization dose audits (TECHNICAL REPORT) (technical report)

Describes approaches to the selection and auditing of a sterilization dose that may reduce the number of product items required while maintaining assurance of attaining the desired sterility assurance level (SAL). This approach addresses sampling plans for verification dose experiments and sterilization dose audits. Additionally, guidance for adopting a product into an existing product family and maintenance of product families is provided.

Single copy price: $104.00 (AAMI Members)/$173.00 (Nonmembers)
Obtain an electronic copy from: celliott@aami.org
Send comments (with copy to psa@ansi.org) to: Colleen Elliott, (703) 253-8261, celliott@aami.org
AAMI (Association for the Advancement of Medical Instrumentation)

AAMI/TIR 13004-2016, Sterilization of health care products - Radiation - Substantiation of a selected sterilization dose: Method VDmaxSD (TECHNICAL REPORT) (technical report)

Describes a method for substantiating a selected sterilization dose of 17.5, 20, 22.5, 27.5, 30, 32.5, or 35 kGy that achieves a sterility assurance level (SAL) of 10^-6 or less for radiation sterilization of health care products. This TIR also specifies a method of sterilization dose audit used to demonstrate the continued effectiveness of the substantiated sterilization dose.

Single copy price: $146.00 (AAMI Members)/$243.00 (nonmembers)


Send comments (with copy to psa@ansi.org) to: Colleen Elliott, (703) 253-8261, celliott@aami.org

30 Day Notice of Withdrawal: ANS 5 to 10 years past approval date

In accordance with clause 4.7.1 Periodic Maintenance of American National Standards of the ANSI Essential Requirements, the following American National Standards have not been reaffirmed or revised within the five-year period following approval as an ANS. Thus, they shall be withdrawn at the close of this 30-day public review notice in Standards Action.

DASMA (Door and Access Systems Manufacturers Association)

ANSI/DASMA 103-2001 (R2006), Standard for Counterbalance Systems on Residential Sectional Garage Doors

DASMA (Door and Access Systems Manufacturers Association)

ANSI/DASMA 203-2004, Standard for Non-Fire-Rated Rolling Doors

DASMA (Door and Access Systems Manufacturers Association)

ANSI/DASMA 204-2004, Standard for Fire-Rated Rolling Door Assemblies

DASMA (Door and Access Systems Manufacturers Association)

ANSI/DASMA 303-2006, Performance Criteria for Accessible Communications Entry Systems
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.

**ABYC (American Boat and Yacht Council)**
- **Office:** 613 Third Street, Suite 10
  Annapolis, MD 21403
- **Contact:** Lynn Lipsey
- **Phone:** (410) 990-4460
- **Fax:** (410) 990-4460
- **E-mail:** llipsey@abycinc.org
- **BSR/ABYC A-22-201x, Marine Compressed Natural Gas (CNG) Systems** (revision of ANSI/ABYC A-22-2012)
- **BSR/ABYC A-26-201x, LPG and CNG Fueled Appliances** (revision of ANSI/ABYC A-26-2012)
- **BSR/ABYC H-1-201x, Field of Vision from the Helm Position** (revision of ANSI/ABYC H-1-2010)
- **BSR/ABYC H-8-201x, Buoyancy in the Event of Swamping** (revision of ANSI/ABYC H-8-2012)
- **BSR/ABYC H-29-201x, Canoes and Kayaks** (revision of ANSI/ABYC H-29-2012)
- **BSR/ABYC H-37-201x, Jet Boats - Light Weight** (revision of ANSI/ABYC H-37-2012)
- **BSR/ABYC P-4-201x, Marine Inboard Engines and Transmissions**
  (revision of ANSI/ABYC P-4-2012)
- **BSR/ABYC P-23-201x, Mechanical Steering and Propulsion Controls for Jet Boats**
  (revision of ANSI/ABYC P-23-2012)

**ADA (American Dental Association)**
- **Office:** 211 East Chicago Avenue
  Chicago, IL 60611-2678
- **Contact:** Paul Bralower
- **Phone:** (312) 587-4129
- **Fax:** (312) 440-2529
- **E-mail:** bralowerp@ada.org
- **BSR/ADA 1094-201x, Quality Assurance for Digital Intra-Oral Radiography** (new standard)

**AWS (American Welding Society)**
- **Office:** 8669 NW 36th Street, #130
  Miami, Florida 33166-6672
- **Contact:** Annik Babinski
- **Phone:** (800) 443-9353
- **Fax:** (305) 443-5951
- **E-mail:** ababinski@aws.org
- **BSR/AWS C1.5-201x, Specification for the Qualification of Resistance Welding Technicians** (revision of ANSI/AWS C1.5-2015)
- **BSR/AWS C6.1-201x, Recommended Practices for Friction Welding**
  (revision of ANSI/AWS C6.1-2009)
- **BSR/AWS D8.8M-201x, Specification for Automotive Weld Quality - Arc Welding of Steel**
  (revision of ANSI/AWS D8.8M-2014)
- **BSR/AWS D8.9M-201x, Test Methods for Evaluating the Resistance Spot Welding Behavior of Automotive Sheet Steel Materials**
  (revision of ANSI/AWS D8.9M-2012)

**NECA (National Electrical Contractors Association)**
- **Office:** 3 Bethesda Metro Center
  Suite 1100
  Bethesda, MD 20814
- **Contact:** Sofia Arias
- **Phone:** (301) 215-4549
- **Fax:** (301) 215-4500
- **E-mail:** sofia.arias@necanet.org
- **BSR/NECA 121-201X, Standard for Installing Nonmetallic-Sheathed Cable**
  (Type NM-B) and Underground Feeder and Branch-Circuit Cable (Type UF)
  (revision of ANSI/NECA 121-2007)

**NSF (NSF International)**
- **Office:** 789 N. Dixboro Road
  Ann Arbor, MI 48105-9723
- **Contact:** Lauren Panoff
- **Phone:** (734) 769-5197
- **E-mail:** lpanoff@nsf.org
- **BSR/NSF 350-201x (i9r1), Onsite Residential and Commercial Reuse Treatment Systems**
  (revision of ANSI/NSF 350-2014)
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)

UL (Underwriters Laboratories, Inc.)
Office: 47173 Benicia Street
        Fremont, CA  94538
Contact: Marcia Kawate
Phone: (510) 319-4259
E-mail: Marcia.M.Kawate@ul.com

BSR/UL 1453-201x, Standard for Safety for Electric Booster and
    Commercial Storage Tank Water Heaters (revision of ANSI/UL 1453
    -2016)

BSR/UL 1558-201x, Standard for Safety for Metal-Enclosed Low-
    Voltage Power Circuit Breaker Switchgear (revision of ANSI/UL 1558
    -2016)

BSR/UL 8750-201x, Standard for Safety for Light Emitting Diode (LED)
    Equipment for Use in Lighting Products (revision of ANSI/UL 8750
    -2015)
Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC O1 – Safety Requirements for Woodworking Machinery

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

- General Interest
- Government
- Producer
- User

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

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

ASTM (ASTM International)

New Standard


Reaffirmation


Revision


ATIS (Alliance for Telecommunications Industry Solutions)

Stabilized Maintenance


Withdrawal


ESTA (Entertainment Services and Technology Association)

Revision


IEEE (Institute of Electrical and Electronics Engineers)

New Standard


**Revision**


**NSF (NSF International)**

**Revision**


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

**New Standard**


**SPRI (Single Ply Roofing Institute)**

**Revision**


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

**Reaffirmation**


**Revision**


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Project Initiation Notification System (PINS)

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

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit www.NSSN.org, which is a database of standards information. Note that this database is not exhaustive.

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

ABYC (American Boat and Yacht Council)

Office: 613 Third Street, Suite 10
Annapolis, MD 21403

Contact: Lynn Lipsey
E-mail: llipsey@abycinc.org

* BSR/ABYC A-22-201x, Marine Compressed Natural Gas (CNG) Systems (revision of ANSI/ABYC A-22-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with marine compressed natural gas (CNG) systems.
  This standard applies to compressed natural gas (CNG) systems used on boats, up to the point of connection with the CNG appliance.

* BSR/ABYC A-26-201x, LPG and CNG Fueled Appliances (revision of ANSI/ABYC A-26-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with LPG- and CNG-fueled appliances.
  This standard is a guide for the design, construction, installation, and maintenance of LPG- and CNG-fueled appliances.

* BSR/ABYC H-1-201x, Field of Vision from the Helm Position (revision of ANSI/ABYC H-1-2010)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with the field of vision from the helm position.
  This standard is a guide to minimize obstructions in the field of vision from the helm station(s).

* BSR/ABYC H-8-201x, Buoyancy in the Event of Swamping (revision of ANSI/ABYC H-8-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with buoyancy in the event of swamping.
  This standard is a guide for determining the flotation and placement required to keep boats afloat when flooded/swamped and where indicated, floating in an approximately level attitude when flooded/swamped.

* BSR/ABYC H-29-201x, Canoes and Kayaks (revision of ANSI/ABYC H-29-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with canoes and kayaks.
  This standard is a guide for determining capacities, flotation, powering, design, construction, and labeling of canoes and kayaks.

* BSR/ABYC H-37-201x, Jet Boats - Light Weight (revision of ANSI/ABYC H-37-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with light-weight jet boats.
  This standard is a guide for the design, construction, and maintenance of inboard water-jet-propelled boats.

* BSR/ABYC P-4-201x, Marine Inboard Engines and Transmissions (revision of ANSI/ABYC P-4-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with marine inboard engines and transmissions.
  This standard is a guide for the design, selection of materials, construction, and installation of inboard engines and transmissions.

* BSR/ABYC P-23-201x, Mechanical Steering and Propulsion Controls for Jet Boats (revision of ANSI/ABYC P-23-2012)
  Stakeholders: Surveyors, consumers, insurance personnel, trade organizations, boat manufacturers, government personnel, boat specialists.
  Project Need: This standard identifies safety issues with mechanical steering and propulsion controls for jet boats.
  This standard is a guide for the design and construction of systems for mechanical steering and mechanical control of propulsion machinery for inboard water-jet-propelled boats.
The purpose of this standard is to establish quality assurance protocols for digital intra-oral radiographic systems. There are three components that make up a digital radiographic system: X-ray unit, image acquisition device and image display device. This standard will provide quality assurance protocols for each of these digital radiography components.

Project Need: Most dental practices currently use some form of digital intra-oral radiography. While most states and regulatory bodies have guidelines for quality assurance protocols that must be performed regularly on all radiography equipment, these were developed primarily for x-ray film. Therefore, development of an effective quality assurance program for digital radiography systems is critical for accurate patient diagnosis and patient safety.

The purpose of this standard is to establish quality assurance protocols for digital intra-oral radiographic systems. There are three components that make up a digital radiographic system: X-ray unit, image acquisition device and image display device. This standard will provide quality assurance protocols for each of these digital radiography components.

ASTM (ASTM International)
Office: 100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Contact: Corice Leonard
Fax: (610) 834-3683
E-mail: accreditation@astm.org

BSR/ASTM WK55900-201x, New Guide for Work of Fracture Measurements on Small Nuclear Graphite Specimens (new standard)
Stakeholders: Manufactured Carbon and Graphite Products industry.
Project Need: This guide provides general tutorial information and best practice for measuring the work of fracture on manufactured graphite and carbon specimens.

https://www.astm.org/DATABASE.CART/WORKITEMS/WK55900.htm

BSR/ASTM WK55905-201x, New Guide for Reporting and Recording of Near Misses for Maritime Industry (new standard)
Stakeholders: General Requirements industry.
Project Need: This guide provides near-miss reporting criteria and terminology for maritime vessels.

https://www.astm.org/DATABASE.CART/WORKITEMS/WK55905.htm

AWS (American Welding Society)
Office: 8669 NW 36th Street, #130
Miami, Florida 33166-6672
Contact: Annik Babinski
Fax: (305) 443-5951
E-mail: ababinski@aws.org

BSR/AWS C1.5-201x, Specification for the Qualification of Resistance Welding Technicians (revision of ANSI/AWS C1.5-2015)
Stakeholders: Resistance Welding community.
Project Need: This specification is intended to supplement the minimum requirements of employers, codes, other standards, or documents, and shall not be construed as a preemption of the employer’s responsibility for the work or for the performance of the work.

This specification establishes the requirements for qualification of resistance welding technicians (RWT) employed in the welding industry. The minimum experience, examination, application, qualification, and requalification requirements and methods are defined in this standard. This specification is a method for technicians to establish a record of their qualification and abilities in welding industry work such as development of machine troubleshooting, processes controls, quality standards, problem solving, etc.

Stakeholders: Friction Welding community.
Project Need: These recommended practices for friction welding are intended to serve as a basic guide for those interested in using any of the variations of this process as a method of joining two or more pieces. Contained in this document are process fundamentals and requirements, equipment descriptions, joint design basics, and material compatibilities. Suggested qualification procedures and inspection methods along with a review of present applications and typical mechanical property data are included.

This recommended practice describes friction-welding fundamentals and basic equipment requirements. Suggested procedure qualification, inspection methods, and joint designs are detailed. Typical mechanical property data are referenced.

BSR/AWS D8.8M-201x, Specification for Automotive Weld Quality - Arc Welding of Steel (revision of ANSI/AWS D8.8M-2014)
Stakeholders: Automotive community, Arc Welding community.
Project Need: Substantive comments stemmed from the recent fifth edition and a sixth edition needs to be created.

This specification describes weld geometry and workmanship criteria essential to ensure the quality of automotive and light truck weldments. This specification covers the arc and hybrid arc welding of coated and uncoated steels.

Stakeholders: Automotive community, Resistance Spot Welding community.

Project Need: The test methods are intended for application in a laboratory environment to characterize certain aspects of the welding behavior of sheet metal products under controlled experimental conditions. They are not intended to simulate production welding practices or to predict welding performance of a given grade of steel in production operations. The test methods and parameters are designed to be used for sheet steels (typically in automotive applications) ranging in thickness from 0.6 mm to 3.0 mm.

This document presents standard test methods for evaluating the resistance spot-welding behavior of automotive sheet steels. The document contains a number of tests and test methods useful in determining the resistance spot-welding performance of coated and uncoated automotive sheet steels of all strength levels and compositions. The test methods are designed to assess current range, electrode endurance, and weld properties of automotive sheet steels. The weld property tests include tests for hold-time sensitivity, weld hardness, shear-tension strength, and cross-tension strength.

SI (Simon Institute)

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

Contact: James Ginnyat
E-mail: jim@simoninstitute.org

BSR/UL 2263-201x, Standard for Safety of Cleaning Chemicals (new standard)

Stakeholders: Janitorial operations (manufacturing, government, military, disabled workers, industrial facilities); custodial operations (universities, schools k-12, private schools, museums, libraries, churches); housekeeping operations (healthcare, hospitality, childcare); building owners and managers; contract cleaning service operations; cleaning chemical manufacturers, facility safety, environmental, and medical organizations; federal safety and chemical regulators.

Project Need: Annually cleaning workers and patrons of facilities are injured or killed due to improper chemical handling. Accidents are frequently caused by what are considered to be "safe" household cleaning chemicals. On other occasions the accident is a result of misusing and/or mixing dangerous chemicals that have no place in a regular cleaning operation.

Cleaning workers and patrons of facilities are injured or killed due to improper chemical handling. Accidents are frequently caused by what are considered to be "safe" household cleaning chemicals. On other occasions the accident is a result of misusing and/or mixing dangerous chemicals that have no place in a regular cleaning operation. Currently, there is no available educational, testing, and permit issuing process that cleaning workers may be required to pass to enter or remain in the occupations of custodian, janitor, and housekeeper. There needs to be a standard and a compliance procedure to ensure that all cleaning workers understand basic chemical handling.

UL (Underwriters Laboratories, Inc.)

Office: 47173 Benicia Street
Fremont, CA  94538

Contact: Linda Phinney
E-mail: Linda.L.Phinney@ul.com

* BSR/UL 2263-201x, Standard for Safety of Electric Vehicle Cable (new standard)

Stakeholders: Authorities having jurisdiction, electric vehicle supply equipment manufacturers, connector manufacturers, consumers.

Project Need: To obtain national recognition of a standard covering electric vehicle cable.

This standard specifies the requirements for electric vehicle cables rated 1000 V maximum and intended for use in accordance with CSA C22.1, Canadian Electrical Code (CEC). Part I and CAN/CSA-C22.2 No. 0, General Requirements - Canadian Electrical Code, Part II, in Canada, NOM-001-SEDE, La Norma de Instalaciones Electricas (Mexican Electrical Code [MEC]), in Mexico, and NFPA 70, National Electrical Code (NEC), in the United States.

UL (Underwriters Laboratories, Inc.)

Office: 333 Pfingsten Road
Northbrook, IL  60062-2096

Contact: Susan Malohn
Fax: (847) 407-1725
E-mail: Susan.P.Malohn@ul.com

BSR/UL 61730-1-201x, Photovoltaic (PV) module safety qualification - Part 1: Requirements for construction (national adoption with modifications of IEC 61730-1)

Stakeholders: Photovoltaic industry.

Project Need: ANSI approval of a new UL IEC-based standard.

This part of IEC 61730 specifies and describes the fundamental construction requirements for photovoltaic (PV) modules in order to provide safe electrical and mechanical operation. Specific topics are provided to assess the prevention of electrical shock, fire hazards, and personal injury due to mechanical and environmental stresses. This part of IEC 61730 pertains to the particular requirements of construction. PV modules covered by this standard are limited to a maximum DC system voltage of 1500 V.

BSR/UL 61730-2-201x, Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing (national adoption with modifications of IEC 61730-2)

Stakeholders: Photovoltaic industry.

Project Need: ANSI approval of a new UL IEC-based standard.

The scope of IEC 61730-1 is also applicable to this part of IEC 61730. While IEC 61730-1 outlines the requirements of construction, this part of the standard lists the tests a PV module is required to fulfill for safety qualification. IEC 61730-2 is applied for safety qualification only in conjunction with IEC 61730-1.
PINS Corrections

BSR ICEA P-45-482-201x and BSR/NEMA ESM1-201x

The following two PINS listings appeared in the September 9, 2016 issue of Standards Action with incomplete scopes. The complete listings are reprinted here.

NEMA (ASC C8) (National Electrical Manufacturers Association)
Office: 1300 North 17th Street
         Rosslyn, VA 22209
Contact: Kevin Connelly
E-mail: Kevin.Connelly@Nema.org

BSR ICEA P-45-482-201x, Short Circuit Performance of Metallic Shields and Sheaths on Insulated Cable (revision of ANSI ICEA P-45-482-2013)
Stakeholders: Wire manufacturers, builders, and installers
Project Need: Periodic review of standard.

Equations and parameters have been established for short-circuit calculations for sheaths or shields made of aluminum, bronze, copper, lead, steel, zinc and cupronickel alloys. The types of sheaths or shields included are:
- Wires, applied either helically, as braid or serving, or longitudinally with corrugations;
- Helically applied flat tape, not overlapped;
- Helically applied, overlapped, flat tape;
- Corrugated tape, longitudinally applied; and
- Tubular sheath.

The types of cable materials in contact with the sheath or shield are: crosslinked (thermoset), thermoplastic, impregnated paper, and varnished cloth. The materials which determine the maximum allowable short-circuit temperatures are: paper, varnished cloth and several thermoplastic and thermosetting materials presently appearing in ICEA standards. Temperature limits, considered safe, were established for the various coverings and insulation materials. The equations may be used to determine:
- The maximum short circuit current permitted for a specific sheath/shield and short-circuit duration;
- The sheath/shield size necessary to carry a specific short-circuit current for a given duration; and
- The maximum duration a specific sheath/shield can carry a specific short-circuit current.
BSR/NEMA ESM1-201x, ESM1 Metrological requirements for electrical submeters (new standard)

Stakeholders: Weights and Measures departments, testing laboratories, multi-tenant building owners, regulators, electrical submeter manufacturers.

Project Need: A base for metrological certification of electrical submeters.

The requirements of this standard cover metrological requirements and associated testing for electronic single-circuit and multiple-circuit secondary electrical energy submeters. The standard applies to stand-alone meters with standard inputs or metering systems comprising meters and associated sensors. These meters are intended for circuits, loads, or electrical energy sources connected downstream from the utility meter. These meters provide details of energy use for energy monitoring or revenue sub-metering. The standard does not apply to primary utility owned meters. The standard includes AC and DC kilowatt hour meters, demand meters, load survey meters, and power quality meters, etc. The standard applies to indoor and outdoor applications, and covers portable, permanently installed, and embedded meters. The standard covers AC meters rated at not more than 1000V that measure active energy, apparent energy, reactive energy (capacitive, inductive, and/or total) including received, delivered, and/or net and also those measuring current, voltage, active power, apparent power, reactive power (capacitive, inductive and/or total), power factor, phase angle, polarity, and frequency when measured in addition to energy. The Standard also applies to DC meters rated not more than 1500V that measure energy received, delivered, and/or net and also those that include additional measurement of power, current, and voltage.
American National Standards Maintained Under Continuous Maintenance

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

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

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

- AAMI (Association for the Advancement of Medical Instrumentation)
- AAMVA (American Association of Motor Vehicle Administrators)
- AGA (American Gas Association)
- AGSC (Auto Glass Safety Council)
- ASC X9 (Accredited Standards Committee X9, Incorporated)
- ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
- ASME (American Society of Mechanical Engineers)
- ASTM (ASTM International)
- GBI (The Green Building Initiative)
- GEIA (Greenguard Environmental Institute)
- HL7 (Health Level Seven)
- IESNA (The Illuminating Engineering Society of North America)
- MHI (ASC MH10) (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

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

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

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

AAMI
Association for the Advancement of Medical Instrumentation
4301 N Fairfax Drive
Suite 301
Arlington, VA 22203-1633
Phone: (703) 253-8261
Fax: (703) 276-0793
Web: www.aami.org

AARST
American Association of Radon Scientists and Technologists
P.O. Box 2109
Fletcher, NC 28732
Phone: (202) 830-1110
Fax: (913) 780-2090
Web: www.aarst.org

ABYC
American Boat and Yacht Council
613 Third Street, Suite 10
Annapolis, MD 21403
Phone: (410) 990-4460
Web: www.abyccinc.org

ADA (Organization)
American Dental Association
211 East Chicago Avenue
Chicago, IL 60611-2678
Phone: (312) 587-4129
Fax: (312) 440-2529
Web: www.ada.org

APA
APA - The Engineered Wood Association
7011 South 19th Street
Tacoma, WA 98466
Phone: (253) 620-7467
Fax: (253) 565-7265
Web: www.apawood.org

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

ASSE (Safety)
American Society of Safety Engineers
520 N. Northwest Highway
Park Ridge, IL 60068
Phone: (847) 768-3411
Fax: (847) 296-9221
Web: www.asse.org

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

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

AWS
American Welding Society
8669 NW 36th Street, #130
Miami, Florida 33166-6672
Phone: (800) 443-9353
Fax: (305) 443-5951
Web: www.aws.org

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

BICSI
Building Industry Consulting Service International
8610 Hidden River Parkway
Tampa, FL 33637
Phone: (813) 903-4712
Fax: (813) 971-4311
Web: www.bicsi.org

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

ESTA
Entertainment Services and Technology Association
630 Ninth Avenue
Suite 609
New York, NY 10036-3748
Phone: (212) 244-1505
Fax: (212) 244-1502
Web: www.estat.org

IEEE
Institute of Electrical and Electronics Engineers (IEEE)
445 Hoes Lane
Piscataway, NJ 08854
Phone: (732) 562-3854
Fax: (732) 796-6966
Web: www.ieee.org

ISTA
International Safe Transit Association
1400 Abbot Rd., Suite 160
East Lansing, MI 48823
Phone: (517) 333-3437
Web: www.ista.org

NASBLA
National Association of State Boating Law Administrators
1648 McGrathiana Parkway
Suite 360
Lexington, KY 40511
Phone: (859) 225-9487
Web: www.nasbla.org

NECA
National Electrical Contractors Association
3 Bethesda Metro Center
Suite 1100
Bethesda, MD 20814
Phone: (301) 215-4549
Fax: (301) 215-4500
Web: www.neca-nesi.org

NEMA (ASC Z535)
National Electrical Manufacturers Association
1300 North 17th Street
Arlington, VA 22209
Phone: (703) 841-3299
Web: www.nema.org

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
Phone: (734) 827-3817
Fax: (734) 827-7875
Web: www.nsf.org

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

SIA
Simon Institute
4760 S. Highland Drive
Salt Lake City, UT 84117
Phone: (907) 738-8747
Web: www.simoninstitute.org

SPRI
Single Ply Roofing Institute
411 Waverley Oaks Road
Suite 331B
Waltham, MA 02452
Phone: (781) 647-7026
Fax: (781) 647-7222
Web: www.sprsi.org

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

UL
Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096
Phone: (847) 664-1725
Fax: (847) 407-1725
Web: www.ul.com
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.

Orders for ISO Drafts can be made available by contacting ANSI's Customer Service department. Please e-mail your request for an ISO 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.

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

ISO/DIS 34101-1, Sustainable and traceable cocoa beans - Part 1: Requirements for sustainability management systems - 10/5/2016, $112.00
ISO/DIS 34101-2, Sustainable and traceable cocoa beans - Part 2: Requirements for performance (related to economic, social, and environmental aspects) - 10/5/2016, $67.00
ISO/DIS 34101-3, Sustainable and traceable cocoa beans - Part 3: Requirements for traceability - 10/5/2016, $82.00

AIRCRAFT AND SPACE VEHICLES (TC 20)
ISO/DIS 18676, Space systems - Guidelines for the management of systems engineering processes - 12/7/2016, $71.00

CONCRETE, REINFORCED CONCRETE AND PRE-STRESSED CONCRETE (TC 71)
ISO/DIS 18407, Guidelines for the simplified desizing of prestressed concrete tanks for potable water - 12/6/2016, $194.00

EARTH-MOVING MACHINERY (TC 127)
ISO 7131/DAmd1, Earth-moving machinery - Loaders - Terminology and commercial specifications - Amendment 1 - 12/7/2016, $29.00
ISO/DIS 17757, Earth-moving machinery and mining - Autonomous and semi-autonomous machine system safety - 10/7/2016, $107.00

GEOSYNTHETICS (TC 221)
ISO/DIS 13438, Geotextiles and geotextile-related products - Screening test method for determining the resistance to oxidation - 10/6/2016, $46.00

MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)
ISO/DIS 35101, Petroleum and natural gas industries - Arctic operations - Working environment - 10/5/2016, $119.00

MECHANICAL VIBRATION AND SHOCK (TC 108)
ISO/DIS 21940-2, Mechanical vibration - Rotor balancing - Part 2: Vocabulary - 10/5/2016, $98.00

OPTICS AND OPTICAL INSTRUMENTS (TC 172)
ISO/DIS 11986, Ophthalmic optics - Contact lenses and contact lens care products - Determination of preservative uptake and release - 12/9/2016, $40.00

PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)
ISO/DIS 18639-1, PPE for firefighters undertaking specialist rescue activities - Part 1: General - 12/9/2016, $82.00
ISO/DIS 18639-3, PPE ensembles for firefighters undertaking specialist rescue activities - Part 3: Clothing - 12/9/2016, $58.00

SMALL CRAFT (TC 188)
ISO/DIS 16147, Small craft - Inboard diesel engines - Engine-mounted fuel, oil and electrical components - 10/9/2016, $33.00

SPORTS AND RECREATIONAL EQUIPMENT (TC 83)
ISO/DIS 8364, Alpine skis and bindings - Binding mounting area - Requirements and test methods - 10/5/2016, $33.00
ISO/DIS 10045, Alpine skis - Binding mounting area - Requirements for test screws - 10/9/2016, $33.00
ISO/DIS 11088, Alpine ski/binding/boot (S-B-B) system - Assembly, adjustment and inspection - 10/5/2016, $62.00

TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)
ISO 17100/DAmd1, Translation services - Requirements for translation services - Amendment 1 - 10/5/2016, $29.00

WELDING AND ALLIED PROCESSES (TC 44)
ISO/DIS 22825, Non-destructive testing of welds - Ultrasonic testing - Testing of welds in austenitic steels and nickel-based alloys - 10/6/2016, $82.00

ISO/IEC JTC 1, Information Technology
ISO/IEC DIS 21778, The JSON data interchange format - 10/9/2016, $46.00
Listed here are new and revised standards recently approved and promulgated by ISO - the International Organization for Standardization – and IEC – the International Electrotechnical Commission. Most are available at the ANSI Electronic Standards Store (ESS) at www.ansi.org. All paper copies are available from Standards resellers (http://webstore.ansi.org/faq.aspx#resellers).

### ISO Standards

#### ISO/IEC JTC 1 Technical Reports

<table>
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<tr>
<th>ISO/IEC TR 38504:2016</th>
<th>Governance of information technology - Guidance for principles-based standards in the governance of information technology, $88.00</th>
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</table>

#### AGRICULTURAL FOOD PRODUCTS (TC 34)

| ISO 12824:2016 | Royal jelly - Specifications, $173.00 |

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

| ISO 14644-14:2016 | Cleanrooms and associated controlled environments - Part 14: Assessment of suitability for use of equipment by airborne particle concentration, $149.00 |

#### ERGONOMICS (TC 159)

| ISO 6385:2016 | Ergonomics principles in the design of work systems, $123.00 |

#### GEOTECHNICS (TC 182)

| ISO 22477-10:2016 | Geotechnical investigation and testing - Testing of geotechnical structures - Part 10: Testing of piles: Rapid load testing, $149.00 |

#### IMPLANTS FOR SURGERY (TC 150)

| ISO 14242-2:2016 | Implants for surgery - Wear of total hip-joint prostheses - Part 2: Methods of measurement, $51.00 |

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

| ISO 14224:2016 | Petroleum, petrochemical and natural gas industries - Collection and exchange of reliability and maintenance data for equipment, $265.00 |

| ISO 20088-1:2016 | Determination of the resistance to cryogenic spillage of insulation materials - Part 1: Liquid phase, $149.00 |

#### METALLIC AND OTHER INORGANIC COATINGS (TC 107)

| ISO 19477:2016 | Metallic and other inorganic coatings - Measurement of Young’s modulus of thermal barrier coatings by beam bending, $123.00 |

#### PAPER, BOARD AND PULPS (TC 6)


### ISO/IEC JTC 1/SC 204 Technical Reports

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

| ISO 3924:2016 | Petroleum products - Determination of boiling range distribution - Gas chromatography method, $149.00 |

#### PLAIN BEARINGS (TC 123)

| ISO 12131-2:2016 | Plain bearings - Hydrodynamic plain thrust pad bearings under steady-state conditions - Part 2: Functions for the calculation of thrust pad bearings, $89.00 |

#### PLASTICS (TC 61)

| ISO 11357-1:2016 | Plastics - Differential scanning calorimetry (DSC) - Part 1: General principles, $173.00 |

#### ROBOTS AND ROBOTIC DEVICES (TC 299)

| ISO 18646-1:2016 | Robotics - Performance criteria and related test methods for service robots - Part 1: Locomotion for wheeled robots, $123.00 |

#### RUBBER AND RUBBER PRODUCTS (TC 45)

| ISO 6235:2016 | Rubber, raw - Determination of block polystyrene content - Ozonolysis method, $51.00 |

| ISO 2286-1:2016 | Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 1: Methods for determination of length, width and net mass, $51.00 |

| ISO 2286-2:2016 | Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 2: Methods for determination of total mass per unit area, mass per unit area of coating and mass per unit area of substrate, $51.00 |

| ISO 2286-3:2016 | Rubber- or plastics-coated fabrics - Determination of roll characteristics - Part 3: Method for determination of thickness, $51.00 |

#### SMALL TOOLS (TC 29)

| ISO 10898:2016 | Spot drills, $51.00 |

#### TEXTILES (TC 38)

| ISO 1144:2016 | Textiles - Universal system for designating linear density (Tex System), $88.00 |

#### TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

| ISO 18495-1:2016 | Intelligent transport systems - Commercial freight - Automotive visibility in the distribution supply chain - Part 1: Architecture and data definitions, $149.00 |

#### WELDING AND ALLIED PROCESSES (TC 44)

| ISO 3677:2016 | Filler metal for soldering and brazing - Designation, $51.00 |

### ISO Technical Specifications

#### FIRE SAFETY (TC 92)

| ISO/TS 19700:2016 | Controlled equivalence ratio method for the determination of hazardous components of fire effluents - Steady-state tube furnace, $200.00 |
IEC Standards

FIBRE OPTICS (TC 86)
IEC 60794-3-20 Ed. 3.0 b:2016, Optical fibre cables - Part 3-20:
Outdoor cables - Family specification for self-supporting aerial telecommunication cables, $73.00

INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL (TC 65)
IEC 61511-1 Ed. 2.0 b cor.1:2016, Corrigendum 1 - Functional safety -
Safety instrumented systems for the process industry sector - Part 1: Framework, definitions, system, hardware and application programming requirements, $0.00

OTHER
CISPR 16-2-3 Ed. 4.0 b:2016, Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements, $375.00
S+ CISPR 16-2-3 Ed. 4.0 en:2016 (Redline version), Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements, $446.00
Proposed Foreign Government Regulations

Call for Comment

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

The National Center for Standards and Certification Information (NCSCI) at the National Institute of Standards and Technology (NIST), distributes these proposed foreign technical regulations to U.S. stakeholders via an online service, Notify U.S. Notify U.S. is an e-mail and Web service that allows interested U.S. parties to register, obtain notifications, and read full texts of regulations from countries and for industry sectors of interest to them. To register for Notify U.S., please go to Internet URL: http://www.nist.gov/notifyus/ and click on “Subscribe”.

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

Call for Members

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

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

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

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

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

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

Society of Cable Telecommunications

ANSI Accredited Standards Developer

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

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

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

ANSI Accredited Standards Developers

Approval of Reaccreditation

Dimensional Metrology Standards Consortium (DMSC)

ANSI’s Executive Standards Council has approved the reaccreditation of the Dimensional Metrology Standards Consortium (DMSC), an ANSI Member and Accredited Standards Developer, under its recently revised operating procedures for documenting consensus on DMSC-sponsored American National Standards, effective September 20, 2016. For additional information, please contact: Mr. Bailey Squier, Executive Director & General Manager, Dimensional Metrology Standards Consortium, 1350 SW Alsbury Boulevard, #514, Burleson, TX 76028-9219; phone: 817.461.1092; e-mail: bsquier@dmis.org.

Reaccreditation

American Nuclear Society (ANS)

Comment Deadline: October 24, 2016

The American Nuclear Society (ANS), an ANSI member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on ANS-sponsored American National Standards, under which it was last reaccredited earlier this year. As the current revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Ms. Patricia Schroeder, Standards Manager, American Nuclear Society, 555 N. Kensington Avenue, La Grange Park, IL 60526; phone: 708.579.8269; e-mail: pschroeder@ans.org. You may view/download a copy of the revisions during the public review period at the following URL: www.ansi.org/accredPR. Please submit any public comments on the revised procedures to ANS by October 24, 2016, with a copy to the ExSC Recording Secretary in ANSI’s New York Office (jthompsco@ANSI.org).

Institute of Environmental Sciences and Technology (IEST)

Comment Deadline: October 24, 2016

The Institute of Environmental Sciences and Technology (IEST), an ANSI member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on IEST-sponsored American National Standards, under which it was last reaccredited in 2010. As the current revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Ms. Jennifer Sklena, Technical Program Manager, Institute of Environmental Sciences & Technology, 2430 S. Arlington Heights Road, Suite 620, Arlington Heights, IL 60005; phone: 847.981.0100; e-mail: jsklena@iest.org. You may view/download a copy of the revisions during the public review period at the following URL: www.ansi.org/accredPR. Please submit any public comments on the revised procedures to ANSI by October 24, 2016, with a copy to the ExSC Recording Secretary in ANSI’s New York Office (jthompsco@ANSI.org).
International Organization for Standardization (ISO)

Establishment of ISO Technical Committees

ISO/TC 307 – Blockchain and Electronic Distributed Ledger Technologies

A new ISO Technical Committee, ISO/TC 307 – Blockchain and electronic distributed ledger technologies, has been formed. The Secretariat has been assigned to Australia (SA).

ISO/TC 307 operates under the following scope:
Standardization of blockchains and distributed ledger technologies to support interoperability and data interchange among users, applications and systems.

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

ISO/TC 309 – Organizational Governance

A new ISO Technical Committee, ISO/TC 309 – Organizational governance, has been formed. The Secretariat has been assigned to the United Kingdom (BSI).

ISO/TC 309 operates under the following scope:
Standardization of organizational governance, including aspects of accountability, direction and control – which may include principles of governance, anti-bribery, conflict of interest, due diligence, whistleblowing, compliance, remuneration structures and external reporting, amongst others.

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

Establishment of ISO Project Committee

ISO/PC 308 – Chain of Custody

A new ISO Project Committee, ISO/PC 308 – Chain of custody, has been formed. The Secretariat has been assigned to the Netherlands (NEN).

ISO/PC 308 operates under the following scope:
Standardization in the field of chain of custody.

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

ISO Proposals for a New Fields of ISO Technical Activity

Collaborative Business Relationship Management
Comment Deadline: November 4, 2016

BSI, the ISO member body for the UK and secretariat of ISO Project Committee 286, has submitted to ISO a proposal for a new field of ISO technical activity on Collaborative business relationship management, with the following scope statement:
Standardization in the field of collaborative business relationship management.

Please note that BSI proposed a new work item proposal on this subject in 2013 which was approved and the standard has been developed under ISO/PC 286. As argued in the proposal, during the development of ISO 11000 (Collaborative business relationship management systems – Framework), the need for supporting documents became apparent, and this proposal seeks to gain support for an ISO/TMB decision to convert the project committee into a technical committee to address these additional projects.

Anyone wishing to review the proposal can request a copy by contacting ANSI’s ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, November 4, 2016.

Exhibitions, Events and Conventions
Comment Deadline: October 7, 2016

SAC, the ISO member body for China, has submitted to ISO a proposal for a new field of ISO technical activity on Exhibitions, Events and Conventions, with the following scope statement:
Standardization of exhibitions (trade shows, trade fairs), events and conventions (conferences, congresses, meetings, forums, seminars), including terminology, classification, statistics, information system, safety control, service and personnel requirements, and sustainability management.

Anyone wishing to review the proposal can request a copy by contacting ANSI’s ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, October 7, 2016.

New Secretariats

ISO/TC 184/SC 5 – Interoperability, integration, and architectures for enterprise systems and automation applications
Comment Deadline: October 20, 2016

Rockwell Automation has requested ANSI to delegate the responsibilities of the administration of the ISO/TC 184/SC 5 secretariat to Rockwell Automation. The secretariat was previously held by Electronic Commerce Code Management Association (ECCMA) and the secretariat transfer is supported by the U.S. TAG.

ISO/TC 184/SC 5 operates under the following scope:
Development of standards in the field of Interoperability, integration, and architectures for enterprise systems and automation applications within the scope of ISO/TC 184:
Standardization in the field of automation systems and their integration for design, sourcing, manufacturing, production and delivery, support, maintenance and disposal of products and their associated services. Areas of standardization include information systems, automation and control systems and integration technologies.

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

Green Building Initiative – GBI 01-201x

The 26th meeting of the Green Building Initiative – GBI 01-201x, Consensus Body will be held via conference call and webinar:

Friday, October 14, 2016 from 12:00 Noon ET to 3:00 PM ET

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

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

To attend, and for additional information, please contact:

Maria Woodbury
Secretariat for Green Building Initiative
207-807-8666 (direct)
Maria@thegbi.org

ASC Z133 – ANSI Standard for Arboricultural Operations – Safety Requirements

The next business meeting of the Accredited Standards Committee Z133 (ANSI Standard for Arboricultural Operations—Safety Requirements) will take place on Wednesday, October 12, 2016, (8:00 am – 5:00 pm) at Hilton Baltimore BWI Airport Hotel–Linthicum, Maryland. For more information, contact Tricia Duzan at the International Society of Arboriculture, ASC Z133 Secretariat, by phone (+1 217.355.9411, ext. 216) or by e-mailing tduzan@isa-arbor.com.

To attend, and for additional information, please contact:

Maria Woodbury
Secretariat for Green Building Initiative
207-807-8666 (direct)
Maria@thegbi.org
Information Concerning

International Organization for Standardization (ISO)

Call for International (ISO) Secretariat

ISO/TC 171 – Document management applications and SC 2

Reply Deadline: October 7, 2016

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 171 – Document management applications and ISO/TC 171/SC 2 – Document file formats, EDMS systems and authenticity of information. ANSI has delegated the responsibility for the administration of the Secretariats for ISO/TC 171 and ISO/TC 171/SC 2 to the Association for Information and Image Management (AIIM). AIIM has advised ANSI of its intent to relinquish its roles as delegated Secretariat for these committees.

ISO/TC 171 operates under the following scope:

Standardization of technologies and processes involving capture, indexing, storage, retrieval, distribution and communication, presentation, migration, exchange, preservation, integrity maintenance and disposal in the field of document management applications. Documents may be managed in micrographic or electronic form.

This includes:

- quality control and integrity maintenance;
- input/output quality of documents (micrographic or electronic);
- implementation, inspection and quality control procedures for storage, use and preservation of documents (micrographic or electronic), including supportive metadata;
- applications involving workflow (process management) in an enterprise and on the Internet;
- maintenance of quality and integrity during information exchange between systems;
- procedures and processes supporting legal admissibility and/or integrity and security;
- management of related audit trail information.

Excluded:

- records management policies and procedures within the scope of TC 46;
- all work on information, process and production definitions and workflow of industrial automation systems within the scope of TC 184;
- cinematography, dimensions and labeling of raw-stock film, and the methods within the scope of ISO/TC 42 dealing with testing, rating, classifying and specifying the performance characteristics of processes, materials and devices applicable to photography;
- work being done by ISO/IEC JTC1 that is within its scope and in particular work of ISO/IEC JTC 1/SC 23, SC 24, SC 27, SC 28, SC 29, SC 32 and SC 34.
NOTE

Where potential or actual overlap with other TCs exists JWGs will be actively pursued.

ISO/TC 171/SC 2 operates under the following scope within ISO/TC 171’s scope:

- Logical aspects of storage and preservation (short and long term)
- File formats
- EDMS functionalities and architecture
- Evaluations and qualification of EDMS
- Workflow
- Authenticity of information

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 171 and/or ISO/TC 171/SC 2. Alternatively, ANSI may be assigned the responsibility for administering ISO Secretariats. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

1. The affected interests have made a financial commitment for not less than three years covering all defined costs incurred by ANSI associated with holding the Secretariat;
2. The affected technical sector, organizations or companies desiring that the U.S. hold the Secretariat request that ANSI perform this function;
3. The relevant U.S. TAG has been consulted with regard to ANSI’s potential role as Secretariat; and
4. ANSI is able to fulfill the requirements of a Secretariat.

If no U.S. organization steps forward to assume the ISO/TC 171 and/or ISO/TC 171/SC 2 Secretariats, or if there is insufficient support for ANSI to assume direct administration of these activities by Friday, October 7, 2016, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of these committees. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat roles.

Information concerning the United States retaining the role of international Secretariat may be obtained by contacting ANSI’s ISO Team (isot@ansi.org).
6 Performance

6.2 Open top hot food holding equipment

6.2.1 Performance requirement

Hot food holding equipment whose hot food storage area is not completely enclosed shall be capable of maintaining a minimum product temperature of 150 °F (65 °C) when tested in accordance with 6.2.2. This requirement is intended to ensure that the equipment is capable of holding food at a minimum temperature of 140 °F (60 °C) under intended use conditions. This requirement applies to bains-marie, steam tables, display cases with hot food holding wells, soup stations, and similar open equipment in which hot food may be held during service or display. This requirement shall not apply to heat lamps and similar overhead heating equipment designed to temporarily slow the cooling of food placed beneath them.

6.2.2 Test method

6.2.2.1 The performance of open hot food holding equipment shall be evaluated within a test chamber maintained under the following conditions for the duration of the test:

- ambient temperature of 73 ± 3 °F (23 ± 2 °C), as measured approximately 10 in (250 mm) from test unit and 36 in (914 mm) from the floor;
- no vertical temperature gradient exceeding 1.5 °F per foot (2.5 °C per meter); and
- no air currents with velocities greater than 50 ft/min (15.2 m/min) measured at a position that is:
  (1) centered side-to-side in relation to the equipment under test, and
  (2) 10 ± 1 in (254 ± 25 mm) above the top rim surface of the test pans, and
  (3) 10 ± 1 in (254 ± 25 mm) in front of the unit.
6.7 Open heated merchandisers

6.7.1 Performance requirement

Open heated merchandisers shall be capable of maintaining a minimum product temperature of 150°F (65.5°C) when tested in accordance with 6.7.2. This requirement is intended to ensure that non-enclosed equipment, which does not utilize food pans or food wells is capable of holding packaged potentially hazardous food at a minimum temperature of 140°F (60°C) under intended use conditions.

NOTE – The test is designed for open hot food holding equipment that does not utilize wells and does not include test criteria for open hot food holding equipment, which is covered under 6.2. This requirement shall not apply to heating equipment designed to temporarily slow the cooling of food.

6.7.2 Test method

6.7.2.1 The performance of open heated merchandisers shall be evaluated within a test chamber maintained under the following conditions for the duration of the test:

- ambient temperature of 73 ± 3°F (23 ± 2°C) as measured approximately 10 in (250 mm) from the test unit and 36 in (914 mm) from the floor;
- no vertical temperature gradient exceeding 1.5°F per foot (2.5°C per meter); and
- no air currents with velocities greater than 50 ft/min (15.2 m/min) measured at a position that is:
  1. centered side-to-side in relation to the equipment under test, and
  2. 10 ± 1 in (254 ± 25 mm) above the lowest heating surface, and
  3. 10 ± 1 in (254 ± 25 mm) in front of the unit.

Rationale: Provides a specific position from the equipment to measure the air velocity to meet the original intent of this requirement. The intent is to measure the air currents in the test room to ensure that they are not interfering with the performance of the equipment being tested. The position of measurement should ensure any air currents that may be produced by the equipment being tested are not included in the air velocity measurement for the test room.
### 8.4.1 Sample frequency

#### 8.4.1.1 Graywater

Influent samples shall be collected two times per week, except for the following (which shall be collected one time per week): surfactants, iron, fats, oil and grease. Effluent samples shall be collected three times per week during design loading periods and two three times during each stress recovery period (the week following completion of each of the stress simulations described in 8.1.2.2.2). Influent samples shall be collected on the same day as effluent samples during each stress recovery period. Effluent samples shall be collected two times per week during all stress events, except power/equipment failure stress and vacation stress where no samples shall be collected. SAR will be collected on the influent and effluent, and color, odor, oily film and foam on the effluent once every 2 m (8 wk [56 d]) for a total of 3 samples over the course of the test.

#### 8.4.1.2 Residential Wastewater

Influent residential wastewater samples shall be collected three times per week, except for the following (which shall be collected one time per week): total phosphorous; COD; total coliforms; TOC; surfactants, iron, fats, oil and grease. Effluent samples shall be collected three times per week during design loading periods and two three times during each stress recovery period. Effluent samples shall be collected on the same day as effluent samples during each stress recovery period. Effluent samples shall be collected two times per week during all stress events, except power/equipment failure stress and vacation stress where no samples shall be collected. SAR will be collected on the influent and effluent, and color, odor, oily film and foam on the effluent once every 2 m (8 wk [56 d]) for a total of 3 samples over the course of the test.

#### 8.6.1.4 During stress loading sequence (8.1.2.2.2 and 8.2.2.2.2), a minimum of 2/3 of the total scheduled data days and from at least 2 1 of the scheduled data days during any single stress recovery shall be necessary for the test to be considered valid.
1. Label proposal

PROPOSAL

36A.3 Label Content

36A.3.1 Selection and Warnings Panel

36A.3.1.1 The Selection and Warnings Panel shall include the following information arranged in the order listed:

a) Sizing information, to include a size class, weight range, and chest and waist size (if applicable), according to Table 36A.3.1.

b) Graphics indicating the appropriate performance level according to Figures 36A.3.1A and 36A.3.1B. The order in which the graphics shall be located on the panel shall be the environmental graphic in Figure 36A.3.1A followed by the applicable turning graphic in Figure 36A.3.1B. The graphics shall be located within the same region of the label. The order in which the graphics shall be located on the panel shall be Figure 36A.3.1A and 36A.3.1B respectively.

c) Graphics to warn the user that the PFD is not designed for use on a personal watercraft, when white water paddling, or when water skiing, or participating in similar towed uses, according to Figure 36A.3.2.

d) Any applicable warnings and limitations, as determined elsewhere in this standard. Examples include, but are not limited to those shown in Table 36A.3.2. When the warnings in Figure 36A.3.2 are not applicable, the warning symbol shown in Figure 36A.3.2 shall be included with the content from Table 36A.3.2.

e) The following statement:

<table>
<thead>
<tr>
<th>English</th>
<th>French</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose and wear the device which fits you and your activity, visit <a href="http://www.XXXXXX.org">www.XXXXXX.org</a> <a href="http://www.safechoice.com">www.safechoice.com</a>. Read and keep the owner’s manual and tags for info, such as rearming, wear, and care.</td>
<td>Choisir et porter l'appareil qui vous convient et votre activité, visitez <a href="http://www.XXXXXX.org">www.XXXXXX.org</a> <a href="http://www.safechoice.com">www.safechoice.com</a>. Lire et conserver le manuel et les étiquettes pour les informations, telles que le réarmement, l'usure et les soins.</td>
<td>Elegir y usar el dispositivo que usted y su actividad, visita <a href="http://www.XXXXXX.org">www.XXXXXX.org</a> <a href="http://www.safechoice.com">www.safechoice.com</a>. Encaja. Lea y mantenga el propietario de etiquetas y manuales de información, tales como el rearme, el desgaste, y la atención.</td>
</tr>
</tbody>
</table>
Figure 36a.3.1b - Performance Information for PFD Labels – Turning

<table>
<thead>
<tr>
<th>Graphic</th>
<th>Definition of Graphic</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Graphic" /></td>
<td>Device does not turn wearer from face down position. Has not been evaluated for turning, or does not have adequate turning.</td>
</tr>
<tr>
<td><img src="image2" alt="Graphic" /></td>
<td>Device turns some wearers from a face down position. Has been evaluated for turning.</td>
</tr>
</tbody>
</table>

Table 36a.3.1 - Sizing Information for PFD Labels

<table>
<thead>
<tr>
<th>Size Class English¹,²</th>
<th>Weight Range</th>
<th>Chest Size³,⁴</th>
<th>Waist Size³,⁴,⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;ADULT&quot;³</td>
<td>'&gt; 41 kg (&gt;90 lbs.)&quot;</td>
<td>Mandatory</td>
<td>Mandatory</td>
</tr>
<tr>
<td>&quot;YOUTH-ADULT&quot;³</td>
<td>'&gt; 34 kg (&gt;75 lbs.)&quot;</td>
<td>Mandatory</td>
<td>Mandatory</td>
</tr>
<tr>
<td>&quot;YOUTH LARGE/ADULT XXS&quot;</td>
<td>'34 - 57 kg (75 - 125 lbs.)&quot;</td>
<td>Mandatory</td>
<td>Mandatory</td>
</tr>
<tr>
<td>&quot;YOUTH&quot;</td>
<td>'23 - 41 kg (50 - 90 lbs.)&quot;</td>
<td>Optional</td>
<td>Mandatory</td>
</tr>
<tr>
<td>&quot;CHILD&quot;</td>
<td>'14 - 23 kg (30 - 50 lbs.)&quot;</td>
<td>Optional</td>
<td>Mandatory</td>
</tr>
<tr>
<td>&quot;INFANT / CHILD&quot;</td>
<td>'&lt;23 kg (&lt;50 lbs.)&quot;</td>
<td>Optional</td>
<td>Mandatory</td>
</tr>
<tr>
<td>&quot;INFANT&quot;</td>
<td>'&lt;14 kg (&lt;30 lbs.)&quot;</td>
<td>Optional</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>

1 If this marking is not visible when the device is packaged, it shall also appear on the package.

2 Notwithstanding 36A.2.1, the size class on the device shall have a letter height of no less than 9 mm (0.35 in).

3 The size class may be followed by a size description, such as but not limited to: "S", "M", "L", "UNIVERSAL", or "OVERSIZE".

4 Shall be expressed in inches and centimeters over a range of not less than 2 inches; for example, "76 to 81 cm (30 to 32 in)".

5 Required only when the primary closure is around the waist.
36A.3.2.1 The Certification and Approval Panel shall include the following information, arranged as indicated:

a) Company trademark and/or name and physical address or web address of the Applicant, in the upper left corner of the Panel;

b) “USCG Approved” and the U.S. Coast Guard Approval Number in the format “160.####/####/#” [and TC approval information], in the lower left corner of the Panel;

c) Model Number and Style (if applicable), manufacturer may include a catalog number;

d) Certification Standard and the Type code (“Type II” or “Type III”, “Type IV”)

e) Lot Number, directly below the Model Number and Style. The lot number shall:

   1. Incorporate a means of identifying the year and quarter of manufacture of the device;

   2. Be numbered serially; and

   3. Provide a means of identifying the device as the product of a particular factory (if a manufacturer produces PFDs at more than one factory);

f) The Mark or Name of the Certification Organization, in the lower right corner of the Panel; and

g) State “Approved only when worn”, if applicable in the bottom left of the panel. See the following:

<table>
<thead>
<tr>
<th>English</th>
<th>French</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved only when worn.</td>
<td>Approuvé que lorsqu’ils sont usés.</td>
<td>Aprobado sólo cuando se usa.</td>
</tr>
</tbody>
</table>
CHOOSE THE DEVICE YOU WILL WANT TO WEAR

SIZE & FIT
- Check label for user weight and chest size.
- Different body types float differently.
- Try your device on in the water to ensure your airway is clear.
- A good fit is secure, comfortable, and adjustable.

PERFORMANCE
- Lower level number generally offers greater mobility, comfort, and style with good flotation for most people.
- Higher level number generally offers greater flotation, turning, and stability in the water.

![Device turn diagram]

CONSIDER YOUR ACTIVITY & ENVIRONMENT

WATER SAFETY INFO *
- In over 80% of boating fatalities the person was not wearing flotation.
- Most of these are sudden falls overboard or capsize of a small boat.
- The first moments in the water are critical, even for experienced swimmers.
- Cold water shock causes involuntary gasping, loss of muscle control and swimm failure.
- Long term immersion in cold water causes hypothermia and requires thermal protection and flotation in the HELP position to conserve energy.

FLOTATION DEVICES SAVE LIVES

Figure 37.1a - Choose the Device You Will Want to Wear (front)
BSR/UL 1453, Standard for Safety for Electric Booster and Commercial Storage Tank Water Heaters

1. Revision to polymeric material and thermal insulation requirements

PROPOSAL

6.1.5 The outer jacket of the water heater shall be made of metal. If the outer jacket encloses insulated or uninsulated current-carrying parts, it shall have a minimum thickness as indicated in Table 6.1 or Table 6.2, as applicable.

6.1.6 An outer jacket of polymeric material that also encloses insulated or uninsulated current-carrying parts shall comply with the enclosure requirements in Tables 6.3 and 6.4.

Exception: An outer jacket is required to comply only with the requirements in Table 6.5, when the outer jacket:

a) Does not enclose any current-carrying parts; or

b) Encloses parts that are completely covered with minimum 1/32 inch (0.8 mm) thick electrical insulation.

(NEW) Table 6.3

<table>
<thead>
<tr>
<th>Supply connection</th>
<th>Encloses current-carrying parts</th>
<th>Direct support of current-carrying parts</th>
<th>Indirect support of current-carrying parts</th>
<th>Enclosure application code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parts with insulation less than 0.028 inch (0.71 mm) thick</td>
<td>No parts with insulation less than 0.028 inch (0.71 mm) thick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduit</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>1</td>
</tr>
<tr>
<td>Conduit</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Conduit</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>3</td>
</tr>
<tr>
<td>Conduit</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Conduit</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Cord</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Cord</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>7</td>
</tr>
<tr>
<td>Cord</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>8</td>
</tr>
<tr>
<td>Cord</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>9</td>
</tr>
<tr>
<td>Cord</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>10</td>
</tr>
</tbody>
</table>
(NEW) Table 6.4

Polymeric material enclosure property and test requirements

<table>
<thead>
<tr>
<th>Application code (see Table 6.3 for code)</th>
<th>Minimum flammability classification</th>
<th>Resistance to ignition</th>
<th>Electrical</th>
<th>End product tests&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximun hot wire (HWI)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Maximun high current (HAI)&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Minimun dielectric strength, volts&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Maximun high voltage track rate (HVTR)&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>1  5V</td>
<td>3  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2  5V</td>
<td>-  2</td>
<td>5000</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>3  5V</td>
<td>3  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4  5V</td>
<td>-  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5  5V</td>
<td>-  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6  5V</td>
<td>3  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7  5V</td>
<td>-  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8  5V</td>
<td>3  2</td>
<td>5000</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>9  5V</td>
<td>3  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10 5V</td>
<td>-  2</td>
<td>5000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<sup>a</sup> The flammability classification is to be determined by tests described in the Standard for Tests for Flammability of Plastic Material for Parts in Devices and Appliances, UL 94, unless it has already been determined to be 5V.

<sup>b</sup> Tests are to be conducted in accordance with the Standard for Polymeric Materials - Short Term Property Evaluations, UL 746A.

<sup>c</sup> The Performance Level Category (PLC) value is as specified in the Standard for Polymeric Materials - Use in Electrical Equipment Evaluations, UL 746C.

<sup>d</sup> Tests are to be conducted in accordance with UL 746C.

(NEW) Table 6.5

Polymeric outer jacket

<table>
<thead>
<tr>
<th>Part</th>
<th>Impact test&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Burning characteristics</th>
<th>Moisture resistance&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer jacket, indoor only</td>
<td></td>
<td>Maximum flame spread index&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Minimum flammability classification&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Impact tests are to be conducted in accordance with UL 746C.

<sup>b</sup> Maximum flame spread index tests are to be conducted in accordance with UL 746C.

<sup>c</sup> Minimum flammability classification tests are to be conducted in accordance with UL 746C.

<sup>d</sup> Moisture resistance tests are to be conducted in accordance with UL 746C.
A.  Less than 10 square feet (0.93 m²) and all dimension less than 6 feet (1.83 m)  
   X     -   HB     -  

B.  10 square feet or more, or a single dimension greater than 6 feet  
   X     200   HB     -  

Outer Jacket, damp locations  

| A. Less than 10 square feet (0.93 m²) and all dimension greater than 6 feet (1.83 m) | X | - | HB | - |

| B. 10 square feet or more, or a single dimension greater than 6 feet | X | 200 | HB | X |

Test is to be conducted in accordance with the Resistance to Impact Test described in the Standard for Polymeric Materials - Use in Electrical Equipment Evaluations, UL 746C.

The maximum flame spread index is to be determined by the method described in the Standard for Test for Surface Burning Characteristics of Building Materials, UL 723, or in accordance with the Test for Surface Flammability of Materials Using a Radiant heat Energy Source, ASTM E162.

The flammability classification is to be determined by tests described in the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94.

Moisture resistance is to be determined in accordance with the Standard Test Method for Water Absorption of Plastics, ASTM D570, and the method for measuring water absorption of polymeric materials in the Standard for Polymeric Materials - Short Term Property Evaluations, UL 746A.

20 Thermal Insulation

20.1 General

20.1.1 Thermal insulation shall not contact an uninsulated live part of a water heater. Thermal insulation in contact with wiring shall be nonabsorbent and resistant to combustion.

Exception: Glass wool or other thermal insulation material may be used if investigated and found to be acceptable for such contact.

20.1.2 Thermal insulation in contact with a live part of wiring shall not have a flame spread rating greater than 75 and shall not absorb water. Thermal insulation in direct contact with a live part shall be glass wool or equivalent material that is nonconductive, nonabsorbent, resistant to combustion, and that has been shown by investigation to be intended for such use.
20.1.4 Determination of the acceptability of an adhesive is not required if the thermal insulation is mechanically supported by at least one rivet or the equivalent per square foot of material.

20.2 Synthetic Polymeric foam

20.2.1 If synthetic polymeric foam is used as thermal insulation:

a) The foam shall be completely enclosed by metal having a thickness as indicated in Tables 6.1 and 6.2, an outer jacket in accordance with 6.1.5 or 6.1.6, as applicable;

b) All enclosure fastening means shall be mechanically secured;

c) The foam shall not be in contact with the internal wiring of the water heater; and

d) The foam shall be located no less than 2 inches (50.8 mm) from any electrical component, such as a thermostat or heating element; and

e) The foam shall be rated for the temperatures involved as specified in the Standard for Polymeric Materials - Long Term Property Evaluations, UL 746B.

Exception No. 1: With respect to (a), foam that has a flame spread classification of 25 or less as shown by the Standard Test for Surface Burning Characteristics of Building Materials, UL 723, is not required to be enclosed in metal.

Exception No. 2: As an alternative to (a), polyvinyl chloride, polyethylene, or the equivalent shall be used in place of enclosure metal at a plumbing connection when the opening at the connection does not exceed three times the diameter of the pipe.

Exception No. 2 3: With respect to (c), the foam may be in contact with internal wiring if it shall not be in contact with internal wiring unless the entrance and exit wiring holes are sealed with PVC grommets or sealing compound.

Exception No. 3 4: If the entrance and exit wiring holes are not sealed as specified in Exception No. 2, the foam may be in contact with internal wiring and the electrical components may be located less than 2 inches from the foam if no fire occurs as a result of the electrical disturbance test described in Section 53, Electrical Disturbance Evaluation of Foam Thermal Insulation. With regard to (c) and (d), the foam shall not be in contact with internal wiring and the electrical components shall not be located less than 2 inches from the foam unless:

a) The foam has a flame class rating of HF-1 or HF-2 in accordance with the Appendix A included with the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94; or

b) No fire occurs as a result of the electrical disturbance test described in Section 51, Electrical Disturbance Evaluation of Foam Thermal Insulation.

Exception No. 5: With regard to (e), a foam is not required to be temperature rated as specified in UL 746B if it is not subjected to temperatures exceeding the temperature requirements documented by the foam manufacturer.
BSR/UL 1558, Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear

1. Increasing Voltage Ratings of Products Covered by UL 1558 to Include 1000 V

PROPOSAL

1.4 These requirements cover equipment rated 600 1000 V ac or less nominal, 635 1058 V ac maximum.

6.2.10 A bus bar or uninsulated live part, other than a pressure wire connector as mentioned in the Exception of 12.2.7, shall be secured so that ordinary vibration will not loosen the securing means, and shall be prevented from turning or shifting in position if any spacings less than half those indicated in Table 12.1 would result from such turning or shifting. A bus bar provided with one or more insulators that must be removed when a unit is installed shall be prevented from any turning that would result in spacings less than half those specified in Table 12.1 with all insulators in place, or that would result in spacings less than 1/8 inch (3.2 mm) for any voltage up to 250 V, or 1/4 inch (6.4 mm) for any voltage of 251 to 600 1000 V, with any insulators omitted.

Table 12.1
Minimum acceptable spacings - power circuits

<table>
<thead>
<tr>
<th>Voltage involved</th>
<th>Minimum spacing between live parts opposite polarity</th>
<th>Minimum spacing through air and over surface and grounded metal parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than</td>
<td>Through air</td>
<td>Over surface</td>
</tr>
<tr>
<td>0</td>
<td>1/2 (12.7)</td>
<td>3/4 (19.1)</td>
</tr>
<tr>
<td>125</td>
<td>3/4 (19.1)</td>
<td>1-1/4 (31.8)</td>
</tr>
<tr>
<td>250</td>
<td>1 (25.4)</td>
<td>2</td>
</tr>
<tr>
<td>600</td>
<td>1 (25.4)</td>
<td>1</td>
</tr>
</tbody>
</table>

a A through air spacing of not less than 1/2 inch (12.7 mm) is acceptable:

1) At a molded-case circuit breaker or a switch, other than a snap switch,
2) Between uninsulated live parts of a meter mounting base and grounded dead metal, and
3) Between grounded dead metal and the neutral of a 480Y/277-V, 3-phase, 4-wire switchgear section.
### Table 12.3
Control circuit spacings

<table>
<thead>
<tr>
<th>Voltage involved</th>
<th>Minimum acceptable spacings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between uninsulated live parts of opposite polarity and between an uninsulated live part and an exposed or uninsulated dead metal part other than the enclosure</td>
</tr>
<tr>
<td>Greater than</td>
<td>Over surface</td>
</tr>
<tr>
<td>0</td>
<td>inches (mm)</td>
</tr>
<tr>
<td>Maximum</td>
<td>1/4 (6.4)</td>
</tr>
<tr>
<td>125</td>
<td>3/8 (9.5)</td>
</tr>
<tr>
<td>250</td>
<td>1/2 (12.7)</td>
</tr>
<tr>
<td>600</td>
<td>1/2 (12.7)</td>
</tr>
<tr>
<td>1000</td>
<td>1/2 (12.7)</td>
</tr>
</tbody>
</table>

<sup>a</sup> The spacing between wiring terminals of opposite polarity shall not be less than 1/4 inch (6.4 mm) in any case if the terminals are in the same plane.

<sup>b</sup> A metal piece attached to the enclosure shall be considered to be a part of the enclosure for the purpose of this note if deformation of the enclosure is likely to reduce the spacing between the metal piece and a live part.

13.1.5 A switchgear section marked for service equipment use for 3-phase, 4-wire, wye connected services rated in excess of 150 V to ground, but not exceeding 600 1000 V phase-to-phase, shall be provided with ground-fault protection for each service disconnecting means rated 1000 A or more. The ground-fault sensing and relaying equipment provided shall operate to cause the service disconnecting means to open all ungrounded conductors of the faulted circuit. The maximum setting of the ground fault protection shall be 1200 A. It is assumed that a 3-phase, 3-wire switchgear assembly may be connected to a solidly grounded 3-phase, 4-wire, wye-connected service.

**Exception No. 1:** If each service disconnecting means rated 1000 A or more, is provided with a shunt trip that is intended for use with ground-fault protection, the ground-fault sensors or relaying equipment or both may be in a separate section of the switchgear if several sections are intended for use in a group.

**Exception No. 2:** Ground-fault protection need not be provided for a switchgear section marked in accordance with 19.4.5.

**Exception No. 3:** If marked in accordance with 19.4.6, ground-fault protection need not be provided for a source intended to supply power to a fire pump or a legally required standby system.
13.3.1 Equipment shall not be connected to the supply side of the service disconnecting means.

Exception No. 1: Meters nominally rated not in excess of 600 1000 V located in the switchgear may be connected to the supply side of the service disconnecting means.

Exception No. 2: Instrument transformers (current and potential), high-impedance shunts, surge-protective devices identified for use on the supply side of the service disconnect, load management devices, and surge arresters located in the switchgear may be connected to the supply side of the service disconnecting means.

Exception No. 3: Taps as described in 4.1 may be located on the supply side of the service disconnecting means.

Exception No. 4: Control circuits of power operable service disconnecting means, including a ground-fault protection system, as covered in Exception No. 2 of 13.1.3, may be connected to the supply side of the service disconnecting means.

19.4.5 A switchgear section that is intended only for use as service equipment, or acceptable for use as service equipment and not provided with ground-fault protection as covered in Exception No. 2 in 13.1.5, shall be marked for the use specified as follows:

a) For a switchgear section rated 480Y/277, 600Y/346, or 1000Y/577 V, 3-phase, 4-wire:

1) "Suitable only for use as service equipment when supplying a continuous industrial process", or

2) "Suitable for use as service equipment only if supplying a continuous industrial process."

b) For a switchgear section rated 480, or 600 or 1000 V, 3-phase, 3-wire, or 600Y/346 V, 3-phase, 4-wire, marked as specified in sub-item 1 or 2 of (a) with the following addition: "or for systems where the neutral is not solidly grounded."

20.1 To provide for system performance testing as required by the National Electrical Code, ANSI/NFPA No. 70, each ground fault relay or product incorporating a ground fault relay or its function intended for protection of a solidly grounded wye service rated more than 150 V to ground but not exceeding 600 1000 V phase-to-phase shall be provided with information sheets describing system testing instructions, and with a test form. The form shall include a space for the date the test was performed and the results, and shall state that the form should be retained by those in charge of the building’s electrical installation in order to be available to the authority having jurisdiction. The instruction shall include the following items and shall basically prescribe only that information necessary to perform the tests. The instructions shall be separate and apart from any more detailed test description that the manufacturer may wish to provide. The instructions shall specify that:

a) The interconnected system shall be evaluated in accordance with the switchgear manufacturer’s detailed instructions, and that this evaluation is to be undertaken by qualified personnel.

b) The proper location of the sensors around the bus of the circuit to be protected shall be determined. This can be done visually, with knowledge of which bus is involved.
c) The grounding points of the system shall be verified to determine that ground paths do not exist that would bypass the sensors. The use of high-voltage testers and resistance bridges may be suggested.

d) The installed system is to be tested for correct response by the application of full scale current into the equipment to duplicate a ground-fault condition, or by equivalent means such as by simulated fault current generated by:

1) A coil around the sensors, or

2) A separate test winding in the sensors.

e) The results of the test are to be recorded on the test form provided with the instructions.
BSR/UL 8750, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products

1. Revise potting compound requirements

6.7.2 During the Temperature Test of 8.3, a potting compound shall comply with (a) or (b) as applicable:

a) A Unless the material is thermosetting, a polymeric potting compound shall not exceed its Relative Thermal Index (RTI).

Exception No. 1: A thermoplastic polymeric potting compound may be used if the maximum potting compound temperature doesn't exceed 90°C (194°F) during the Temperature Test of 8.3.

Exception No. 2: A thermoplastic polymeric potting compound may be used if the maximum potting compound temperature is at least 15°C (27°F) less than the softening point of the compound as determined by the Standard Test Methods for Softening Point of Resins Derived from Pine Chemicals and Hydrocarbons, by Ring-and-Ball Apparatus, ASTM E28.

Exception No. 3: A thermoplastic polymeric potting compound may be used if the maximum potting compound temperature is at least 25°C (77°F) less than the softening point of the compound as determined by the Standard Test Methods for Vicat Softening Temperature of Plastics, ASTM D1525.

b) An asphalt potting compound shall remain at least 15°C (27°F) below its softening point as determined by the Standard Test Methods for Softening Point of Resins Derived from Pine Chemicals and Hydrocarbons, by Ring-and-Ball Apparatus, ASTM E28 Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus), ASTM D36/D36M.