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American National Standards

Call for comment on proposals listed

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

Ordering Instructions for "Call-for-Comment" Listings

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

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

* Standard for consumer products

Comment Deadline: September 16, 2018

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

Addenda

BSR/ASHRAE Addendum 161a-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2013)

This proposed addendum clarifies the units of measure in Sections 7.1 (Ozone) and 8.17 (Dry Ice) are parts per million by volume, not by weight.

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

Send comments (with copy to psa@ansi.org) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

BSR/ASHRAE Addendum 161b-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2013)

This proposed addendum removes a reference that is not applicable to this standard.

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

Send comments (with copy to psa@ansi.org) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

BSR/ASHRAE Addendum 161c-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2013)

This proposed addendum corrects an error in Section 8.6.b (Hydraulic Fluid) that refers to TCPs in hydraulic fluids (as TCPs are not added to hydraulic fluids). Also, in Sections 8.6.b and 8.7.b (Engine Oil), the text is generalized to apply to reportable hazardous ingredients and the relevant reference is updated.

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

Send comments (with copy to psa@ansi.org) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

BSR/ASHRAE Addendum 161d-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2013)

This proposed addendum updates the definition of HEPA Filter Type A in Section 6.3.1 (Recirculated Air Quality) and updates the reference for this definition in Section 11 (References).

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

Send comments (with copy to psa@ansi.org) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

BSR/ASHRAE Addendum 161e-201x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2013)

This proposed addendum updates the filter type and reference of Section 6.3.1 (Recirculated Air Quality) and updates the respective reference in Section 11 (References).

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

Send comments (with copy to psa@ansi.org) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME A112.6.3-201x, Floor and Trench Drains (revision of ANSI/ASME A112.6.3-2016)

This Standard covers floor, area, adjustable floor, and trench drains that are used inside of, or outside and immediately adjacent to, building structures. This Standard specifies design requirements, definitions, nomenclature, outlet types and connections, grate opening areas, top-loading classifications, materials, and finishes.

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

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

NSF (NSF International)

Revision

BSR/NSF 49-201x (i59r2), Biosafety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-201x (i59r2))

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor/blower performance.

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

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

BSR/NSF 49-201x (i92r7), Biosafety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2016)

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor/blower performance.

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

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

BSR/NSF 49-201x (i108r4), Biosafety Cabinetry (revision of ANSI/NSF 49-2016)

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor/blower performance.

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

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

BSR/NSF 426-201x (i6r1), Environmental Leadership and Corporate Social Responsibility Assessment of Servers (revision of ANSI/NSF 426-2017)

This Standard defines environmental and corporate social responsibility performance criteria for computer servers as defined in the ENERGY STAR Server specification. This Standard establishes criteria for multiple levels of environmental leadership and corporate social responsibility performance throughout the product life cycle, relating to energy efficiency; management of substances; preferable materials use; product packaging; design for repair, reuse and recycling; product longevity; responsible end-of-life management; and corporate responsibility.

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

Send comments (with copy to psa@ansi.org) to: Jessica Slomka, (734) 214-6219, jslomka@nsf.org

BSR/NSF 426-201x (i7r1), Environmental Leadership and Corporate Social Responsibility Assessment of Servers (revision of ANSI/NSF 426-2017)

This Standard defines environmental and corporate social responsibility performance criteria for computer servers as defined in the ENERGY STAR Server specification. This Standard establishes criteria for multiple levels of environmental leadership and corporate social responsibility performance throughout the product life cycle, relating to energy efficiency; management of substances; preferable materials use; product packaging; design for repair, reuse and recycling; product longevity; responsible end-of-life management; and corporate responsibility.

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

Send comments (with copy to psa@ansi.org) to: Jessica Slomka, (734) 214-6219, jslomka@nsf.org

UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 60335-2-8-201X, Standard for Safety for Household and Similar Electrical Appliances - Part 2: Particular Requirements for Shavers, Hair Clippers, and Similar Appliances (Proposal date 8-17-18) (national adoption of IEC 60335-2-8 with modifications and revision of ANSI/UL 60335-2-8-2018)

(1) Nonpolarized attachment plugs for Class II shavers.

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

Send comments (with copy to psa@ansi.org) to: Ross Wilson, (919) 549-1511, Ross.Wilson@ul.com

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 489-201X, Standard for Safety for Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures (revision of ANSI/UL 489-2016)

(7) Addition of requirements from UL 489G into UL 489.

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

Send comments (with copy to psa@ansi.org) to: Patricia Sena, (919) 549-1636, patricia.a.sena@ul.com

BSR/UL 705-201X, Standard for Safety for Power Ventilators (revision of ANSI/UL 705-2018)

Revise UL 705 to require a ventilator employing more than one power source to be provided with a disconnect for each power supply.

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

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

BSR/UL 1773-201x, Standard for Safety for Termination Boxes (revision of ANSI/UL 1773-2016)

This proposal covers the removal of requirements for Inlet Assemblies for cord connections of Generators used in conjunction with Transfer Switch Equipment.

[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

BSR/UL 2443-201X, Standard for Flexible Sprinkler Hose with Fittings for Fire Protection Service (revision of ANSI/UL 2443-2016)

(1) Permanency of marking; (2) Thermoplastic inlet fittings; and (3) Revisions to clarify test methods and requirements.

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

Send comments (with copy to psa@ansi.org) to: Wathma Jayathilake, (613) 368-4432, Wathma.Jayathilake@ul.com

Comment Deadline: October 1, 2018

ALI (ASC A14) (American Ladder Institute)

Reaffirmation

BSR A14.3-2008 (R201x), Standard for Ladders - Fixed - Safety Requirements (reaffirmation of ANSI A14.3-2008)

This standard prescribes minimum requirements for the design, construction, and use of fixed ladders, and sets forth requirements for cages, wells, and ladder safety systems used with fixed ladders, in order to minimize personal injuries. All parts and appurtenances necessary for a safe and efficient ladder shall be considered integral parts of the design.

Single copy price: \$275.00 USD

Obtain an electronic copy from: info@americanladderinstitute.org

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

ANS (American Nuclear Society)

Reaffirmation

BSR/ANS 41.5-2012 (R201x), Verification and Validation of Radiological Data for Use in Waste Management and Environmental Remediation (reaffirmation of ANSI/ANS 41.5-2012)

This standard establishes criteria for verification and validation of radioanalytical data for waste management and environmental remediation activities. It applies to the independent review of the data-generation process for field measurements and radioanalytical laboratories. While this standard does not specifically address all nondestructive assays and in situ measurements, the general principles and some of the elements of this standard may apply. This standard does not address non-radioassay measurement methods (e.g., inductively coupled plasma-mass spectroscopy, kinetic phosphorescence analysis, X-ray diffraction).

Single copy price: \$177.00

Obtain an electronic copy from: orders@ans.org

Order from: orders@ans.org

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

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

Addenda

BSR/ASHRAE Addendum a to BSR/ASHRAE Standard 184-201x, Method of Test for Field Performance of Liquid-Chilling Systems (addenda to)

ASHRAE Standard 184 was published in 2016 and prescribes methods of testing to measure performance, such as capacity and efficiency, of liquid-chilling systems as installed in the field within a building system. A key concept of the testing process is to conduct an analysis to estimate the uncertainty of both measurements and results calculated from those measurements. Addendum a to the standard provides users of the standard additional guidance on conducting this analysis by adding two informative appendices to the standard.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

BSR/ASHRAE Addendum br to BSR/ASHRAE Standard 135-201x, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016)

This addendum adds new engineering units, a new mandate to accept writes of NULL to non-commandable properties, and intrinsic fault reporting to Lighting Output object type; deprecates time form of timestamps; clarifies the multi-state object types when Number_Of_States shrinks; fixes the language for event type and message text parameters of event notifications; clarifies the object instance 4194303; extends the ReadPropertyMultiple service to support the Network Port wildcard instance treatment; and clarifies the timestamp of trend log and trend log multiple log records.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

BSR/ASHRAE Addendum bt to BSR/ASHRAE Standard 135-201x, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016)

This addendum adds re-alert transitions to the CHANGE_OF_LIFE_SAFETY event algorithm, specific error codes for LifeSafetyOperation error situations, and support for elevator-based occupant evacuation (OEO) to the life safety objects.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

BSR/ASHRAE Addendum bu to BSR/ASHRAE Standard 135-201x, BACnet - A Data Communication Protocol for Building Automation and Control Networks (addenda to ANSI/ASHRAE Standard 135-2016)

This addendum introduces BACnetARRAY of BACnetLIST collection property data type; adds clarifications on character and value encoding issues; and clarifies transmission of unconfirmed COV notifications, logging of event notifications, recording of status events in log buffers, Event Enrollment object reliability evaluation, and the Global Group object reliability evaluation.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

ASQ (ASC Z1) (American Society for Quality)

Reaffirmation

BSR ASQ Z1.4-2003 (R201x), Sampling procedures and tables for inspection by attributes (reaffirmation of ANSI/ASQ Z1.4-2003 (R2013))

Establishes sampling plans and procedures for inspection by attributes. When specified by the responsible authority, this publication shall be referenced in the specification, contract, inspection instructions, or other documents and the provisions set forth herein shall govern. The "responsible authority" shall be designated in one of the above documents, as agreed to by the purchaser and seller or producer and user.

Single copy price: \$199.00

Obtain an electronic copy from: <https://asq.org/quality-press/display-item?item=T964e>

Order from: <https://asq.org/quality-press/display-item?item=T964>

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

ASTM (ASTM International)

New Standard

BSR/ASTM WK58446-201x, Guide for Cybersecurity and Cyberattack Mitigation (new standard)

http://www.astm.org/ANSI_SA

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

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

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

AWS (American Welding Society)

Revision

BSR/AWS A3.0M/A3.0-201x, Standard Terms and Definitions Including Terms for Adhesive Bonding, Brazing, Soldering, Thermal Cutting, and Thermal Spraying (revision of ANSI/AWS A3.0M/A3.0-2009)

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

Single copy price: \$86.00

Obtain an electronic copy from: sborrero@aws.org

Order from: sborrero@aws.org

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

BHMA (Builders Hardware Manufacturers Association)

Reaffirmation

BSR/BHMA A156.16-2013 (R201x), Standard for Auxiliary Hardware (reaffirmation of ANSI/BHMA A156.16-2013)

This Standard establishes requirements for auxiliary hardware and includes performance tests covering operational, cyclical, strength or finish criteria.

Single copy price: \$36.00

Obtain an electronic copy from: mtierney@kellencompany.com

Order from: mtierney@kellencompany.com

Send comments (with copy to psa@ansi.org) to: Michael Tierney, mtierney@kellencompany.com

BSR/BHMA A156.28-2013 (R201x), Recommended Practice for Mechanical Keying Systems (reaffirmation of ANSI/BHMA A156.28-2013)

This recommended practice is intended for building owners, security professionals, and others responsible for designing, implementing, and maintaining secure keying systems. Minimizes legal liability by providing industry proven guidelines. It covers system design, to provide design criteria to establish and maintain a secure keying system. The purpose of this document is to provide guidelines for the essential keying conference, establish good practices for effective key management, and give building owners the ability to extend the life of keying systems to meet future demands.

Single copy price: Free

Obtain an electronic copy from: mtierney@kellencompany.com

Order from: mtierney@kellencompany.com

Send comments (with copy to psa@ansi.org) to: Michael Tierney, mtierney@kellencompany.com

ECIA (Electronic Components Industry Association)

Reaffirmation

BSR/EIA/ECA 364-18B-2007 (R201x), Visual and Dimensional Inspection Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA/ECA 364-18B-2007 (R2012))

This standard establishes guidelines for visual and dimensional inspection of electrical connectors and sockets prior to, during, and after other test procedures.

Single copy price: \$72.00

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

Send comments (with copy to psa@ansi.org) to: Ed Mikoski, emikoski@ecianow.org

EOS/ESD (ESD Association, Inc.)

Revision

BSR/ESD STM11.31-201x, ESD Association Standard Test Method for Evaluating the Performance of Electrostatic Discharge Shielding Materials - Bags (revision of ANSI/ESD STM11.31-1994 (R2012))

This document evaluates the attenuation ability of electrostatic discharge shielding bags.

Single copy price: \$145.00 (List)/\$115.00 (EOS/ESD members) [Hard Copy]; \$135.00 (List)/\$105.00 (EOS/ESD members) [PDF]

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl, (315) 339-6937, cearl@esda.org

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

FM (FM Approvals)

Reaffirmation

BSR/FM 4910-2013 (R201x), Cleanroom Materials Flammability Test Protocol (reaffirmation of ANSI/FM 4910-2013)

Describes minimum performance requirements for materials that are intended for use in cleanroom facilities. This standard evaluates the ability of the materials and, in turn, the system components to limit fire spread and smoke damage resulting from a fire in the cleanroom environment.

Single copy price: Free

Obtain an electronic copy from: josephine.mahnken@fmapprovals.com

Send comments (with copy to psa@ansi.org) to: josephine.mahnken@fmapprovals.com

BSR/FM 4950-2007 (R201x), Evaluating Welding Pads, Welding Blankets and Welding Curtains for Hot Work Operations (reaffirmation of ANSI/FM 4950-2007 (R2013))

Sets performance requirements for welding pads, welding blankets and welding curtains used as a means of preventing the ignition of combustibles during welding, cutting, and other hot work operations. Welding pads, welding blankets, and welding curtains will be evaluated on their ability to: prevent burn-through of the material; provide adequate protection for adjacent combustibles; limit temperature transmission through the material; resist melting, dripping, or deformation; maintain their flexibility, durability, and structural integrity; and resist degradation from weathering.

Single copy price: Free

Obtain an electronic copy from: josephine.mahnken@fmapprovals.com

Send comments (with copy to psa@ansi.org) to: josephine.mahnken@fmapprovals.com

GTESS (Georgia Tech Energy & Sustainability Services)

New National Adoption

BSR/MSE/ISO TS 50008-201x, Energy management and energy savings - Building energy data management for energy performance - Guidance for a systemic data exchange approach (identical national adoption of ISO 50008)

This document provides guidance on how the energy management team (EnMT) in an organization can define, request, and regularly access the data and information needed to implement an EnMS designed to continually improve energy performance in buildings.

Data can be provided by human processes or by building automation, control, information technology, or even accounting systems. If the building information system (BIS) is accessible by the EnMT, the BIS can facilitate the provision of data and information. This could include data used in determining significant energy uses (SEUs), managing to improve energy performance - including energy consumption, energy use, and energy efficiency - through the use of energy performance indicators (EnPIs). The following cases are not in the scope of this document:

- Residential or industrial buildings;
- Buildings containing an industrial process where the industrial processes cannot be separated from other uses. However, many of the principles in this document can be applied to these or other types of buildings.

NOTE: Industrial processes might include manufacturing, packaging, transportation, assembly, etc. Building automation data communication protocols themselves are not in the scope of this document. This document does not consider the selection of energy management software, hardware, and control algorithms for automatically managing buildings.

Single copy price: \$100.00

Obtain an electronic copy from: deann.desai@gatech.edu

Order from: Deann Desai, (770) 605-4474, deann.desai@innovate.gatech.edu

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

HL7 (Health Level Seven)

Reaffirmation

BSR/HL7 V3 CPPV3MODELS, R1-2012 (R201x), HL7 Version 3 Standard: Core Principles and Properties of Version 3 Models, Release 1 (reaffirmation of ANSI/HL7 V3 CPPV3MODELS, R1-2012)

This standard defines the infrastructure for the core models - Data Types, Reference Information, and vocabulary - that form the foundation for all Version 3 models. In addition to specifying the representations of these models, the document specifies how these three models should be used in combination to support implementation of V3 standards.

Single copy price: Free to members and non-members

Obtain an electronic copy from: Karenvan@HL7.org

Order from: Karen Van Hentenryck, (734) 677-7777, Karenvan@HL7.org

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

BSR/HL7 V3 MFRI, R1-2006 (R201x), HL7 Version 3 Standard: Master File/Registry Infrastructure, R1 (reaffirmation of ANSI/HL7 V3 MFRI, R1-2006 (R2011))

This standard addresses the communications environment that is considered common to all HL7 Version 3 messaging implementations. It covers the transmission wrapper as well as the transmission interaction patterns.

Single copy price: Free to members and non-members

Obtain an electronic copy from: Karenvan@HL7.org

Order from: Karen Van Hentenryck, (734) 677-7777, Karenvan@HL7.org

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

HL7 (Health Level Seven)

Revision

BSR/HL7 V3 CPPV3MODELS, R2-201x, HL7 Version 3 Standard: Core Principles and Properties of Version 3 Models, Release 2 (revision and redesignation of ANSI/HL7 V3 CPPV3MODELS, R1-2012)

As the HL7 Version 3 Methodology matured, the responsible work groups realized that there was a "missing" specification. The "missing" specification should specify what are the essential features of the models on which V3 is based and how should these models be used to develop and to implement V3 specifications. This document is that "missing" specification.

Single copy price: Free to members; free to non-member 90 days following ANSI approval and publication by HL7.

Obtain an electronic copy from: Karenvan@HL7.org

Order from: Karen Van Hentenryck, (734) 677-7777, Karenvan@HL7.org

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

NEMA (ASC C12) (National Electrical Manufacturers Association)

New National Adoption

BSR/IEC 62056-5-3 ED3-201x, Electricity Metering Data Exchange - The DLMS/COSEM Suite - Part 5-3:DLMS/COSEM Application Layer (identical national adoption of IEC62056-5-3 ED3)

This part of IEC 62056 specifies the DLMS/COSEM application layer in terms of structure, services, and protocols for DLMS/COSEM clients and servers, and defines rules to specify the DLMS/COSEM communication profiles. It defines services for establishing and releasing application associations, and data communication services for accessing the methods and attributes of COSEM interface objects, defined in IEC 62056-6-2 using either logical name (LN) or short name (SN) referencing.

Single copy price: \$410.00

Obtain an electronic copy from: pau_orr@nema.org

Order from: Paul Orr, (703) 841-3227, Pau_orr@nema.org

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

BSR/IEC 62056-6-1 ED3-201x, Electricity Metering Data Exchange - The DLMS/COSEM Suite - Part 6-1: Object Identification System (OBIS) (identical national adoption of IEC 62056-6-1 ED3)

This part of IEC 62056 specifies the overall structure of the OBject Identification System (OBIS) and the mapping of all commonly used data items in metering equipment to their identification codes. OBIS provides a unique identifier for all data within the metering equipment, including not only measurement values, but also abstract values used for configuration or obtaining information about the behaviour of the metering equipment.

Single copy price: \$281.00

Obtain an electronic copy from: pau_orr@nema.org

Order from: Paul Orr, (703) 841-3227, Pau_orr@nema.org

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

BSR/IEC 62056-6-2 ED3-201x, Electricity Metering Data Exchange - The DLMS/COSEM Suite - Part 6-2: COSEM Interface Classes (identical national adoption of IEC 62056-6-2 ED3)

This part of IEC 62056 specifies a model of a meter as it is seen through its communication interface(s). Generic building blocks are defined using object-oriented methods, in the form of interface classes to model meters from simple up to very complex functionality.

Single copy price: \$410.00

Obtain an electronic copy from: pau_orr@nema.org

Order from: Paul Orr, (703) 841-3227, Pau_orr@nema.org

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

BSR/IEC 62056-9-7 ED 1.0-201x, Electricity Metering Data Exchange - Communication Profile for TCP-UDP/IP Networks (identical national adoption of IEC 62056-9-7 ED 1.0)

This part of IEC 62056 specifies the DLMS/COSEM communication profile for TCP-UDP/IP networks.

Single copy price: \$117.00

Obtain an electronic copy from: pau_orr@nema.org

Order from: Paul Orr, (703) 841-3227, Pau_orr@nema.org

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

BSR/IEC TS 62056-8-20 ED 1.0-201x, Electricity Metering Data Exchange - The DLMS/COSEM Suite - Part 8-20: Mesh Communication Profile for Neighbourhood Networks (identical national adoption of IEC TS 62056-8-20 ED 1.0)

This part of IEC 62056 specifies a DLMS/COSEM communication profile that can be used in a smart metering system in which the Neighbourhood Networks (NN) are mesh networks. This profile may be considered as an adaptation and extension of the UDP/IP communication profile specified in IEC 62056-9-7:2013. As in that standard, the PHY and MAC layers are out of the Scope.

Single copy price: \$164.00

Obtain an electronic copy from: pau_orr@nema.org

Order from: Paul Orr, (703) 841-3227, Pau_orr@nema.org

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

NSF (NSF International)

Revision

BSR/NSF 14-201x (i99r2), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2017)

This Standard establishes minimum physical, performance, and health effects requirements for plastic piping system components and related materials. These criteria were established for the protection of public health and the environment.

Single copy price: Free

Obtain an electronic copy from: https://standards.nsf.org/apps/group_public/document.php?document_id=44045

Send comments (with copy to psa@ansi.org) to: Jason Snider, (734) 418-6660, jsnider@nsf.org

BSR/NSF 419-201x (i6r1), Public Drinking Water Equipment Performance - Membrane Filtration (revision of ANSI/NSF 419-2015)

This Standard is designed to describe the performance evaluation test procedure for the product-specific challenge testing of full-scale UF and MF membrane modules, bag filters, and cartridge filters for the removal of microbial contaminants. This Standard provides procedures to develop challenge testing Log Removal Values (LRVC_TEST), as required in the EPA's Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) published in 40 CFR 141-subpart W.

Single copy price: Free

Obtain an electronic copy from: https://standards.nsf.org/apps/group_public/download.php/44108/419i6r1%20-%20Section%205%20-%20JC%20memo%20&%20ballot.pdf

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

BSR/NSF 419-201x (i6r1), Public Drinking Water Equipment Performance - Membrane Filtration (revision of ANSI/NSF 419-2015)

This Standard is designed to describe the performance evaluation test procedure for the product-specific challenge testing of full-scale UF and MF membrane modules, bag filters, and cartridge filters for the removal of microbial contaminants. This Standard provides procedures to develop challenge testing Log Removal Values (LRVC_TEST), as required in the EPA's Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) published in 40 CFR 141-subpart W.

Single copy price: Free

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

BSR/NSF 426-201x (i3r1), Environmental Leadership and Corporate Social Responsibility Assessment of Servers (revision of ANSI/NSF 426-2017)

This Standard defines environmental and corporate social responsibility performance criteria for computer servers as defined in the ENERGY STAR Server specification. This Standard establishes criteria for multiple levels of environmental leadership and corporate social responsibility performance throughout the product life cycle, relating to energy efficiency; management of substances; preferable materials use; product packaging; design for repair, reuse, and recycling; product longevity; responsible end-of-life management; and corporate responsibility.

Single copy price: Free

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Send comments (with copy to psa@ansi.org) to: Jason Snider, (734) 418-6660, jsnider@nsf.org

BSR/NSF 426-201x (i4r1), Environmental Leadership and Corporate Social Responsibility Assessment of Servers (revision of ANSI/NSF 426-2017)

This Standard defines environmental and corporate social responsibility performance criteria for computer servers as defined in the ENERGY STAR Server specification. This Standard establishes criteria for multiple levels of environmental leadership and corporate social responsibility performance throughout the product life cycle, relating to energy efficiency; management of substances; preferable materials use; product packaging; design for repair, reuse, and recycling; product longevity; responsible end-of-life management; and corporate responsibility.

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Send comments (with copy to psa@ansi.org) to: Jessica Slomka, (734) 214-6219, jslomka@nsf.org

BSR/NSF 426-201x (i5r1), Environmental Leadership and Corporate Social Responsibility Assessment of Servers (revision of ANSI/NSF 426i5r1)

This Standard defines environmental and corporate social responsibility performance criteria for computer servers as defined in the ENERGY STAR Server specification. This Standard establishes criteria for multiple levels of environmental leadership and corporate social responsibility performance throughout the product life cycle, relating to energy efficiency; management of substances; preferable materials use; product packaging; design for repair, reuse, and recycling; product longevity; responsible end-of-life management; and corporate responsibility.

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BSR/NSF 426-201x (i13r1), Environmental Leadership and Corporate Social Responsibility Assessment of Servers (revision of ANSI/NSF 426-2017)

This Standard defines environmental and corporate social responsibility performance criteria for computer servers as defined in the ENERGY STAR Server specification. This Standard establishes criteria for multiple levels of environmental leadership and corporate social responsibility performance throughout the product life cycle, relating to energy efficiency; management of substances; preferable materials use; product packaging; design for repair, reuse, and recycling; product longevity; responsible end-of-life management; and corporate responsibility."

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UL (Underwriters Laboratories, Inc.)

New Standard

BSR/UL 1974-201x, Standard for Safety for Evaluation for Repurposing Batteries (new standard)

The proposed first edition of the Standard for Evaluation for Repurposing Batteries, UL 1974. This standard covers the sorting and grading process of battery packs, modules, and cells and electrochemical capacitors that were originally configured and used for other purposes, such as electric vehicle propulsion, and that are intended for a repurposed use application, such as for use in stationary energy storage and other applications. The process of sorting and grading these devices is essentially determining the state of health and other parameters to identify continued viability and the rating mechanisms the repurposing manufacturer may use for those that are determined suitable for continued use. This standard also covers application-specific requirements for battery packs utilizing repurposed batteries and components.

Single copy price: Free

Obtain an electronic copy from: <http://www.shopulstandards.com>

Send comments (with copy to psa@ansi.org) to: Megan Van Heirseele, (847) 664-2881, Megan.M.VanHeirseele@ul.com

UL (Underwriters Laboratories, Inc.)

Reaffirmation

BSR/UL 296A-2013 (R201x), Standard for Safety for Waste Oil-Burning Air-Heating Appliances (reaffirmation of ANSI/UL 296A-2013)

These requirements cover air-heating appliances of the central furnace and unit heater types and boiler assemblies intended for burning waste oil fuels and having fuel inputs rated no more than 20 gallons/hour (75.7 liters/hour) or approximately 3,000,000 Btu/hour (3,160,000 kJ/hour).

Single copy price: Free

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Send comments (with copy to psa@ansi.org) to: Marcia Kawate, (510) 319-4259, Marcia.M.Kawate@ul.com

BSR/UL 498-2018 (R201x), Standard for Safety for Attachment Plugs and Receptacles (reaffirmation of ANSI/UL 498-2018)

These requirements cover attachment plugs, receptacles, cord connectors, inlets, and current taps provided with wiring terminals for flexible cord, and flatiron and appliance plugs - all intended for connection to a branch circuit for use in accordance with the National Electrical Code, ANSI/NFPA 70.

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

BSR/UL 60947-1-2013 (R201x), Standard for Safety for Low-Voltage Switchgear and Controlgear - Part 1: General Rules (reaffirmation of ANSI/UL 60947-1-2013)

Reaffirmation of ANSI Approval.

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UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 749-201X, Standard for Safety for Household Dishwashers (Proposal dated 8-17-18) (revision of ANSI/UL 749-2017)

This Recirculation revises the proposal dated 2018-03-09 for the proposed 11th edition of UL 749.

Single copy price: Free

Obtain an electronic copy from: <http://www.shopulstandards.com>

Send comments (with copy to psa@ansi.org) to: Ross Wilson, (919) 549-1511, Ross.Wilson@ul.com

BSR/UL 2239-201X, Standard for Safety for Hardware for the Support of Conduit, Tubing, and Cable (revision of ANSI/UL 2239-2015)

(1) Addition of requirements to certify conduit and tubing supports for rooftops and duct banks.

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Send comments (with copy to psa@ansi.org) to: Joshua Johnson, (919) 549-1053, Joshua.Johnson@ul.com

Comment Deadline: October 16, 2018

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

API (American Petroleum Institute)

New National Adoption

BSR/API RP 2MET-201x, Derivation of Metocean Design and Operating Conditions (national adoption of ISO 19901-1 with modifications and revision of ANSI/API RP 2MET-2014)

This standard contains general requirements for the determination and use of meteorological and oceanographic (metocean) conditions for the design, construction and operation of offshore structures of all types.

Single copy price: \$50.00

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

ASME (American Society of Mechanical Engineers)

Revision

BSR/ASME Y14.41-201x, Digital Product Definition Data Practices (revision of ANSI/ASME Y14.41-2012)

This Standard establishes requirements and references documents applicable to the preparation and revision of digital product definition data, referred to as data sets in this standard. This standard defines exceptions and additional requirements to existing ASME standards for using digital product definition digital data set(s) or drawing graphic sheet(s) in digital format, referred to in this standard as drawing graphic sheet(s). When no exception or additional requirements are stated, existing ASME standards shall apply.

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: Fredric Constantino, (212) 591-8684, constantinof@asme.org

IEEE (Institute of Electrical and Electronics Engineers)

New Standard

BSR/IEEE 112-201x, Standard Test Procedure for Polyphase Induction Motors and Generators (new standard)

This standard covers instructions for conducting and reporting the more generally applicable and acceptable tests of polyphase induction motors and generators. Many of the tests described may be applied to both motors and generators, as needed, and no attempt is made to partition the test procedure into clauses and subclauses that separately apply to motors or to generators.

Single copy price: \$145.00 (pdf)/\$181.00 (print)

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Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 650-201x, Standard for Qualification of Class 1E Static Battery Chargers, Inverters, and Uninterruptible Power Supply Systems for Nuclear Power Generating Stations (new standard)

This standard describes methods for qualifying static battery chargers, inverters, and uninterruptible power supply (UPS) systems for Class 1E installations outside containment in nuclear power generating stations, and is not intended for qualification under harsh environment (example: Inside Containment) design basis conditions.

Single copy price: \$76.00 (pdf)/\$95.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

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BSR/IEEE 802.3bs-201x, Standard for Ethernet Amendment 10: Media Access Control Parameters, Physical Layers, and Management Parameters for 200 Gb/s and 400 Gb/s Operation (new standard)

Defines Ethernet Media Access Control (MAC) parameters, physical layer specifications, and management parameters for the transfer of Ethernet format frames at 200 Gb/s over single-mode fiber and 400 Gb/s over optical physical media.

Single copy price: \$267.00 (pdf)/\$335.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 802.15.8-201x, Standard for Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Peer Aware Communications (PAC) (new standard)

This standard defines physical layer (PHY) and medium access control (MAC) layer specifications for 14 Wireless Personal Area Networks (WPAN) Peer Aware Communications (PAC) optimized for peer-to-peer 15 and infrastructure-less communications with fully distributed coordination.

Single copy price: \$268.00 (pdf)/\$335.00 (print)

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BSR/IEEE 1450.4-201x, Standard for Extensions to Standard Test Interface Language (STIL) (IEEE Std 1450-1999) for Test Flow Specification (new standard)

This standard specifies extensions to IEEE Std. 1450-1999 that define the description of certain test flow and binning components of an Integrated Circuit (IC) test program in a test-hardware-independent manner. These extensions provide the language constructs and semantics necessary to describe both the test program flow as well as sequencing data needed to compose a test program to run on an Automated Test Equipment (ATE) platform

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BSR/IEEE 1804-201x, Standard for Fault Accounting and Coverage Reporting (FACR) for Digital Modules (new standard)

The standard formalizes aspects of the stuck-at fault model as they are relevant to the generation of test patterns for digital circuits. Its scope includes (a) fault counting, (b) fault classification, and (c) fault coverage reporting across different ATPG (automatic test pattern generation) tools, for the single stuck-at fault model. Fault Grading and Simulation is limited to the Verilog Gate Level representation of a digital circuit. With this standard, it shall be incumbent on all ATPG tools (which comply to this standard) to report fault coverage in a uniform way.

Single copy price: \$52.00 (pdf)/\$65.00 (print)

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BSR/IEEE 1900.5.2-201x, Standard for Method for Modeling Spectrum Consumption (new standard)

This standard defines a generalized method for modeling spectrum consumption of any type of use of RF spectrum and the attendant computations for arbitrating the compatibility among models. The methods of modeling are chosen to support the development of tractable algorithms for determining the compatibility between models and for performing various spectrum management tasks that operate on a plurality of models.

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BSR/IEEE 1903.1-201x, Standard for Content Delivery Protocols of Next Generation Service Overlay Network (new standard)

This Standard specifies protocols among Content Delivery (CD) Functional Entity (FE), Service Routing (SR) FE, Service Policy Decision (SPD) FE, Service Discovery and Negotiation (SDN) FE, and Context Information Management (CIM) FE to support advanced content delivery capability in next generation service overlay networks. The content delivery capability aims to support content discovery, content cache and storage management, content delivery control, and transport QoS control including context-aware and dynamically adaptive content delivery operations.

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BSR/IEEE 1903.2-201x, Standard for Service Composition Protocols of Next Generation Service Overlay Network (new standard)

This standard specifies protocols among Service Composition (SC) Functional Entity (FE), Service Discovery and Negotiation (SDN) FE, Context Information Management (CIM) FE, Service Routing (SR) FE and Service Policy Decision (SPD) FE to support service composition capabilities in next generation service overlay network. The capabilities of service composition aim to support service chaining and instantiation, specification interpretation, service brokering and execution, and context-aware and dynamically adaptive service composition.

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BSR/IEEE 1903.3-201x, Standard for Self-Organizing Management Protocols of Next Generation Service Overlay Network (new standard)

This standard specifies protocols between Overlay Management (OM) Functional Entity (FE) and all other NGSON Functional Entities, and/or NGSON nodes to enable OM Functional Entity involved self-organizing management capability. This capability includes activation and deactivation of an NGSON node and addition, deletion, movement and copy of an NGSON function entity from or to an NGSON node. This standard also specifies protocols among Service Routing (SR) Functional Entities to enable OM Functional Entity non-involved self-organizing management capability such as re-organization of overlay structure among multiple SR Functional Entities for recovery from a failed or overloaded SR Functional Entity or for performance improvement of service routing.

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BSR/IEEE 2030.7-201x, Standard for the Specification of Microgrid Controllers (new standard)

A key element of microgrid operation is the Microgrid Energy Management System (MEMS). It includes the control functions that define the microgrid as a system that can manage itself, and operate autonomously or grid connected, and seamlessly connect to and disconnect from the main distribution grid for the exchange of power and the supply of ancillary services. The scope of this standard is to address the technical issues and challenges associated with the proper operation of the MEMS that are common to all microgrids, regardless of topology, configuration, or jurisdiction, and to present the control approaches required from the distribution system operator and the microgrid operator. Testing procedures are addressed.

Single copy price: \$60.00 (pdf)/\$75.00 (print)

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Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 3001.2-201x, Recommended Practice for Evaluating the Electrical Service Requirements of Industrial and Commercial Power Systems (new standard)

This recommended practice explores commercial, institutional, and industrial design of electrical services, interconnecting with a utility distribution or transmission system. Close coordination between the facility electrical designer and the serving utility are critical for a successful service connection. This recommended practice considers the electrical system information needed by the designer concerning the utility's system characteristics and the electrical load information needed by the utility to design a satisfactory electrical interface between the serving utility and the premise electrical distribution system. It describes various ways to take power from the serving utility. It also covers the specific requirements for utility metering on service entrance equipment, as well as service equipment rooms, vaults, and pads.

Single copy price: \$94.00 (pdf)/\$118.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

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BSR/IEEE 3006.3-201x, Recommended Practice for Determining the Impact of Preventative Maintenance on the Reliability of Industrial and Commercial Power Systems (new standard)

This recommended practice describes how to determine the impact of preventive maintenance on the reliability of industrial and commercial power systems. It is likely to be of greatest value to the power-oriented engineer with limited experience in the area of reliability. It can also be an aid to all engineers responsible for the electrical design of industrial and commercial power systems.

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BSR/IEEE 3333.1.2-201x, Standard for the Perceptual Quality Assessment of Three-Dimensional (3D) and Ultra-High-Definition (UHD) Content (new standard)

This standard establishes methods for quality assessment of 3D and UHD contents based on physiological mechanisms such as perceptual quality and visual attention. This standard identifies and quantifies the following: causes and visual attention of perceptual quality degradation for 3D and UHD image and video contents: compression distortion, such as multi-view image and video compression, interpolation distortion by intermediate view rendering, such as 3D and UHD warping, view synthesis, structural distortion, such as bit errors on wireless/wired transmission errors, visual attention according to the quality degradation.

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BSR/IEEE C37.06.1-201x, Recommended Practice for Preferred Ratings for High-Voltage (1000 volts) AC Circuit Breakers Designated Definite Purpose for Fast Transient Recovery Voltage Rise Times (new standard)

This recommended practice is issued as a supplement to IEEE Std C37.06 for high-voltage circuit breaker applications where the transient recovery voltage (TRV) peak is higher and/or its rise to the crest value occurs more rapidly than those specified in IEEE Std C37.06.

Single copy price: \$67.00 (pdf)

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BSR/IEEE C37.20.7-201x, Guide for Testing Switchgear Rated Up to 52 kV for Internal Arcing Faults (new standard)

This guide establishes methods by which equipment may be tested for resistance to the effects of arcing due to an internal fault. This guide applies only to equipment utilizing air or other insulating gas as the primary insulation medium and rated 52 kV ac or below. It applies to both indoor and outdoor equipment; however, special consideration should be given to the building size and construction for indoor applications (not fully addressed by this document).

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BSR/IEEE C37.241-201x, Guide for Application of Optical Instrument Transformers for Protective Relaying (new standard)

This document provides a guide that covers the use of optical voltage and current sensor systems for protective relaying - including selection, installation, testing, and operations.

Single copy price: \$60.00 (pdf)/\$75.00 (print)

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BSR/IEEE C37.248-201x, Guide for Common Format for Naming Intelligent Electronic Devices (COMDEV) (new standard)

This guide provides a common convention for naming physical and virtual Intelligent Electronic Devices (IEDs). It discusses the various environments where device names are needed and how a common naming convention would be beneficial.

Single copy price: \$60.00 (pdf)/\$75.00 (print)

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BSR/IEEE C57.12.39-201x, Standard for Requirements for Distribution Transformer Tank Pressure Coordination (new standard)

This standard covers certain mechanical requirements for liquid-immersed distribution transformers in respect to tank strength as well as static and dynamic tank pressure mitigation. This standard can be applied to various tank configurations for distribution transformers. This standard does not cover the electrical and mechanical requirements of any accessory devices that may be supplied with the transformer.

Single copy price: \$52.00 (pdf)/\$65.00 (print)

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BSR/IEEE C57.13.1-201x, Guide for Field Testing of Relaying Current Transformers (new standard)

The scope of this guide is to describe field test methods that assure current transformers (CTs) are connected properly, are of marked ratio and polarity, and are in a condition to perform as designed both initially and after being in service for a period of time.

Single copy price: \$59.00 (pdf)

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BSR/IEEE C57.19.01-201x, Standard for Performance Characteristics and Dimensions for Power Transformer and Reactor Bushings (new standard)

This standard covers electrical, dimensional, and related requirements for outdoor power apparatus bushings that have basic impulse insulation levels (BILs) of 150 kV and above. It provides specific values for dimensional and related requirements that are to be interpreted, measured, or tested in accordance with IEEE Std C57.19.00. Bushings covered by this standard are intended for use in free air as components of liquid-filled transformers and reactors.

Single copy price: \$114.00 (pdf)/\$130.00 (print)

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BSR/IEEE C57.158-201x, Guide for the Application of Tertiary and Stabilizing Windings in Power Transformers (new standard)

This guide addresses the application of tertiary and stabilizing windings in liquid immersed power transformers, as covered by IEEE Std C57.12.00, as well as recommendations to evaluate the need or convenience of having such windings. The primary application of this guide is for transformers and autotransformers with wye-wye connected windings, with or without a delta connected tertiary or stabilizing winding. The guide does not address tertiary windings in conventional delta-wye, or delta-delta connected transformers.

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BSR/IEEE C62.23-201x, Application Guide for Surge Protection of Electric Generating Plants (new standard)

This guide covers surges entering an electric generating plant via transmission and distribution lines and methods to reduce them; methods of protecting indoor and outdoor equipment, controls and communication systems within the plant switchyard, the plant proper and ancillary facilities within the premises such as fuel, ash, water, cooling, weather and warning systems, against direct strokes, incoming and internally generated surges.

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IEEE (Institute of Electrical and Electronics Engineers)

Revision

BSR/IEEE 802.16-201x, Standard for Air Interface for Broadband Wireless Access Systems (revision of ANSI/IEEE 802.16-2009)

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support the WirelessMAN-SC, WirelessMANOFDM, and WirelessMAN-OFDMA PHY specifications, each suited to a particular operational environment.

Single copy price: \$701.00 (pdf)/\$876.00 (print)

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BSR/IEEE 1003.1-201x, Standard for Information Technology - Portable Operating System Interface (POSIX(R)) Base Specifications, Issue 7 (revision of ANSI/IEEE 1003.1-2009)

POSIX.1-201x defines a standard operating system interface and environment, including a command interpreter (or "shell"), and common utility programs to support applications portability at the source code level. It is intended to be used by both application developers and system implementors.

Single copy price: \$856.00 (pdf)

Order from: <https://www.techstreet.com/ieee/pages/home>

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 1082-201x, Guide for Incorporating Human Reliability Analysis into Probabilistic Risk Assessments for Nuclear Power Generating Stations and Other Nuclear Facilities (revision of ANSI/IEEE 1082-1997 (R2010))

This guide provides a structured framework for the incorporation of human reliability analysis (HRA) into Probabilistic Risk Assessments (PRAs).

Single copy price: \$60.00 (pdf)/\$75.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 1671.1-201x, Standard for Automatic Test Markup Language (ATML) Test Descriptions (revision of ANSI/IEEE 1671.1-2009)

This standard defines an exchange format, utilizing Extensible Markup Language (XML), for specifying test performance, test conditions, diagnostic requirements, and support equipment to locate, align, and verify the proper operation of a Unit Under Test (UUT). This is in support of the lifecycle of Test Program Sets (TPSs) that will be used in an automatic test environment.

Single copy price: \$188.00 (pdf)/\$235.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE 1671.3-201x, Standard for Automatic Test Markup Language (ATML) Unit Under Test (UUT) Description (revision of ANSI/IEEE 1671.3-2007)

This standard defines an exchange format, utilizing Extensible Markup Language (XML), for both the static description of unit under test (UUT), and the specific description of UUT instance information.

Single copy price: \$145.00 (pdf)/\$181.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

BSR/IEEE C37.015-201x, Guide for the Application of Shunt Reactor Switching (revision of ANSI/IEEE C37.015-2009)

This application guide applies to ac high-voltage (> 1000 V) circuit breakers rated for shunt reactor switching. This application guide provides the theoretical background of shunt reactor switching and how information obtained from test results should be used to predict overvoltages in the field and gives suggestions how to mitigate these overvoltages.

Single copy price: \$76.00 (pdf)/\$95.00 (print)

Order from: <https://www.techstreet.com/ieee/pages/home>

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

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

New National Adoption

INCITS/ISO/IEC 18384-1:2016 [201x], Information Technology - Reference Architecture for Service Oriented Architecture (SOA RA) - Part 1: Terminology and Concepts for SOA (identical national adoption of ISO/IEC 18384-1:2016)

Establishes vocabulary, guidelines, and general technical principles underlying service oriented architecture (SOA), including principles relating to functional design, performance, development, deployment, and management.

Single copy price: \$209.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

INCITS/ISO/IEC 18384-2:2016 [201x], Information Technology - Reference Architecture for Service Oriented Architecture (SOA RA) - Part 2: Reference Architecture for SOA Solutions (identical national adoption of ISO/IEC 18384-2:2016)

Describes a Reference Architecture for SOA Solutions which applies to functional design, performance, development, deployment, and management of SOA Solutions. It includes a domain-independent framework, addressing functional requirements and non-functional requirements, as well as capabilities and best practices to support those requirements.

Single copy price: \$232.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

INCITS/ISO/IEC 18384-3:2016 [201x], Information Technology - Reference Architecture for Service Oriented Architecture (SOA RA) - Part 3: Service Oriented Architecture Ontology (identical national adoption of ISO/IEC 18384-3:2016)

Defines a formal ontology for service-oriented architecture (SOA), an architectural style that supports service orientation. The terms defined in this ontology are key terms from the vocabulary in ISO/IEC 18384-1.

Single copy price: \$209.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

INCITS/ISO/IEC 19086-1:2016 [201x], Information Technology - Cloud computing - Service Level Agreement (SLA) Framework - Part 1: Overview and Concepts (identical national adoption of ISO/IEC 19086-1:2016)

Seeks to establish a set of common cloud SLA building blocks (concepts, terms, definitions, contexts) that can be used to create cloud Service Level Agreements (SLAs). This document specifies (a) an overview of cloud SLAs, (b) identification of the relationship between the cloud service agreement and the cloud SLA, (c) concepts that can be used to build cloud SLAs, and (d) terms commonly used in cloud SLAs.

Single copy price: \$162.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

Projects Withdrawn from Consideration

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

API (American Petroleum Institute)

BSR/API Recommended Practice 19C, 2nd Edition-201x, Measurement of Proppants Used in Hydraulic Fracturing and Gravel-Packing Operations (revision and redesignation of ANSI/API RP 19C-ISO 13503-2, 1st Edition-2007)

BSR/API Recommended Practice 19D, 2nd Edition-201x, Measuring Conductivity of Proppants (revision and redesignation of ANSI/API RP 19D/ISO 13503-5, 1st Edition-2007)

BSR/API Spec 6DSS, 2nd Edition/ISO 14723-2-2009 (R201x), Specification for Subsea Pipeline Valves (reaffirmation of ANSI/API Spec 6DSS, 2nd Edition/ISO 14723-2009)

Inquiries may be directed to Edmund Baniak, (202) 682-8135, baniake@api.org

APPA (APPA - Leadership in Educational Facilities)

BSR/APPA 1001-201x, Asset Management - Overview Principles and Terminology (identical national adoption of ISO 55000)

BSR/APPA 1002-201x, Part 11: Terminology (identical national adoption of ISO/TR 15686-11:2014)

BSR/APPA 1100-201x, Facility Management Terms and Definitions (new standard)

Notice of Withdrawn ANS by an ANSI-Accredited Standards Developer

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

API (American Petroleum Institute)

ANSI/API RP 19C-ISO 13503-2, 1st Edition-2007, Recommended Practice for Measurement of Properties of Proppants Used in Hydraulic Fracturing and Gravel-Packing Operations

Questions may be directed to: Jacqueline Roueche, (202) 682-8286, RouecheJ@api.org

ANSI/API Spec 6DSS, 2nd Edition/ISO 14723-2009, Specification on Subsea Pipeline Valves

Questions may be directed to: Edmund Baniak, (202) 682-8135, baniake@api.org

Call for Members (ANS Consensus Bodies)

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

ABMA (American Brush Manufacturers Association)

Office: 736 Main Avenue
Suite 7
Durango, CO 81301-5479

Contact: David Parr

Phone: (720) 392-2262

E-mail: dparr@abma.org

BSR B165.1-201x, Power Driven Brushing Tools-Safety Requirements for Design, Care and Use (revision of ANSI B165.1-2013)

ASQ (ASC Z1) (American Society for Quality)

Office: 600 N Plankinton Ave
Milwaukee, WI 53203

Contact: Julie Sharp

Phone: (800) 248-1946

E-mail: standards@asq.org

BSR ASQ Z1.4-2003 (R2018), Sampling procedures and tables for inspection by attributes (reaffirmation of ANSI/ASQ Z1.4-2003 (R2013))

BSR/ASQ Z1.9-2003 (R201x), Sampling procedures and tables for inspection by variables for percent nonconforming (reaffirmation of ANSI/ASQ Z1.9-2003 (R2013))

BSR/ASQ Z1.9-2003 (R201x), Sampling procedures and tables for inspection by variables for percent nonconforming (reaffirmation of ANSI/ASQ Z1.9-2003 (R2013))

BHMA (Builders Hardware Manufacturers Association)

Office: 355 Lexington Avenue, 15th Floor
15th Floor
New York, NY 10017-6603

Contact: Michael Tierney

Phone: (860) 944-4264

E-mail: mtierney@kellencompany.com

BSR/BHMA A156.16-2013 (R201x), Standard for Auxiliary Hardware (reaffirmation of ANSI/BHMA A156.16-2013)

BSR/BHMA A156.28-2013 (R201x), Recommended Practice for Mechanical Keying Systems (reaffirmation of ANSI/BHMA A156.28-2013)

CTA (Consumer Technology Association)

Office: 1919 South Eads Street
Arlington, VA 22202

Contact: Veronica Lancaster

Phone: (703) 907-7697

E-mail: vlancaster@cta.tech

BSR/CTA 2068.1-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - HRV (new standard)

BSR/CTA 2068.2-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - Skin Conductance (new standard)

BSR/CTA 2068.3-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - Respiration (new standard)

BSR/CTA 2068.4-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - Heart Rate (new standard)

BSR/CTA 2085-201x, Definitions and Characteristics for VR Video and VR Images (new standard)

BSR/CTA 2086-201x, Categorization Augmented and Virtual Reality Consumer Experiences (new standard)

BSR/CTA 2087-201x, Recommendations and Best Practices for Connection and Use of Accessories for Augmented and Virtual Reality Technologies (new standard)

ECIA (Electronic Components Industry Association)

Office: 2214 Rock Hill Road
Suite 265
Herndon, VA 20170-4212

Contact: Laura Donohoe

Phone: (571) 323-0294

E-mail: ldonohoe@ecianow.org

BSR/EIA 364-119-201x, Removal Tool Rotation Test Procedure for Electrical Connectors (new standard)

BSR/EIA/ECA 364-18B-2007 (R201x), Visual and Dimensional Inspection Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA/ECA 364-18B-2007 (R2012))

EOS/ESD (ESD Association, Inc.)

Office: 7900 Turin Rd., Bldg. 3
Rome, NY 13440

Contact: *Christina Earl*

Phone: (315) 339-6937

E-mail: cearl@esda.org

BSR/ESD STM9.1-201x, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Footwear - Resistive Characterization (revision of ANSI/ESD STM9.1-2014)

BSR/ESD STM11.31-201x, ESD Association Standard Test Method for Evaluating the Performance of Electrostatic Discharge Shielding Materials - Bags (revision of ANSI/ESD STM11.31-1994 (R2012))

GTESS (Georgia Tech Energy & Sustainability Services)

Office: 75 Fifth Street N.W
Suite 300
Atlanta, GA 30332-0640

Contact: *Deann Desai*

Phone: (770) 605-4474

E-mail: deann.desai@innovate.gatech.edu

BSR/MSE 50005-201x, Energy management systems - Modular implementation of the energy management system ISO 50001 including the use of energy performance evaluation techniques (identical national adoption of ISO 50005)

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

Office: 1101 K Street, NW
Suite 610
Washington, DC 20005-3922

Contact: *Barbara Bennett*

Phone: (202) 737-8888

E-mail: comments@standards.incits.org

INCITS/ISO/IEC 18384-1:2016 [201x], Information Technology - Reference Architecture for Service Oriented Architecture (SOA RA) - Part 1: Terminology and Concepts for SOA (identical national adoption of ISO/IEC 18384-1:2016)

INCITS/ISO/IEC 18384-2:2016 [201x], Information Technology - Reference Architecture for Service Oriented Architecture (SOA RA) - Part 2: Reference Architecture for SOA Solutions (identical national adoption of ISO/IEC 18384-2:2016)

INCITS/ISO/IEC 18384-3:2016 [201x], Information Technology - Reference Architecture for Service Oriented Architecture (SOA RA) - Part 3: Service Oriented Architecture Ontology (identical national adoption of ISO/IEC 18384-3:2016)

INCITS/ISO/IEC 19086-1:2016 [201x], Information technology - Cloud computing - Service level agreement (SLA) framework - Part 1: Overview and concepts (identical national adoption of ISO/IEC 19086-1:2016)

NEMA (ASC W1) (National Electrical Manufacturers Association)

Office: 1300 North 17th Street
Rosslyn, VA 22209

Contact: *Khaled Masri*

Phone: (703) 843278

E-mail: Khaled.Masri@nema.org

BSR/NEMA IEC 60974-1-201x, Arc Welding Equipment - Part 1: Welding Power Sources (national adoption of IEC 60974-1: 5th edition, Arc Welding Equipment "Part 1: Welding power sources, issued February 2017 with modifications and revision of ANSI/IEC 60974-1-2008)

NSF (NSF International)

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

Contact: *Jason Snider*

Phone: (734) 418-6660

E-mail: jsnider@nsf.org

BSR/NSF 14-201x (i99r2), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2017)

BSR/NSF 49-201x (i77r3), Biosafety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2016)

BSR/NSF 49-201x (i108r4), Biosafety Cabinetry (revision of ANSI/NSF 49-2016)

BSR/NSF 419-201x (i6r1), Public Drinking Water Equipment Performance - Membrane Filtration (revision of ANSI/NSF 419-2015)

BSR/NSF 419-201x (i6r1), Public Drinking Water Equipment Performance - Membrane Filtration (revision of ANSI/NSF 419-2015)

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.

AAMI (Association for the Advancement of Medical Instrumentation)

Reaffirmation

ANSI/AAMI HE75-2009 (R2018), Human factors engineering - Design of medical devices (reaffirmation of ANSI/AAMI HE75-2009 (R2013)): 8/10/2018

ANSI/AAMI/ISO 5841-3-2013 (R2018), Implants for surgery - Cardiac pacemakers - Part 3: Low-profile connectors (IS-1) for implantable pacemakers (reaffirmation of ANSI/AAMI/ISO 5841-3-2013): 8/10/2018

ASABE (American Society of Agricultural and Biological Engineers)

Revision

ANSI/ASAE S315.5-AUG2018, Agricultural Baling Twine for Automatic Balers (revision and redesignation of ANSI/ASAE S315.4-2012 (R2017)): 8/3/2018

ASC X9 (Accredited Standards Committee X9, Incorporated)

Revision

ANSI X9.100-111-2018, Check Endorsements (revision of ANSI X9.100-111-2015): 8/7/2018

ANSI X9.100-140-2018, Image Replacement Document (IRD) (revision of ANSI X9.100-140-2016): 8/10/2018

ANSI X9.100-188-2018, Return Reasons for Check Image Exchange and IRDs (revision of ANSI X9.100-188-2016): 8/3/2018

Stabilized Maintenance

ANSI X9.100-180-2006 (S2018), Specifications for Electronic Exchange of Check and Image Data (Non-Domestic) (stabilized maintenance of ANSI X9.100-180-2006 (R2013)): 8/10/2018

ASME (American Society of Mechanical Engineers)

Reaffirmation

ANSI/ASME PTC 19.11-2008 (R2018), Steam and Water Sampling, Conditioning, and Analysis in the Power Cycle (reaffirmation of ANSI/ASME PTC 19.11-2008 (R2013)): 8/3/2018

Revision

ANSI/ASME B16.14-2018, Ferrous Pipe Plugs, Bushings, and Locknuts with Pipe Threads (revision of ANSI/ASME B16.14-2013): 8/3/2018

ANSI/ASME B16.15-2018, Cast Copper Alloy Threaded Fittings: Classes 125 and 250 (revision of ANSI/ASME B16.15-2013): 8/3/2018

ANSI/ASME B16.22-2018, Wrought Copper and Copper Alloy Solder Joint Pressure Fittings (revision of ANSI/ASME B16.22-2013): 8/3/2018

ANSI/ASME B16.26-2018, Cast Copper Alloy Fittings for Flared Copper Tubes (revision of ANSI/ASME B16.26-2013): 8/3/2018

ANSI/ASME B31.3-2018, Process Piping (revision of ANSI/ASME B31.3-2016): 8/8/2018

ANSI/ASME B31.8-2018, Gas Transmission and Distribution Piping Systems (revision of ANSI/ASME B31.8-2016): 8/3/2018

ANSI/ASME PCC-2-2018, Repair of Pressure Equipment and Piping (revision, redesignation and consolidation of ANSI/ASME PCC-2-2015, ANSI/ASME PCC-2-Supplement-2015): 8/8/2018

ASTM (ASTM International)

New Standard

ANSI/ASTM F3146-2018, Test Method for Impact Attenuation of Turf Playing Systems Designated for Rugby (new standard): 8/1/2018

Reaffirmation

ANSI/ASTM E2768-2018, Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test) (reaffirmation of ANSI/ASTM E2768-2011): 8/1/2018

AWS (American Welding Society)

New Standard

ANSI/AWS-NAVSEA B2.1-1-314-2018, Standard Welding Procedure Specification for Naval Applications (SWPS-N) for Gas Tungsten Arc Welding with Consumable Insert Root of Carbon Steel (S-1), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, MIL-MS-1 and MIL-70S-2, in the As-Welded or PWHT Condition, Primarily Pipe for Naval Applications (new standard): 8/3/2018

ANSI/AWS-NAVSEA B2.1-1-315-2018, Standard Welding Procedure Specification for Naval Applications (SWPS-N) for Gas Tungsten Arc Welding with Consumable Insert Root followed by Shielded Metal Arc Welding of Carbon Steel (S-1), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, MIL-MS-1 MIL-70S-2, and MIL-7018-M in the As-Welded or PWHT Condition, Primarily Pipe for Naval Applications (new standard): 8/3/2018

ANSI/AWS-NAVSEA B2.1-8-321-2018, Standard Welding Procedure Specification for Naval Applications (SWPS-N) for Gas Tungsten Arc Welding with Consumable Insert Root of Austenitic Stainless Steel (S-8), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, MIL-3XX, in the As-Welded Condition, Primarily Pipe for Naval Applications (new standard): 8/3/2018

ANSI/AWS-NAVSEA B2.1-8-322-2018, Standard Welding Procedure Specification for Naval Applications (SWPS-N) for Gas Tungsten Arc Welding with Consumable Insert Root Followed by Shielded Metal Arc Welding of Austenitic Stainless Steel (S-8), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, MIL-3XX and MIL-3XX-XX, in the As-Welded Condition, Primarily Pipe for Naval Applications (new standard): 8/3/2018

AWWA (American Water Works Association)

Revision

ANSI/AWWA B407-2018, Liquid Ferric Chloride (revision, redesignation and consolidation of ANSI/AWWA B407-2012, ANSI/AWWA B407a-2017): 8/3/2018

ANSI/AWWA B506-2018, Zinc Orthophosphate (revision of ANSI/AWWA B506-2013): 8/3/2018

BHMA (Builders Hardware Manufacturers Association)

Revision

ANSI/BHMA A156.12-2018, Interconnected Locks (revision of ANSI/BHMA A156.12-2013): 8/10/2018

ANSI/BHMA A156.25-2018, Electrified Locking Devices (revision of ANSI/BHMA A156.25-2013): 8/10/2018

IAPMO (International Association of Plumbing & Mechanical Officials)**Revision**

ANSI/IAPMO USHGC 1-2018, Uniform Solar, Hydronics and Geothermal Code (revision of ANSI/IAPMO USEHC 1-2015): 7/27/2018

ANSI/IAPMO USPSHTC 1-2018, Uniform Swimming Pool, Spa & Hot Tub Code (revision of ANSI/IAPMO USPSHTC 1-2015): 7/26/2018

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

ANSI/IEEE 1829-2017, Guide for Conducting Corona Tests on Hardware for Overhead Transmission Lines and Substations (new standard): 8/3/2018

ANSI/IEEE C62.92.2-2017, Guide for the Application of Neutral Grounding in Electrical Utility Systems - Part II: Synchronous Generator Systems (new standard): 8/7/2018

ITSDF (Industrial Truck Standards Development Foundation, Inc.)**Addenda**

ANSI/ITSDF B56.1a-2018, Safety Standard Low Lift and High Lift Trucks (addenda to ANSI/ITSDF B56.1-2016): 8/3/2018

NSF (NSF International)**Revision**

ANSI/NSF 49-2018 (i110r3), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2016): 8/1/2018

ANSI/NSF 173-2018 (i78r1), Dietary Supplements (revision of ANSI/NSF 173-2017): 8/1/2018

ANSI/NSF 173-2018 (i80r1), Dietary Supplements (revision of ANSI/NSF 173-2017): 8/3/2018

OPEI (Outdoor Power Equipment Institute)**New Standard**

* ANSI/OPEI B71.7-2018, Powered Consumer Ram-Type Log Splitters - Safety Specifications (new standard): 8/8/2018

Revision

ANSI/OPEI B71.10-2018, Standard for Off-Road Ground-Supported Outdoor Power Equipment - Gasoline Fuel Systems - Safety Specifications (revision of ANSI/OPEI B71.10-2013): 8/10/2018

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

ANSI/TAPPI T 815 om-2012 (R2018), Coefficient of static friction (slide angle) of packaging and packaging materials (including shipping sack papers, corrugated and solid fiberboard) (inclined plane method) (reaffirmation of ANSI/TAPPI T 815 om-2012): 8/2/2018

TCIA (ASC A300) (Tree Care Industry Association)**Revision**

ANSI A300 Part 2-2018, Tree, Shrub, and Other Woody Plant Management - Standard Practices (Soil Management a. Assessment, b. Modification, c. Fertilization, and d. Drainage) (revision of ANSI A300 Part 2-2011): 8/10/2018

ANSI A300 Part 7-2018, Tree, Shrub, and Other Woody Plant Management Standard Practices (Integrated Vegetation Management) (revision of ANSI A300 (Part 7)-2012): 8/10/2018

TIA (Telecommunications Industry Association)**Addenda**

ANSI/TIA 598-D-1-2018, Optical Fiber Color Coding in Cable - Addendum 1, for Additional Colors for Fibers 13-16 (addenda to ANSI/TIA 598-D-2014): 8/10/2018

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

ANSI/UL 2577-2017 (R2018), Standard for Safety for Standard for Suspended Ceiling Grid Low Voltage Systems and Equipment (reaffirmation of ANSI/UL 2577-2017): 8/3/2018

ANSI/UL 8752-2012 (R2018), Standard for Safety for Organic Light Emitting Diode (OLED) Panels (reaffirmation of ANSI/UL 8752-2012): 8/3/2018

ANSI/UL 8753-2013 (R2018), Standard for Safety for Standard for Field-Replaceable Light Emitting Diode (LED) Engines (reaffirmation of ANSI/UL 8753-2013): 8/3/2018

ANSI/UL 8754-2014 (R2018), Standard for Safety for Standard for Holders, Bases and Connectors for Solid-State (LED) Light Engines and Arrays (reaffirmation of ANSI/UL 8754-2014): 8/3/2018

Revision

* ANSI/UL 711-2018, Standard for Safety for Rating and Fire Testing of Fire Extinguishers (revision of ANSI/UL 711-2009): 8/6/2018

ANSI/UL 867-2018, Standard for Safety for Electrostatic Air Cleaners (revision of ANSI/UL 867-2016): 8/7/2018

ANSI/UL 1004-1-2018, Standard for Safety for Rotating Electrical Machines - General Requirements (revision of ANSI/UL 1004-1-2017): 8/6/2018

ANSI/UL 1004-1-2018a, Standard for Safety for Rotating Electrical Machines - General Requirements (revision of ANSI/UL 1004-1-2017): 8/6/2018

ANSI/UL 1993-2018, Standard for Safety for Self-Ballasted Lamps and Lamp Adapters (revision of ANSI/UL 1993-2017): 8/6/2018

ANSI/UL 60745-2-16-2018, Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-16: Particular Requirements for Tackers (revision of ANSI/UL 60745-2-16-2009 (R2015)): 7/27/2018

Correction**Incorrect Category****ANSI ICEA T-31-610-2018**

In the Final Actions section of the June 22, 2018 issue of Standards Action, ANSI ICEA T-31-610-2018 was incorrectly listed as a New Standard. It is actually a revision of ANSI/ICEA T-31-610-2014.

Project Initiation Notification System (PINS)

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

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

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

AAFS (American Academy of Forensic Sciences)

Contact: Teresa Ambrosius, (719) 453-1036, tambrosius@aafs.org
410 North 21st Street, Colorado Springs, CO 80904

New Standard

BSR/ASB Std 058-201x, Standard Method for Blood Ethanol Identification and Quantitation in Forensic Toxicology Laboratories (new standard)

Stakeholders: The forensic toxicology community, law enforcement, attorneys, medicolegal death investigation community, and courts.

Project Need: This document will provide a standard test method for identification and quantitation of ethanol in blood samples. Currently, there is no universally accepted standard method for blood alcohol determinations for all subdisciplines of forensic toxicology.

This document establishes a procedure for the identification and quantitation of ethanol in blood samples. The standard method is intended for laboratories engaged in any of the following forensic toxicology subdisciplines: postmortem forensic toxicology, human performance toxicology (e.g., drug-facilitated crimes and driving-under-the-influence of ethanol or drugs), non-regulated employment drug testing, court-ordered toxicology (e.g., probation and parole, drug courts, child services), and general forensic toxicology (non-lethal poisonings or intoxications). It is not intended for the area of breath ethanol toxicology.

BSR/ASB Std 098-201x, Standard for Mass Spectral Data Acceptance in Forensic Toxicology (new standard)

Stakeholders: The forensic toxicology community, law enforcement, attorneys, medicolegal death investigation community, and courts.

Project Need: During the last several decades, mass spectrometry has replaced traditional, less specific techniques such as flame ionization, nitrogen-phosphorus, electron-capture, ultraviolet and fluorescence detection as the preferred technology for the confirmation of drugs, drug metabolites, relevant xenobiotics, and endogenous analytes in forensic toxicology. Although criteria for the acceptance of mass spectrometry data have been promulgated in regulated areas of forensic toxicology, none have been universally applied by practicing forensic toxicologists. This document addresses the lack of universal mass spectrometry acceptance criteria in forensic toxicology laboratories by providing minimum standards of practice for this topic. Specifically, this standard focuses on minimum criteria for mass spectral data acquired using a nominal or high resolution mass spectrometer that utilizes ionization processes such as electron ionization, chemical ionization, electrospray ionization, or atmospheric pressure chemical ionization.

This document provides criteria for the acceptance of mass spectral analyses of small molecules (compounds with an atomic weight of less than 800 daltons) in laboratories conducting any of the following forensic toxicology subdisciplines: postmortem forensic toxicology, human performance toxicology (e.g., drug-facilitated crimes and driving-under-the-influence of alcohol or drugs), non-regulated employment drug testing, court-ordered toxicology (e.g., probation and parole, drug courts, child services), and general forensic toxicology (non-lethal poisonings or intoxications). The document provides minimum requirements for acquiring data on single- or multiple-stage mass spectrometers using nominal or high-resolution mass spectrometers. It also provides instruction on the evaluation of mass spectral data when conducting acquisitions in full-scan mode, selected ion monitoring, multiple-stage analyses, or when using high-resolution mass analyzers. Criteria, requirements and instructions in this document are not intended for the area of breath alcohol toxicology. Further, it is not intended to address the use of matrix-assisted laser desorption, inductively coupled plasma, or ion mobility mass spectrometry. It is also not intended to provide criteria for analyte identification in forensic toxicology laboratories.

ABMA (American Brush Manufacturers Association)

Contact: David Parr, (720) 392-2262, dparr@abma.org
736 Main Avenue, Suite 7, Durango, CO 81301-5479

Revision

BSR B165.1-201x, Power-Driven Brushing Tools-Safety Requirements for Design, Care and Use (revision of ANSI B165.1-2013)

Stakeholders: Producers, Users and Organizations with General Interest in power brushing tools.

Project Need: Five-year revision of the current standard via the canvass method.

The standard establishes the rules and specifications for safety that apply in the design, use, and care of power-driven brushing tools, which are specifically defined and covered under the scope of the standard. It includes specifications for shanks, adapters, flanges, collets, chucks, and safety guards and the rules for proper storage, handling, mounting, and use of brushes.

ASTM (ASTM International)

Contact: Laura Klineburger, (610) 832-9696, accreditation@astm.org
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

New Standard

BSR/ASTM WK64558-201x, New Guide for Evaluating Water Miscible Metalworking Fluid Foaming Tendency (new standard)

Stakeholders: Health and Safety Standards for Metal Working Fluids Industry.

Project Need: Provide guidance on protocols than can be used to evaluate the foaming tendency of water miscible metalworking fluids. Evaluations discussed in this document are applicable for use during formulation development, as field diagnostic or condition monitoring tests, or both.

Methods ASTM D3519 and ASTM D3601 were withdrawn in 2013. Although each method had some utility, neither method reliably predicted in-use foaming tendency. Since methods D3519 and D3601 were first adopted, a number of more predictive test protocols have been developed. However, it has also become common knowledge that no single protocol is universally suitable for predicting water-miscible metalworking fluid (MWF) foaming tendency. Moreover, there are no generally recognized reference standard fluid (either MWF or foam control additive). This guide provides an overview of foaming tendency evaluation protocols and their appropriate use.

CSA (CSA Group)

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

Revision

BSR/CSA B149.6-201x, Code for digester gas, landfill gas, and biogas generation and utilization (revision and redesignation of ANSI B149.6-2015)

Stakeholders: Utilities, manufacturers, governmental agencies, suppliers.

Project Need: To address industry concerns regarding gas produced from renewable sources.

This Code applies to the installation of systems for the production, handling, storage, utilization, and safety aspects of the operation and maintenance for handling, storage, and utilization of: (1) digester gas in newly constructed wastewater treatment plants, as well as additions to, and the upgrading of, existing systems; (2) landfill gas in newly constructed landfill gas systems, as well as additions to, and the upgrading of, existing systems and temporary systems; and (3) biogas in newly constructed biogas systems.

CTA (Consumer Technology Association)

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

New Standard

BSR/CTA 2068.1-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - HRV (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To defines and creates performance criteria for consumer stress monitoring technologies that use HRV in the measurement and application of stress metrics.

This standard defines and creates performance criteria for consumer stress monitoring technologies that use HRV in the measurement and application of stress metrics.

BSR/CTA 2068.2-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - Skin Conductance (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To define and create performance criteria for consumer stress monitoring technologies that use Skin Conductance in the measurement and application of stress metrics.

This standard defines and creates performance criteria for consumer stress monitoring technologies that use Skin Conductance in the measurement and application of stress metrics.

BSR/CTA 2068.3-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - Respiration (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To define and create performance criteria for consumer stress monitoring technologies that use Respiration in the measurement and application of stress metrics.

This standard defines and creates performance criteria for consumer stress monitoring technologies that use Respiration in the measurement and application of stress metrics.

BSR/CTA 2068.4-201x, Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress - Heart Rate (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To define and create performance criteria for consumer stress monitoring technologies that use Heart Rate in the measurement and application of stress metrics.

This standard defines and creates performance criteria for consumer stress monitoring technologies that use Heart Rate in the measurement and application of stress metrics.

BSR/CTA 2085-201x, Definitions and Characteristics for VR Video and VR Images (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To create a standard to define the definitions and characteristics for VR Video and VR Images.

This document defines the definitions and characteristics for VR Video, and VR Images, which are still or moving imagery captured and formatted explicitly as separate left and right eye images; usually intended for display in a VR headset. More specifically, this document will explore the technical processes, hardware, and software techniques behind the creation and delivery of VR Video/VR Images.

BSR/CTA 2086-201x, Categorization Augmented and Virtual Reality Consumer Experiences (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: This document through a quantitative approach categorizes AR and VR consumer experiences.

The goal of this project is to create mindshare around various types and formulations of in-headset content, and provide common, industry standard language to describe the various types of virtual and augmented reality experiences that a consumer should come to expect. This will make media and experiences more accessible to consumers, as well as give them language to communicate and share with others. This document, through a quantitative approach, categorizes AR and VR consumer experiences. The experiences are categorized through the standardization of language and packaging of technical features that allows consumers to understand the scope and features of a variety of AR and VR experiences.

BSR/CTA 2087-201x, Recommendations and Best Practices for Connection and Use of Accessories for Augmented and Virtual Reality Technologies (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: To explore augmented and virtual reality technologies accessories and their connections and performance requirements with augmented and virtual reality technologies hardware.

This document will explore augmented and virtual reality technologies accessories and their connections and performance requirements with augmented and virtual reality technologies hardware. The output would be to develop the following: (1) Agree on common terminology and definitions; (2) Agree on a common connectivity standard including device compatibility.

ECIA (Electronic Components Industry Association)

Contact: *Laura Donohoe, (571) 323-0294, ldonohoe@ecianow.org
2214 Rock Hill Road, Suite 265, Herndon, VA 20170-4212*

New Standard

BSR/EIA 364-119-201x, Removal Tool Rotation Test Procedure for Electrical Connectors (new standard)

Stakeholders: Electronics, electrical, and telecommunications industries.

Project Need: Create a new American National Standard.

This test standard establishes a test method to determine the removal tool rotation that is used to insert and remove a contact from a connector.

EOS/ESD (ESD Association, Inc.)

Contact: Christina Earl, (315) 339-6937, cearl@esda.org
7900 Turin Rd., Bldg. 3, Rome, NY 13440

Revision

BSR/ESD STM9.1-201x, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Footwear - Resistive Characterization (revision of ANSI/ESD STM9.1-2014)

Stakeholders: Electronics industry including telecom, consumer, medical, and industrial.

Project Need: This document provides a test method to measure the electrical resistance of static control footwear.

This document relies on electrical resistance measurements utilizing common electrical instruments to provide a means of evaluating footwear. This standard excludes foot grounders (i.e., heel straps, toe grounders, sole grounders, and booties).

GTESS (Georgia Tech Energy & Sustainability Services)

Contact: Deann Desai, (770) 605-4474, deann.desai@innovate.gatech.edu
75 Fifth Street N.W, Suite 300, Atlanta, GA 30332-0640

New National Adoption

BSR/MSE 50005-201x, Energy management systems - Modular implementation of the energy management system ISO 50001 including the use of energy performance evaluation techniques (identical national adoption of ISO 50005)

Stakeholders: Large organizations (Industry, Service, other); small to mid-size organizations (Industry, Service) consultants; certification bodies

Project Need: To provide for organizations with an approach that provides for phased implementation of ISO 50001.

This document provides guidance for a step-by-step process to implement an energy management system. In particular, this process can support and simplify the implementation of an energy management system by Small and Medium Sized Enterprises (SMEs). It outlines essential energy savings or management activities and more comprehensive elements for implementing an energy management system. This approach enables the user of this document to either build on this step-by-step process to fully meet the requirements of ISO 50001 "Energy management systems - Requirements with guidance for use", or to achieve a level of energy management appropriate to its needs and goals.

NEMA (ASC W1) (National Electrical Manufacturers Association)

Contact: Khaled Masri, (703) 843278, Khaled.Masri@nema.org
1300 North 17th Street, Rosslyn, VA 22209

New National Adoption

BSR/NEMA IEC 60974-1-201x, Arc Welding Equipment - Part 1: Welding Power Sources (national adoption of IEC 60974-1: 5th edition, Arc Welding Equipment "Part 1: Welding power sources, issued February 2017 with modifications and revision of ANSI/IEC 60974-1-2008)

Stakeholders: Arc welding equipment manufacturers, users and others.

Project Need: Adopt the 2017 (5th edition) of the IEC 60974-1 standard with appropriate modifications for the United States.

This part of IEC 60974 is applicable to power sources for arc welding and allied processes designed for industrial and professional use, and supplied by a voltage not exceeding 1000 V, battery supplied or driven by mechanical means. This document specifies safety and performance requirements of welding power sources and plasma cutting systems. This document is not applicable to limited duty arc welding and cutting power sources which are designed mainly for use by laymen and designed in accordance with IEC 60974-6.

NSF (NSF International)

Contact: Jessica Slomka, (734) 214-6219, jslomka@nsf.org
789 N. Dixboro Road, Ann Arbor, MI 48105-9723

New Standard

BSR/NSF 498-201x, Multi-Attribute Sustainability Program Document for Architectural Coatings (new standard)

Stakeholders: Industry, users, and public health/regulatory

Project Need: Increased awareness and procurement programs are emerging requiring conformance with a variety of sustainability criteria. This project is needed to attain a consensus standard on what constitutes sustainable leadership for architectural coating products.

This is a multi-attribute sustainability document for architectural coating products. This document addresses multiple sustainability attributes throughout the product lifecycle such as implementation of chemicals management practices reduction of substances of concern, preferable materials use, energy efficiency, design for end-of-life, product packaging, product longevity, responsible end-of-life management, and corporate responsibility.

UL (Underwriters Laboratories, Inc.)

Contact: *Mitchell Gold, (847) 664-2850, mitchell.gold@ul.com*
333 Pfingsten Road, Northbrook, IL 60062-2096

New Standard

BSR/UL 1367-201x, Standard for Safety for Capacitor Banks for Power Factor Correction (new standard)

Stakeholders: Capacitor industry, manufacturers of capacitors, manufacturers of capacitor assemblies, and manufacturers of components of these assemblies.

Project Need: Development of a standard for safety to provide power factor correction for AC power systems.

These requirements cover equipment having ac voltage ratings above 1000 V, up to 38 kV, intended to provide power factor correction for AC power systems. The power factor correction equipment covered by this standard are assemblies consisting of one or more shunt power capacitor(s), with or without additional controls and switching devices necessary to provide control the power factor of the system to which the equipment is connected. The power factor correction equipment covered by this standard may be open or enclosed, and may be rated for indoor or outdoor use. These requirements cover equipment intended for use in ordinary locations in accordance with the National Electrical Code.

American National Standards Maintained Under Continuous Maintenance

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

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

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

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

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

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

ANSI-Accredited Standards Developers Contact Information

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

<p>AAFS American Academy of Forensic Sciences 410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 453-1036 Web: www.aafs.org</p>	<p>ASC X9 Accredited Standards Committee X9, Incorporated 275 West Street Suite 107 Annapolis, MD 21401 Phone: (410) 267-7707 Web: www.x9.org</p>	<p>BHMA Builders Hardware Manufacturers Association 355 Lexington Avenue, 15th Floor 15th Floor New York, NY 10017-6603 Phone: (860) 944-4264 Web: www.buildershardware.com</p>	<p>IAPMO International Association of Plumbing & Mechanical Officials 4755 E. Philadelphia Street Ontario, CA 91761 Phone: (909) 472-4111 Web: www.iapmo.org</p>
<p>AAMI Association for the Advancement of Medical Instrumentation 4301 N. Fairfax Drive, Suite 301 Arlington, VA 22203-1633 Phone: (703) 253-8274 Web: www.aami.org</p>	<p>ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329 Phone: (678) 539-1214 Web: www.ashrae.org</p>	<p>CSA CSA Group 8501 E. Pleasant Valley Road Cleveland, OH 44131 Phone: (216) 524-4990 Web: www.csagroup.org</p>	<p>IEEE Institute of Electrical and Electronics Engineers 445 Hoes Lane Piscataway, NJ 08854 Phone: (732) 562-3854 Web: www.ieee.org</p>
<p>ABMA American Brush Manufacturers Association 736 Main Avenue Suite 7 Durango, CO 81301-5479 Phone: (720) 392-2262 Web: www.abma.org</p>	<p>ASME American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990 Phone: (212) 591-8521 Web: www.asme.org</p>	<p>CTA Consumer Technology Association 1919 South Eads Street Arlington, VA 22202 Phone: (703) 907-7697 Web: www.cta.tech</p>	<p>ITI (INCITS) InterNational Committee for Information Technology Standards 1101 K Street, NW Suite 610 Washington, DC 20005-3922 Phone: (202) 737-8888 Web: www.incits.org</p>
<p>ALI (ASC A14) American Ladder Institute 330 N. Wabash Avenue, Suite 2000 Chicago, IL 60611-6610 Phone: (312) 321-6806 Web: www.americanladderinstitute.org</p>	<p>ASQ (ASC Z1) American Society for Quality 600 N Plankinton Ave Milwaukee, WI 53203 Phone: (800) 248-1946 Web: www.asq.org</p>	<p>ECIA Electronic Components Industry Association 2214 Rock Hill Road Suite 265 Herndon, VA 20170-4212 Phone: (571) 323-0294 Web: www.ecianow.org</p>	<p>ITSDF Industrial Truck Standards Development Foundation, Inc. 1750 K Street NW Suite 460 Washington, DC 20006 Phone: (202) 296-9880 Web: www.indtrk.org</p>
<p>ANS American Nuclear Society 555 North Kensington Avenue La Grange Park, IL 60526-5592 Phone: (708) 579-8269 Web: www.ans.org</p>	<p>ASTM ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9696 Web: www.astm.org</p>	<p>EOS/ESD ESD Association, Inc. 7900 Turin Rd., Bldg. 3 Rome, NY 13440 Phone: (315) 339-6937 Web: www.esda.org</p>	<p>NEMA (ASC C12) National Electrical Manufacturers Association 1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3227 Web: www.nema.org</p>
<p>API American Petroleum Institute 1220 L Street, NW Washington, DC 20005-4070 Phone: (202) 682-8056 Web: www.api.org</p>	<p>AWS American Welding Society 8669 NW 36th Street Suite 130 Doral, FL 33166 Phone: (305) 443-9353 Web: www.aws.org</p>	<p>FM FM Approvals 1151 Boston-Providence Turnpike Norwood, MA 02062 Phone: (781) 255-4813 Web: www.fmglobal.com</p>	<p>NEMA (ASC W1) National Electrical Manufacturers Association 1300 North 17th Street Rosslyn, VA 22209 Phone: (703) 843278 Web: www.nema.org</p>
<p>ASABE American Society of Agricultural and Biological Engineers 2950 Niles Road Saint Joseph, MI 49085 Phone: (269) 932-7015 Web: www.asabe.org</p>	<p>AWWA American Water Works Association 6666 W. Quincy Ave. Denver, CO 80235 Phone: (303) 347-6178 Web: www.awwa.org</p>	<p>GTESS Georgia Tech Energy & Sustainability Services 75 Fifth Street N.W Suite 300 Atlanta, GA 30332-0640 Phone: (770) 605-4474 Web: www.innovate.gatech.edu</p>	<p>NSF NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 418-6660 Web: www.nsf.org</p>
		<p>HL7 Health Level Seven 3300 Washtenaw Avenue Suite 227 Ann Arbor, MI 48104 Phone: (734) 677-7777 Web: www.hl7.org</p>	

OPEI

Outdoor Power Equipment Institute
341 South Patrick Street
Alexandria, VA 22314
Phone: (703) 678-2990
Web: www.opei.org

TAPPI

Technical Association of the Pulp and
Paper Industry
15 Technology Parkway South
Suite 115
Peachtree Corners, GA 30092
Phone: (770) 209-7249
Web: www.tappi.org

TCIA (ASC A300)

Tree Care Industry Association
136 Harvey Rd # 101
Londonderry, NH 03053
Phone: (603) 314-5380
Web: www.treecareindustry.org

TIA

Telecommunications Industry
Association
1320 North Courthouse Road
Suite 200
Arlington, VA 22201
Phone: (703) 907-7706
Web: www.tiaonline.org

UL

Underwriters Laboratories, Inc.
333 Pfingsten Road
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Web: www.ul.com

Intent to Process Provisional (ANS) American National Standards

AAMI Announcement of Intent to Process the following Provisional American National Standards ANS (PS) in accordance with Annex B of the ANSI Essential Requirements (www.ansi.org/essentialrequirements)

AAMI/HIT1000-1, Safety and effectiveness of health IT software and systems — Part 1: Fundamental concepts and principles

AAMI/HIT1000-2, Safety and effectiveness of health IT software and systems — Part 2: Application of quality systems principles and practice

AAMI/HIT1000-3, Safety and effectiveness of health IT software and systems — Part 3: Application of risk management

AAMI/HIT1000-4, Safety and effectiveness of health IT software and systems — Part 4: Application of human factors engineering

There is an urgent need for standards addressing fundamental principles of safety and effectiveness for Health IT software and systems. Authorities have recognized the specific need for standards on applying quality systems, risk management and human factors engineering in this domain.

AAMI has previously announced the development of these American National Standards, but their issuance as Provisional Standards is warranted due to the urgency of the need and to allow the standards to be implemented on a trial basis so that feedback from users in the field can be considered and incorporated as they are advanced for full American National Standards Status.

The intent is to complete the development and issue these documents as Provisional Standards over the next 6 to 9 months.

For more information about the standards or how to participate in the work, please contact Joe Lewelling at jlewelling@aami.org.



ISO & IEC Draft International Standards

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

Comments

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

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

Ordering Instructions

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

ISO Standards

AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO/DIS 12871, Olive oils and olive-pomace oils - Determination of aliphatic and triterpenic alcohols content by capillary gas chromatography - 9/3/2018, \$46.00

ISO/DIS 20813, Molecular biomarker analysis - Methods of analysis for the detection and identification of animal species from foods and food products (Nucleic-acid-based methods) - General requirements and definitions - 9/3/2018, \$88.00

AIRCRAFT AND SPACE VEHICLES (TC 20)

ISO/DIS 22137, Space systems - Program management - Test reviews - 10/29/2018, \$77.00

ISO/DIS 26872, Space systems - Disposal of satellites operating at geosynchronous altitude - 10/26/2018, \$146.00

ISO/DIS 14620-2, Space systems - Safety requirements - Part 2: Launch site operations - 10/29/2018, \$67.00

ISO/DIS 14621-1, Space systems - Electrical, electronic and electromechanical (EEE) parts - Part 1: Parts management - 11/1/2018, \$112.00

ISO/DIS 14621-2, Space systems - Electrical, electronic and electromechanical (EEE) parts - Part 2: Control programme requirements - 11/1/2018, \$46.00

BIOLOGICAL EVALUATION OF MEDICAL AND DENTAL MATERIALS AND DEVICES (TC 194)

ISO 10993-7/DAmD1, Biological evaluation of medical devices - Part 7: Ethylene oxide sterilization residuals - Amendment 1 - 9/2/2018, \$46.00

ISO/DIS 22442-1, Medical devices utilizing animal tissues and their derivatives - Part 1: Application of risk management - 9/2/2018, \$93.00

ISO/DIS 10993-18, Biological evaluation of medical devices - Part 18: Chemical characterization of materials - 12/4/2008, \$134.00

EARTH-MOVING MACHINERY (TC 127)

ISO/DIS 7096, Earth-moving machinery - Laboratory evaluation of operator seat vibration - 11/1/2018, \$82.00

GAS CYLINDERS (TC 58)

ISO/DIS 11513, Gas cylinders - Refillable welded steel cylinders containing materials for sub-atmospheric gas packaging (excluding acetylene) - Design, construction, testing, use and periodic inspection - 9/2/2018, \$82.00

GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)

ISO/DIS 19150-4, Geographic information - Ontology - Part 4: Service ontology - 10/28/2018, \$125.00

GRAPHIC TECHNOLOGY (TC 130)

ISO/DIS 21812-1, Graphic technology - Digital data exchange - Print product metadata for PDF files - Part 1: Architecture and core requirements for metadata - 9/3/2018, \$93.00

HYDROMETRIC DETERMINATIONS (TC 113)

ISO/DIS 25377, Hydrometric uncertainty guidance (HUG) - 11/1/2018, \$146.00

INNOVATION MANAGEMENT (TC 279)

ISO/DIS 50501, Innovation management - Innovation management system - Guidance - 8/31/2018, \$102.00

LEATHER (TC 120)

ISO/DIS 22244, Leather - Raw Hides - Guidelines for Preservation of Hides - 9/1/2018, \$33.00

ISO/DIS 22284, Leather - Raw Skins - Guidelines for Preservation of Goat and Sheep Skins - 9/2/2018, \$33.00

PAINTS AND VARNISHES (TC 35)

ISO/DIS 8504-1, Preparation of steel substrates before application of paints and related products - Surface preparation methods - Part 1: General principles - 9/2/2018, \$46.00

PAPER, BOARD AND PULPS (TC 6)

ISO/DIS 2144, Paper, board, pulps and cellulose nanomaterials - Determination of residue (ash content) on ignition at 900 degrees C - 9/3/2018, \$33.00

ISO/DIS 12830, Paper, board, pulps and cellulose nanomaterials - Determination of acid-soluble magnesium, calcium, manganese, iron, copper, sodium and potassium - 9/3/2018, \$58.00

ISO/DIS 21993, Paper and Pulp - Deinkability test for printed paper products - 9/2/2018, \$82.00

PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)

ISO/DIS 20320, Protective clothing for use in Snowboarding - Wrist Protectors - Requirements and test methods - 9/1/2018, \$62.00

PETROLEUM PRODUCTS AND LUBRICANTS (TC 28)

ISO/DIS 20846, Petroleum products - Determination of sulfur content of automotive fuels - Ultraviolet fluorescence method - 10/29/2018, \$53.00

ISO/DIS 20884, Petroleum products - Determination of sulfur content of automotive fuels - Wavelength-dispersive X-ray fluorescence spectrometry - 10/29/2018, \$46.00

SAFETY OF MACHINERY (TC 199)

ISO/DIS 21260, Safety of machinery - Mechanical safety data for physical contacts between moving machinery or moving parts of machinery and persons - 10/28/2018, \$107.00

SHIPS AND MARINE TECHNOLOGY (TC 8)

ISO/DIS 15738, Ships and marine technology - Life saving and fire protection - Gas inflation systems for inflatable life-saving appliances - 9/2/2018, \$58.00

ISO/DIS 21173, Submersibles - Hydrostatic pressure test - Pressure structures - 9/3/2018, \$58.00

SMALL TOOLS (TC 29)

ISO 1711-1/DAMd1, Assembly tools for screws and nuts - Technical specifications - Part 1: Hand-operated wrenches and sockets - Amendment 1 - 10/28/2018, \$29.00

ISO 1711-2/DAMd1, Assembly tools for screws and nuts - Technical specifications - Part 2: Machine-operated sockets (impact) - Amendment 1 - 10/28/2018, \$29.00

TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)

ISO/DIS 24622-2, Language resource management - Component metadata infrastructure (CMDI) - Part 2: The component metadata specific language - 9/3/2018, \$102.00

THERMAL INSULATION (TC 163)

ISO/DIS 21105-1, Performance of buildings - Building enclosure thermal performance verification and commissioning - Part 1: General requirements - 10/28/2018, \$88.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)

ISO/DIS 9512, Cigarettes - Determination of ventilation - Definitions and measurement principles - 8/30/2018, \$71.00

ISO/DIS 20193, Analysis of tobacco and tobacco products - Determination of the width of the strands of cut tobacco - 10/28/2018, \$46.00

TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)

ISO/DIS 15886-4, Irrigation equipment - Irrigation sprinklers - Part 4: Test methods for durability - 9/1/2018, \$53.00

TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

ISO/DIS 20900, Intelligent transport systems - Partially automated parking systems (PAPS) - Performance requirements and test procedures - 9/2/2018, \$88.00

ISO/DIS 17573-1, Electronic fee collection - Systems architecture for vehicle-related tolling - Part 1: Reference model - 9/2/2018, \$119.00

ISO/DIS 19297-1, Intelligent transport systems - Shareable geospatial databases for ITS applications - Part 1: Framework - 9/1/2018, \$53.00

TYRES, RIMS AND VALVES (TC 31)

ISO/DIS 18885-3, TPMS - Valves performances - Part 3: Performances - 11/1/2018, \$58.00

WELDING AND ALLIED PROCESSES (TC 44)

ISO/DIS 5178, Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints - 9/3/2018, \$40.00

ISO/DIS 9090, Gas tightness of equipment for gas welding and allied processes - 9/2/2018, \$46.00

ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 10918-7, Information technology - Digital compression and coding of continuous-tone still images - Part 7: Reference software - 10/29/2018, \$71.00

ISO/IEC DIS 15909-1, Systems and software engineering - High-level Petri nets - Part 1: Concepts, definitions and graphical notation - 10/28/2018, \$102.00

ISO/IEC DIS 19566-5, Information technologies - JPEG Systems - Part 5: JPEG Universal Metadata Box Format (JUMBF) - 10/28/2018, \$77.00

ISO/IEC DIS 19566-6, Information technologies - JPEG systems - Part 6: JPEG 360 - 10/26/2018, \$88.00

ISO/IEC DIS 21122-2, Information technology - JPEG XS low-latency lightweight image coding system - Part 2: Profiles and buffer models - 11/1/2018, \$119.00

ISO/IEC DIS 23092-1, Information technology - Part 1: Transport and storage of genomic information - 11/1/2018, \$119.00

ISO/IEC/IEEE DIS 15289, Systems and software engineering - Content of life-cycle information items (documentation) - 9/2/2018, \$155.00

IEC Standards

8/1497/CD, IEC TS 62749 ED2: Assessment of power quality - Characteristics of electricity supplied by public networks, 2018/10/5
15/852/CDV, IEC 60684-3-216 ED2: Flexible insulating sleeving - Part 3: Specifications for individual types of sleeving - Sheet 216: Heat-shrinkable, flame-retarded, limited-fire-hazard sleeving, 2018/11/2

22/296/CD, IEC TR 60146-1-2 ED5: Semiconductor converters - General requirements and line commutated converters - Part 1-2: Application guide, 2018/11/2

25/631/NP, PNW 25-631: Quantities and units - Part 18: Software product, 2018/10/5

32C/553/CD, IEC 60127-3/AMD1 ED3: Miniature fuses - Part 3: Sub-miniature fuse-links, 2018/10/5

32C/552/CD, IEC 60127-2/AMD1 ED3: Miniature fuses - Part 2: Cartridge fuse-links, 2018/10/5

34D/1405/CD, IEC 60598-1/AMD2/FRAG28 ED8: Luminaires - Part 1: General requirements and tests, 2018/11/2

34D/1406/CD, IEC 60598-1/AMD2/FRAG29 ED8: Luminaires - Part 1: General requirements and tests, 2018/11/2

44/836/DTR, IEC TR 63161 ED1: Assignment of a safety integrity requirements - Basic rationale, 2018/10/5

45A/1223/Q, Proposed Amendment to IEC 62859 ED1.0 (published in 2016-10), Nuclear power plants - Instrumentation and control systems - Requirements for coordinating safety and cybersecurity, 2018/11/2

- 45B/909/CDV, IEC 61322 ED2: Radiation protection instrumentation - Installed ambient dose equivalent rate meters, warning and monitoring assemblies for neutrons with energies from thermal to 20 MeV, 2018/11/2
- 46/700A/FDIS, IEC 60966-1 ED3: Radio frequency and coaxial cable assemblies - Part 1: Generic specification - General requirements and test methods, 2018/9/21
- 48B/2678/FDIS, IEC 61076-1/AMD1 ED2: Amendment 1: Connectors for electronic equipment - Product requirements - Part 1: Generic specification, 2018/9/21
- 48B/2679/FDIS, IEC 60603-7/AMD2 ED3: Amendment 2: Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors, 2018/9/21
- 56/1799/DC, IEC 60300-3-10 ED2 Dependability management - Part 3 -10: Application guide - Maintainability and supportability, 2018/9/21
- 61/5709/FDIS, IEC 60335-2-15/AMD2 ED6: Household and similar electrical appliances - Safety - Part 2-15: Particular requirements for appliances for heating liquids, 2018/9/21
- 62D/1617/CDV, ISO 80601-2-12 ED2: Medical electrical equipment - Part 2-12: Particular requirements for the basic safety and essential performance of critical care ventilators, 2018/11/2
- 64/2281(F)/CDV, IEC 60364-7-710 ED2: Low voltage electrical installations - Part 7-710: Requirements for special installations or locations - Medical locations, /2018/11/3
- 64/2332/CD, IEC 60364-5-54/AMD1 ED3: Low-voltage electrical installations - Part 5-54: Selection and erection of electrical equipment - Earthing arrangements and protective conductors, /2018/11/3
- 65/710/CD, IEC TS 62872 ED2: Industrial-process measurement, control and automation system interface between industrial facilities and the smart grid, 2018/10/5
- 77C/284/CDV, IEC 61000-4-36 ED2: Electromagnetic compatibility (EMC) - Part 4-36: Testing and measurement techniques - IEMI immunity test methods for equipment and systems, 2018/11/2
- 78/1234/NP, PNW 78-1234: Live Working - Hand protective devices against the thermal hazards of an electric arc - Part 1-1: Test methods - Method 1: Determination of the arc rating (ELIM, ATPV and/or EBT) of hand protective devices using an open arc, 2018/11/2
- 78/1236/Q, Protective gloves against the hazards of an electric arc, 2018/9/21
- 78/1235/NP, PNW 78-1235-1 ED1: Live Working - Hand protective devices against the thermal hazards of an electric arc - Part 1-2: Test methods - Method 2: Determination of arc protection class hand protective devices by using a constrained and directed arc (box test), 2018/11/2
- 85/648/CD, IEC TR 63213 ED1: Measurement applications within electrical distribution network, 2018/10/5
- 88/696/FDIS, IEC 61400-1 ED4: Wind energy generation systems - Part 1: Design requirements, 2018/9/21
- 104/806/CDV, IEC 60068-3-3 ED2: Environmental testing - Part 3-3: Guidance - Seismic test methods for equipments, 2018/11/2
- 105/695/FDIS, IEC 62282-3-100 ED2: Fuel cell technologies - Part 3 -100: Stationary fuel cell power systems - Safety, 2018/9/21
- 108/708/DTR, IEC TR 62368-2 ED3: Audio/video, information and communication technology equipment - Part 2: Explanatory information related to IEC 62368-1, 2018/10/5
- 110/1014/CD, IEC 62341-5-3 ED2: Organic light emitting diode (OLED) displays - Part 5-3: Measuring methods of image sticking and lifetime, 2018/10/5
- 110/1015/CD, IEC 62906-5-3 ED1: Laser display devices - Part 5-3: Measuring methods of image quality for laser projection displays, 2018/10/5
- 110/1012/CD, IEC 62977-2-1 ED1: Electronic displays - Part 2-1: Measurements of optical characteristics - Fundamental measurements, 2018/10/5
- 110/1013/CD, IEC 62908-12-20 ED1: Touch and interactive displays - Part 12-20: Measuring methods of touch displays - Multi-touch performance, 2018/10/5
- 114/283/NP, PNW TS 114-283: Marine energy - Wave, tidal and other water current converters - Part 4: Standard for establishing qualification of new technology, 2018/11/2
- 116/384/NP, PNW 116-384: Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4 -3: Particular requirements for pedestrian controlled walk-behind lawnmowers, 2018/11/2
- 124/40/CD, IEC 63203-402-1 ED1: Wearable electronic devices and technologies - Part 402-1: Devices and Systems - Accessory - Test and evaluation methods of glove-type motion sensors for measuring finger movements, 2018/10/5
- 124/39/CD, IEC 63203-401-1 ED1: Wearable electronic devices and technologies - Part 401-1: Devices and Systems - Functional elements - Evaluation method of the stretchable resistive strain sensor, 2018/10/5
- CIS/B/710/CD, Amendment 3 Fragment 1 to CISPR 11 Ed. 6: Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement - Requirements for air-gap wireless power transfer (WPT), 2018/10/5
- CIS/F/746/CD, CISPR 14-1/AMD1/FRAG4 ED6: Electromagnetic compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission, 2018/10/5
- SyCSmartCities/50/NP, PNW SYCSMARTCITIES-50: Smart City System- Vocabulary (chapter for electropedia), 2018/11/2
- SyCSmartCities/51/NP, PNW TS SYCSMARTCITIES-51: Systems Reference Document (SRD)- Smart City System - Methodology for concepts and taxonomies building, 2018/11/2



Newly Published ISO & IEC Standards

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

ISO Standards

ISO/IEC JTC 1 Technical Reports

[ISO/IEC TR 23008-14:2018](#), Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 14: Conversion and coding practices for HDR/WCG YCbCr 4:2:0 video with PQ transfer characteristics, \$185.00

[ISO/IEC TR 23008-15:2018](#), Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 15: Signalling, backward compatibility and display adaptation for HDR/WCG video, \$185.00

AGRICULTURAL FOOD PRODUCTS (TC 34)

[ISO 21846:2018](#), Vegetable fats and oils - Determination of composition of triacylglycerols and composition and content of diacylglycerols by capillary gas chromatography, \$103.00

AIR QUALITY (TC 146)

[ISO 16000-34:2018](#), Indoor air - Part 34: Strategies for the measurement of airborne particles, \$185.00

AIRCRAFT AND SPACE VEHICLES (TC 20)

[ISO 5884:2018](#), Aerospace series - Fluid systems and components - Methods for system sampling and measuring the solid particle contamination in hydraulic fluids, \$103.00

BUILDING CONSTRUCTION MACHINERY AND EQUIPMENT (TC 195)

[ISO 19711-1:2018](#), Building construction machinery and equipment - Truck mixers - Part 1: Terminology and commercial specifications, \$45.00

FERTILIZERS AND SOIL CONDITIONERS (TC 134)

[ISO 19822:2018](#), Fertilizers and soil conditioners - Determination of humic and hydrophobic fulvic acids concentrations in fertilizer materials, \$103.00

FINE CERAMICS (TC 206)

[ISO 21819-1:2018](#), Fine ceramics (advanced ceramics, advanced technical ceramics) - Characteristic of piezoelectric properties under high-load conditions - Part 1: Resonant-antiresonant method under high-temperature conditions, \$68.00

FORENSIC SCIENCES (TC 272)

[ISO 21043-1:2018](#), Forensic sciences - Part 1: Terms and definitions, \$45.00

IMPLANTS FOR SURGERY (TC 150)

[ISO 7206-10:2018](#), Implants for surgery - Partial and total hip-joint prostheses - Part 10: Determination of resistance to static load of modular femoral heads, \$68.00

LIGHT METALS AND THEIR ALLOYS (TC 79)

[ISO 8251:2018](#), Anodizing of aluminium and its alloys - Measurement of abrasion resistance of anodic oxidation coatings, \$162.00

[ISO 20258:2018](#), Magnesium lithium alloys - Determination of lithium - Inductively coupled plasma optical emission spectrometric method, \$68.00

MECHANICAL VIBRATION AND SHOCK (TC 108)

[ISO 20816-8:2018](#), Mechanical vibration - Measurement and evaluation of machine vibration - Part 8: Reciprocating compressor systems, \$162.00

NON-DESTRUCTIVE TESTING (TC 135)

[ISO 11699-2:2018](#), Non-destructive testing - Industrial radiographic films - Part 2: Control of film processing by means of reference values, \$68.00

OTHER

[ISO 3690:2018](#), Welding and allied processes - Determination of hydrogen content in arc weld metal, \$138.00

[ISO 8249:2018](#), Welding - Determination of Ferrite Number (FN) in austenitic and duplex ferritic-austenitic Cr-Ni stainless steel weld metals, \$162.00

[ISO 11640:2018](#), Leather - Tests for colour fastness - Colour fastness to cycles of to-and-fro rubbing, \$45.00

PLASTICS (TC 61)

[ISO 6238:2018](#), Adhesives - Wood-to-wood adhesive bonds - Determination of shear strength by compressive loading, \$68.00

[ISO 11567:2018](#), Carbon fibre - Determination of filament diameter and cross-sectional area, \$68.00

ROAD VEHICLES (TC 22)

[ISO 18541-5:2018](#), Road vehicles - Standardized access to automotive repair and maintenance information (RMI) - Part 5: Heavy duty specific provision, \$185.00

RUBBER AND RUBBER PRODUCTS (TC 45)

[ISO 1419:2018](#), Rubber- or plastics-coated fabrics - Accelerated-ageing tests, \$45.00

SHIPS AND MARINE TECHNOLOGY (TC 8)

[ISO 8384:2018](#), Ships and marine technology - Dredgers - Vocabulary, \$45.00

SOIL QUALITY (TC 190)

[ISO 19258:2018](#), Soil quality - Guidance on the determination of background values, \$138.00

STEEL (TC 17)

[ISO 18632:2018](#), Alloyed steels - Determination of manganese - Potentiometric or visual titration method, \$68.00

TEXTILE MACHINERY AND ALLIED MACHINERY AND ACCESSORIES (TC 72)

[ISO 9902-6:2018](#), Textile machinery - Noise test code - Part 6: Fabric manufacturing machinery, \$103.00

TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)

[ISO 9912-4:2018](#), Agricultural irrigation equipment - Filters for microirrigation - Part 4: Granulated media filters, \$103.00

WATER QUALITY (TC 147)

[ISO 19040-1:2018](#), Water quality - Determination of the estrogenic potential of water and waste water - Part 1: Yeast estrogen screen (*Saccharomyces cerevisiae*), \$209.00

[ISO 19040-2:2018](#), Water quality - Determination of the estrogenic potential of water and waste water - Part 2: Yeast estrogen screen (A-YES, *Arxula adenivorans*), \$209.00

[ISO 19040-3:2018](#), Water quality - Determination of the estrogenic potential of water and waste water - Part 3: In vitro human cell-based reporter gene assay, \$185.00

WELDING AND ALLIED PROCESSES (TC 44)

[ISO 2401:2018](#), Welding consumables - Covered electrodes - Determination of the efficiency, metal recovery and deposition coefficient, \$45.00

ISO Technical Specifications**RUBBER AND RUBBER PRODUCTS (TC 45)**

[ISO/TS 22687:2018](#), Rubber - Framework for assessing the environmental fate of tyre and road wear particles (TRWP), \$103.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 7811-1:2018](#), Identification cards - Recording technique - Part 1: Embossing, \$138.00

[ISO/IEC 7811-2:2018](#), Identification cards - Recording technique - Part 2: Magnetic stripe: Low coercivity, \$138.00

[ISO/IEC 7811-6:2018](#), Identification cards - Recording technique - Part 6: Magnetic stripe: High coercivity, \$138.00

[ISO/IEC 7811-7:2018](#), Identification cards - Recording technique - Part 7: Magnetic stripe: High coercivity, high density, \$138.00

[ISO/IEC 23008-8:2018](#), Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 8: Conformance specification for HEVC, \$232.00

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

[IEC 62153-4-17 Ed. 1.0 b:2018](#), Metallic cables and other passive components - Test methods - Part 4-17: Electromagnetic compatibility (EMC) - Reduction Factor, \$47.00

DEPENDABILITY (TC 56)

[IEC 60812 Ed. 3.0 b:2018](#), Failure modes and effects analysis (FMEA and FMECA), \$352.00

ELECTRIC TRACTION EQUIPMENT (TC 9)

[IEC 62888-5 Ed. 1.0 b:2018](#), Railway applications - Energy measurement on board trains - Part 5: Conformance test, \$164.00

ELECTRICAL ACCESSORIES (TC 23)

[IEC 62275 Ed. 3.0 b:2018](#), Cable management systems - Cable ties for electrical installations, \$281.00

ELECTROMECHANICAL COMPONENTS AND MECHANICAL STRUCTURES FOR ELECTRONIC EQUIPMENTS (TC 48)

[IEC 60297-3-110 Ed. 1.0 b:2018](#), Mechanical structures for electrical and electronic equipment - Dimensions of mechanical structures of the 482,6 mm (19 in) series - Part 3-110: Residential racks and cabinets for smart houses, \$117.00

FIBRE OPTICS (TC 86)

[IEC 61753-1 Ed. 2.0 b:2018](#), Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance, \$352.00

[IEC 60793-1-49 Ed. 3.0 b:2018](#), Optical fibres - Part 1-49: Measurement methods and test procedures - Differential mode delay, \$235.00

[S+ IEC 61753-1 Ed. 2.0 en:2018 \(Redline version\)](#), Fibre optic interconnecting devices and passive components - Performance standard - Part 1: General and guidance, \$457.00

LAMPS AND RELATED EQUIPMENT (TC 34)

[IEC 62612 Ed. 1.2 b:2018](#), Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements, \$410.00

[IEC 62612 Amd.2 Ed. 1.0 b:2018](#), Amendment 2 - Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements, \$23.00

OTHER

[CISPR 16-4-2 Amd.2 Ed. 2.0 b:2018](#), Amendment 2 - Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty, \$117.00

[CISPR 16-4-2 Ed. 2.2 b:2018](#), Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty, \$586.00

POWER TRANSFORMERS (TC 14)

[IEC 60076-11 Ed. 2.0 b:2018](#), Power transformers - Part 11: Dry-type transformers, \$352.00

[S+ IEC 60076-11 Ed. 2.0 en:2018 \(Redline version\)](#), Power transformers - Part 11: Dry-type transformers, \$457.00

SAFETY OF MEASURING, CONTROL, AND LABORATORY EQUIPMENT (TC 66)

[IEC 61010-031 Ed. 2.1 en cor.1:2018](#), Corrigendum 1 - Safety requirements for electrical equipment for measurement, control and laboratory use - Part 031: Safety requirements for hand-held and hand-manipulated probe assemblies for electrical test and measurement, \$0.00

SOLAR PHOTOVOLTAIC ENERGY SYSTEMS (TC 82)

[IEC 62446-1 Amd.1 Ed. 1.0 b:2018](#), Amendment 1 - Photovoltaic (PV) systems - Requirements for testing, documentation and maintenance - Part 1: Grid connected systems - Documentation, commissioning tests and inspection, \$23.00

[IEC 62446-1 Ed. 1.1 b:2018](#), Photovoltaic (PV) systems -
Requirements for testing, documentation and maintenance - Part 1:
Grid connected systems - Documentation, commissioning tests and
inspection, \$410.00

IEC Technical Reports

**METHODS FOR THE ASSESSMENT OF ELECTRIC, MAGNETIC
AND ELECTROMAGNETIC FIELDS ASSOCIATED WITH HUMAN
EXPOSURE (TC 106)**

[IEC/TR 63170 Ed. 1.0 en:2018](#), Measurement procedure for the
evaluation of power density related to human exposure to radio
frequency fields from wireless communication devices operating
between 6 GHz and 100 GHz, \$375.00

SOLAR PHOTOVOLTAIC ENERGY SYSTEMS (TC 82)

[IEC/TR 63149 Ed. 1.0 en:2018](#), Land usage of photovoltaic (PV) farms
- Mathematical models and calculation examples, \$352.00

IEC Technical Specifications

SOLAR PHOTOVOLTAIC ENERGY SYSTEMS (TC 82)

[IEC/TS 62738 Ed. 1.0 en:2018](#), Ground-mounted photovoltaic power
plants - Design guidelines and recommendations, \$281.00

Proposed Foreign Government Regulations

Call for Comment

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

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

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

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

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

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

Information Concerning

American National Standards

Call for Members

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

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

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

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

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

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

Society of Cable Telecommunications

ANSI Accredited Standards Developer

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

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

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

ANSI Accredited Standards Developers

Approval of Reaccreditation

Accredited Standards Committee X9, Inc.

The reaccreditation of Accredited Standards Committee X9, Inc., an ANSI member and Accredited Standards Developer (ASD), has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ASC X9, Inc.-sponsored American National Standards, effective August 15, 2018. For additional information, please contact: Ms. Janet Busch, Program Manager, Accredited Standards Committee X9, Inc., 275 West Street, Suite 107, Annapolis, MD 21401; phone: 410.267.7707; e-mail: janet.busch@x9.org.

Reaccreditation

U.S. Green Building Council (USGBC)

Comment Deadline: September 17, 2018

As part of the mandatory 5-year review for Accredited Standards Developers that do not currently sponsor any current American National Standards, the U.S. Green Building Council (USGBC), an ANSI member and ASD, has submitted its current operating procedures for review and reaccreditation.

To obtain a copy of USGBC's operating procedures or to offer comments, please contact: Ms. Susan E. Dorn, General Counsel, USGBC, 2101 L Street NW, Suite 500, Washington, DC 20037; phone: 202.742.3299; e-mail: sdorn@usgbc.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 USGBC by September 17, 2018, with a copy to the ExSC Recording Secretary in ANSI's New York Office (jthompo@ANSI.org).

Withdrawal of ASD Accreditation

National Institute for Metalworking Skills (NIMS)

The National Institute for Metalworking Skills (NIMS) has requested the formal withdrawal of its ANSI accreditation as a developer of American National Standards (ANS). NIMS currently maintains no ANS.

This action is taken, effective August 14, 2018. For additional information, please contact: Ms. Joanna Eyer, Bookkeeper/HR Representative, National Institute for Metalworking Skills, 10565 Fairfax Road, Suite 10, Fairfax, VA 22030; phone: 703.352.4971; e-mail: jeyer@nims-skills.org.

International Organization for Standardization

Call for U.S. Participants

ISO Guide 82 – Guidelines for Addressing Sustainability in Standards

Please be advised that the ISO Technical Management Board (ISO/TMB) has agreed to do a limited revision to ISO Guide 82 to include information on how ISO standards can support the UN Sustainable Development Goals. The revision will be limited to including content related to how ISO standards relate to and/or support the SDGs. The rest of ISO Guide 82 will not be not up for revision at this time.

ANSI is seeking U.S. experts to serve on the U.S. Virtual Technical Advisory Group (VTAG) to support this revision. It is anticipated that this project will start in early October, and is supposed to last one year.

Experts interested in participating on the U.S. VTAG for revising ISO Guide 82 should contact ANSI's Daniel Wisner by e-mail at dwisner@ansi.org.

Call for U.S. TAG Administrator

ISO/TC 244 – Industrial Furnaces and Associated Processing Equipment

ANSI has been informed that the Industrial Heating Equipment Association (IHEA), the ANSI-accredited U.S. TAG Administrator for ISO/TC 244, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 244 operates under the following scope:

Standardization of the requirements for industrial thermoprocessing equipment (e.g. heated enclosures such as furnaces, ovens, kilns, lehrs and dryers) and associated processing equipment.

The scope includes, but is not limited to, requirements for safety, energy efficiency (including exergy), design, construction, operation, processes and quality control of processed material.

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

U.S. Technical Advisory Groups

Approval of Reaccreditation

U.S. TAG to ISO TC 178 – Quality Management and Quality Assurance

ANSI's Executive Standards Council has approved the reaccreditation of the U.S. Technical Advisory Group to ISO TC 178, Quality Management and Quality Assurance, under its recently revised operating procedures, effective August 13, 2018. For additional information, please contact the TAG Administrator of the U.S. TAG to ISO TC 67: Ms. Jennifer Admussen, CQA, CQIA, Standards Manager, ISO Secretary – PC302, TC 176 SC 1, TC 207 SC 4, TC 69, ASQ, 600 N. Plankinton Avenue, Milwaukee, WI 53203; phone: 414.274.2100; e-mail: jadmussen@asq.org.

Meeting Notice

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

Meeting Date: October 22, 2018; 8:00 AM – 4:00 PM CST

Meeting Location: Omni Forth Worth Hotel, 1300 Houston Street, Fort Worth, Texas (Teleconference information available upon request)

Purpose: This is the annual ANSI B109 meeting. Updates will be given for each of the B109 standards. Breakout sessions for B109.1, B109.2, B109.3, and B109.4 will follow the main meeting.

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



**BSR/ASHRAE Addendum a to
ANSI/ASHRAE Standard 161-2018**

Public Review Draft

**Proposed Addendum a to
Standard 161-2018, Air Quality
within Commercial Aircraft**

**First Public Review (August 2018)
(Draft shows Proposed Changes to Current Standard)**

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FOREWORD

This proposed addendum clarifies the units of measure in Sections 7.1 (Ozone) and 8.17 (Dry Ice) are parts per million by volume, not by weight.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum a to Standard 161-2018

Revise Section 7.1 as shown below.

7.1 Ozone. The in-flight ozone concentration shall not exceed 0.25 ppm by volume (ppmv) (sea level equivalent) at any time, and the time-weighted average ozone concentration shall not exceed 0.1 ppmv during any consecutive three-hour period; these ozone limit values are based on the limits in U.S. Federal Aviation Regulations 25.832 and 121.578^{9,10}. These limits apply to all flights.

Revise the last paragraph in Section 7.2 as shown below. The remainder of Section 7.2 is unchanged.

[...]

If in-service testing demonstrates that carbon monoxide (CO) will be an effective chemical marker for oil or hydraulic fluid contamination of the bleed air supply system, and it is selected as the indicator substance, the trigger point for data recording and display shall be set at 9 ppmv, and an exceedance shall be defined as either (a) a ten-minute time-weighted average concentration at or above 9 ppmv or (b) a 60 second peak value at or above 50 ppmv.

Revise Section 8.17 Operation as shown below. The remainder of Section 8.17 is unchanged.

8.17 Dry Ice

[...]

Operation The aircraft manufacturer aircraft-specific guidelines for proper packaging and handling of dry ice shall be followed when dry ice is brought on board.

In occupied spaces where dry ice results in elevation of the CO₂ concentration, the total CO₂ concentration shall not exceed 5000 ppmv (5 minute average).



**BSR/ASHRAE Addendum b to
ANSI/ASHRAE Standard 161-2018**

Public Review Draft

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FOREWORD

This proposed addendum removes a reference that is not applicable to this standard.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum a to Standard 161-2018

Delete Reference 25 in Section 11 as shown below. The remainder of Section 11 is unchanged.

- ~~25. NIOSH. 2004. *Respirator Selection Logic*, Chapter III, Respirator Selection Logic Sequence. DHHS (NIOSH) Publication 2005-100 U.S. National Institute for Occupational Safety and Health, Department of Health and Human Services, Cincinnati, OH.~~



**BSR/ASHRAE Addendum c to
ANSI/ASHRAE Standard 161-2018**

Public Review Draft

**Proposed Addendum c to
Standard 161-2018, Air Quality
within Commercial Aircraft**

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FOREWORD

This proposed addendum corrects an error in Section 8.6.b (Hydraulic Fluid) that refers to TCPs in hydraulic fluids (as TCPs are not added to hydraulic fluids). Also, in Sections 8.6.b and 8.7.b (Engine Oil), the text is generalized to apply to reportable hazardous ingredients and the relevant reference is updated.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum c to Standard 161-2018

Revise Section 8.6 as shown below. The remainder of Section 8.6 is unchanged.

8.6 Hydraulic Fluid. See also Section 8.2.

Control Measures

- Design**
- Design measures that minimize the potential for hydraulic fluid entering the aircraft air supply systems through the APU or engines should be evaluated. Such measures include an assessment of the robustness of hydraulic fluid lines/ clamps, of the durability of high-pressure fittings and clamps that hold hydraulic system lines, and of the reservoir-fill system design to reduce the possibility of overfilling. Based on this evaluation, appropriate measures to reduce the likelihood of hydraulic fluid or mist entering the cabin and flight deck air supply systems should be implemented.
 - Safety Data Sheet (SDS) information on the content of hazardous ingredients (defined in 29CFR1910.1200²⁶) individual isomers of TCPs in hydraulic fluids used in the airline industry shall be made available to crew members and ground workers that may be working in the aircraft as required by Title 29 CFR Section 1910.1200 (1996). Hydraulic fluids Products with reduced content of those hazardous ingredients or the TCPs that still provide the required performance characteristics for the specific application should be selected.

[...]

Revise Section 8.7 as shown below. The remainder of Section 8.7 is unchanged.

8.7 Engine Oil. See also Section 8.2.

Control Measures

- Design**
- Engine design features that minimize the potential for engine oil and/or its byproducts to enter the cabin and flight deck air supplies shall be evaluated and implemented, where possible, on new and current engine designs. Such measures include, but are not limited to, the design of more robust oil seals and improved oil reservoir design to include a placard at each servicing point with specific instructions not to overservice and to prevent spillage.
 - SDS information on the content of hazardous ingredients (defined in 29CFR1910.1200²⁶) individual isomers of TCPs in engine oils used in the airline industry shall be made available to crew members and ground workers that may be working in the aircraft as required by Title 29 CFR Section 1910.1200 (1996). Engine oils Products with reduced content of those hazardous ingredients or the TCPs that still provide the required performance characteristics for the specific application should be selected.

[...]

Add a new reference to Section 11 as shown below. The remainder of Section 11 is unchanged.

11. REFERENCES

26. OSHA, 2012. U.S. Occupational Safety and Health Administration, Department of the Labor Code of Federal Regulations Title 29, Standard 1910.1200: Washington, DC.



**BSR/ASHRAE Addendum d to
ANSI/ASHRAE Standard 161-2018**

Public Review Draft

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FOREWORD

This proposed addendum updates the definition of HEPA Filter Type A in Section 6.3.1 (Recirculated Air Quality) and updates the reference for this definition in Section 11 (References).

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum d to Standard 161-2018

Revise Section 6.3.1 as shown below.

6.3.1 Recirculated Air Quality. All air that is recirculated through the aircraft systems shall pass through a high-efficiency particulate air (HEPA) filter before it is supplied to the cabin. HEPA filters used for this purpose shall meet or exceed the requirements for Filter Type “A” as defined by ~~of~~ Institute of Environmental Science and Technology IEST-RP-CC001⁶ ~~IEST-RP-CC007.2⁶ Filter Type A, or MERV-17 or H13 according to EN 1822-1⁷~~, and shall provide a minimum of 99.97% collection efficiency for 0.3 micron particles. Alternatively, the filters shall meet or exceed the requirements for filter class H13 ~~may be tested according to EN 1822-1⁷~~ and shall provide a minimum of 99.95% overall collection efficiency at the most penetrating particle size. These filters and their mountings shall be designed, installed, and maintained or replaced according to manufacturer recommendations to prevent bypassing of unfiltered air due to media failure, improper installation, or other causes, and to prevent overloading. Alternative technology may be used to meet this requirement if it provides the same removal efficiency as required above for HEPA filters and is so demonstrated by a test method approved by a cognizant authority.

Revise reference number 6 in Section 11 as shown below. The remainder of Section 11 is unchanged.

11. REFERENCES

6. IEST. ~~2016~~ 2007. IEST-RP-CC001, 6th Edition, *HEPA and ULPA Filters*. ~~IEST-RP-CC007.2, *Testing ULPA Filters*~~. Mt. Prospect, IL: Institute of Environmental Science and Technology.



**BSR/ASHRAE Addendum e to
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FOREWORD

This proposed addendum updates the filter type and reference of Section 6.3.1 (Recirculated Air Quality) and updates the respective reference in Section 11 (References).

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum e to Standard 161-2018

Revise Section 6.3.1(Recirculated Air Quality) as shown below.

6.3.1 Recirculated Air Quality. All air that is recirculated through the aircraft systems shall pass through a high efficiency particulate air (HEPA) filter before it is supplied to the cabin. HEPA filters used for this purpose shall meet or exceed the requirements for Filter Type “A” as defined by ~~of~~ Institute of Environmental Science and Technology IEST-RP-CC007.21⁶ ~~Filter Type “A,” or MERV 17 or H13 according to EN 1822-1~~ and shall provide a minimum of 99.97% collection efficiency for 0.3 micron particles. Alternatively, the filters shall meet or exceed the requirements for filter class H13 ~~may be tested~~ according to EN1822-1⁷ and shall provide a minimum of 99.95% overall collection efficiency at the most penetrating particle size. These filters and their mountings shall be designed, installed, and maintained or replaced according to manufacturer recommendations to prevent bypassing of unfiltered air due to media failure, improper installation, or other causes, and to prevent overloading. Alternative technology may be used to meet this requirement if it provides the same removal efficiency as required above for HEPA filters and is so demonstrated by a test method approved by a cognizant authority.

Revise Section 11 (References) as shown below. The rest of Section 11 is unchanged.

11. REFERENCES

6. IEST. ~~2016~~ 2007-IEST-RP-CC0017.2, 6th Edition, *HEPA and ULPA Filters Testing ULPA Filters*, Mt. Prospect, IL: Institute of Environmental Science and Technology.

Revise Section A4.8 (Bacteria and Viruses) as shown below.

A4.8 Bacteria and Viruses. Aircraft air distribution system design is intended to minimize the spread of people-generated contaminants, including bacteria and viruses, by minimizing the airflow in the fore and aft directions, while providing ventilation to the airplane occupants. In addition, ~~high efficiency~~ high efficiency particulate air filters (HEPA) on the recirculated air component are standard on most large, new production aircraft but are uncommon on the regional fleet. These filters are designed to remove bacteria and viruses. Aircraft occupants may be infected by several routes of transmission: proximity, including direct contact (contact with an infected person) and indirect contact (touching an infected surface such as a cup or lavatory door handle and then touching one’s mouth or eyes); exposure to aerosols due to proximity (aerosols generated by an infected person that land within a short distance); and, potentially, exposure to smaller airborne particles that are affected by airflow patterns in the cabin. The relative contributions of these transmission routes within the aircraft have not yet been quantified, but an important transmission route is believed to be close proximity. Other variables include pathogen type (i.e., clinically relevant dose) and individual susceptibility to infection. For both routes, the exposure potential,

and therefore the risk of infection, will increase relative to the duration of the flight. For the contact route, regular hand washing and avoidance of touching one's face is expected to reduce the risk of infection. For the airborne route, the residency time of infectious agents in the passenger cabin air will be influenced by the total ventilation rate. That is, the greater the per-person total ventilation rate, the shorter the residency time, everything else being the same. Properly installed and maintained HEPA filters are designed to be effective at removing small particulate in the size range of single viruses and clusters and bacteria, which makes the total ventilation flow effective for dilution of particulates. Seating configuration and occupant activity will affect the degree of overlap between occupants' microenvironments. The relative contributions from contact with infected surfaces and airborne exposure should be assessed by a cognizant health organization.

ASME A112.6.3 Draft_Rev 2018-06
[Revision of ASME A112.6.3 – 2016]

A112.6.3

Floor and Trench Drains

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

1.65 Reference Standards

ASTM A312/A312M, Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes

ASTM B633 Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel

2.0 GENERAL REQUIREMENTS

2.2.2.1 Preparation. Parts to be covered with non-organic finishes shall be prepared as follows:

(a) Parts to be cadmium-plated shall be prepared and plated in accordance with ASTM B766.

(b) Parts to be chrome-plated shall be polished before plating and subsequently given a commercial-grade copper-nickel-chromium plating.

(c) Parts to be given a commercial-grade bronze chromate treatment shall first be given a commercial-grade cadmium-plate treatment.

(d) Parts to be zinc-plated shall be prepared and plated in accordance with ASTM B633/ASTM B663[EF1].

(e) Parts to be hot-dip galvanized shall be coated in accordance with ASTM A123/A123M or ASTM A153/A153M.

2.2.2.2 Corrosion Resistance of Parts with Nonorganic Finishes.

2.2.2.2.1 General. of parts with non-organic finishes

2.2.2.2.1 General. The specimens with nonorganic finishes selected for testing shall be as received from the manufacturer and shall not have been subjected to any other test. Coated areas visible after installation shall be free of defects and uncoated areas and shall not be stained.

2.3 Weep Holes

Weep holes may be provided at the option of the manufacturer. When provided, weep hole(s) shall have a minimum combined (i.e., total) area of 24 mm² (0.037 in.²), and ~~a~~ the smallest dimension ~~of~~ shall be at least 3.2 mm (0.125 in.).

2.4 Drain Body Thickness

The minimum thickness for drain body sumps, after fabrication, shall be as specified in Table 13.96 mm (0.156 in.).

3 BOLTS AND FASTENERS

3.1 General

Bolts and fasteners used to connect clamp collars, frames, or drain flanges to the bodies of drains shall be at least 6.35 mm ($\frac{1}{4}$ in.) national coarse (NC).

3.1.2 Drains

Connections between clamp collars and drain bodies shall have at least three bolts.

3.4 Threads

Threads shall be American national pipe taper (NPT) Classes 2A and 2B.

3.5 Tolerances

Tolerances on the dimensions specified in Tables 21, 32, and 43, and in the associated illustration figures, shall be ± 1.6 mm (± 0.06 in.).

4.3 Outlet Connection Types

4.3.4 Spigot (No-Hub)

4.3.4.1 Spigot (i.e., no-hub or hubless) outlet connections shall comply with the dimensions for beadless connections outside diameters specified in ASTM A53, ASTM A74, ASTM A312/A312M, or ASTM A888, ASTM D2661, ASTM D2665, or CISPI 301.

4.3.4.2 The wall thickness of the spigot (i.e., no-hub or hubless) connection shall comply with the minimum wall thicknesses specified in ASTM A53, ASTM A74, ASTM A312/A312M, ASTM A888, ASTM D2661, ASTM D2665, or [EF2] Section para. 2.4 of this Standard.

4.3.5 **Solvent Cement.** Outlet connections intended to be solvent-cemented shall comply with

(a) ASTM D2661 for ABS drains

(b) ASTM D2665 for PVC drains

5 TOP DIMENSIONS — AREA OF THE GRATE — OPENINGS — FREE AREA [CD3]

5.1 Requirements for Grate's Free Area Requirements

5.1.1 The areas of the grate free openings of areas for floor and trench drains shall be as specified in Table 45.

5.1.2 The area of the grate openings shall be the sum of the minimum projected area of each grate opening as viewed ~~when viewing the grate~~ from above, perpendicular to its top surface. ~~For all grates other than perimeter grates, only the grate itself shall be considered in the measurement of the area of the grate openings~~ ~~When measuring the area of the grate openings,~~ ~~except for perimeter grates, only the grate itself shall be considered in the calculations~~[CD4]; no other part of the drain shall be considered.

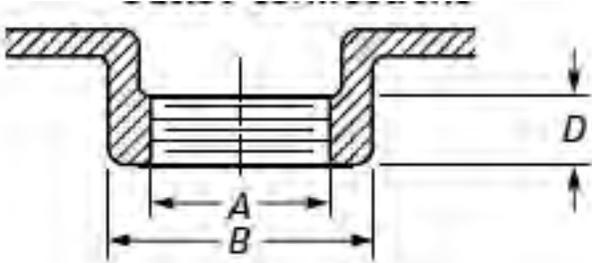
5.1.3 The area of the grate ~~- openings~~ for perimeter grates shall include the minimum projected area of the opening(s) between the grate and the drain body, ~~as viewed from determined when viewing the grate from~~ above, perpendicular to its top surface.

NoteOTE: The frame or drain body constitutes the outer edge of perimeter grate openings.

5.2 ~~Grate Openings~~Sizing

Grate openings shall be sized to exclude debris and support the anticipated loads.

Table 2-1
Minimum Dimensions for Threaded Outlet Connections

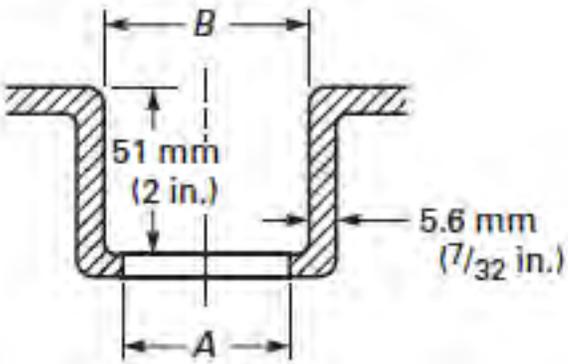


<u>NPT</u>			
<u>Nominal Size</u>	<u>A, in.</u>	<u>B, mm (in.)</u>	<u>D, mm (in.)</u>
<u>1½</u>	<u>1½</u>	<u>59 (2⁵/₁₆)</u>	<u>11 (7⁷/₁₆₀)</u>
<u>2</u>	<u>2</u>	<u>73 (2⁷/₈)</u>	<u>11 (7⁷/₁₆)</u>
<u>2½</u>	<u>2½</u>	<u>86 (3³/₈)</u>	<u>16 (5⁵/₈)</u>
<u>3</u>	<u>3</u>	<u>105 (4¹/₈)</u>	<u>19 (3³/₄)</u>
<u>4</u>	<u>4</u>	<u>130 (5¹/₈)</u>	<u>21 (1³/₁₆)</u>
<u>5</u>	<u>5</u>	<u>159 (6¹/₄)</u>	<u>22 (7⁷/₈)</u>
<u>6</u>	<u>6</u>	<u>184 (7¹/₄)</u>	<u>25 (1)</u>

NOTE: Tolerances shall be ±1.6 mm (±0.06 in.).

Table 32

Minimum Dimensions for Inside Caulk (Gasket) Outlet Connections

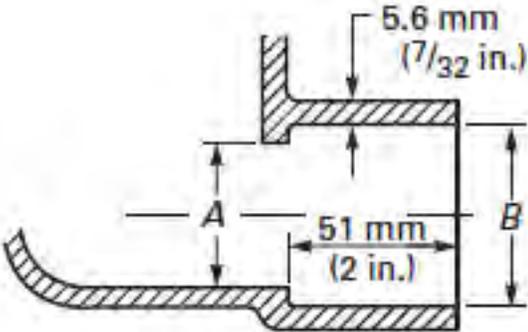


<u>Nominal Size</u>	<u>A, mm (in.)</u>	<u>B, mm (in.)</u>
<u>2</u>	<u>64 (2^{1/2})</u>	<u>76 (3)</u>
<u>3</u>	<u>92 (3^{5/8})</u>	<u>105 (4^{1/8})</u>
<u>4</u>	<u>117 (4^{5/8})</u>	<u>130 (5^{1/8})</u>
<u>5</u>	<u>143 (5^{5/8})</u>	<u>156 (6^{1/8})</u>
<u>6</u>	<u>168 (6^{5/8})</u>	<u>181 (7^{1/8})</u>

NOTE: Tolerances shall be ±1.6 mm (±0.06 in.).

Table 34

Minimum Dimensions for Hubbed (Push-On) Outlet Connections



<u>Nominal Size</u>	<u>A, mm (in.)</u>	<u>B, mm (in.)</u>
<u>2</u>	<u>51 (2)</u>	<u>76 (3)</u>
<u>3</u>	<u>76 (3)</u>	<u>105 (4^{1/8})</u>
<u>4</u>	<u>102 (4)</u>	<u>130 (5^{1/8})</u>
<u>5</u>	<u>127 (5)</u>	<u>156 (6^{1/8})</u>
<u>6</u>	<u>152 (6)</u>	<u>181 (7^{1/8})</u>

NOTE: Tolerances shall be ±1.6 mm (±0.06 in.).

Table 54

Minimum Areas of Grate--Openings- Free Area Requirements for Drains [EF5]		
Nominal		
<u>Outlet Connection Size</u>	<u>Transverse Area of Connecting Pipe, cm.² (in.²)</u>	<u>Minimum Area of the Grate-Openings-Area, cm.² (in.²)</u>
Floor and Trench Drains (Subject to Rainfall)		
<u>2</u>	<u>20.3 (3.14)</u>	<u>41.9 (6.5)</u>
<u>3</u>	<u>45.5 (7.06)</u>	<u>90.3 (14.0)</u>
<u>4</u>	<u>80.6 (12.50)</u>	<u>161.3 (25.0)</u>
<u>5</u>	<u>126.4 (19.60)</u>	<u>258.0 (40.0)</u>
<u>6</u>	<u>182.5 (28.30)</u>	<u>361.2 (56.0)</u>
All Other Drains		
<u>2</u>	<u>20.3 (3.14)</u>	<u>32.3 (5.0)</u>
<u>3</u>	<u>45.5 (7.06)</u>	<u>71.0 (11.0)</u>
<u>4</u>	<u>80.6 (12.50)</u>	<u>116.1 (18.0)</u>
<u>5</u>	<u>126.4 (19.60)</u>	<u>193.5 (30.0)</u>
<u>6</u>	<u>182.5 (28.30)</u>	<u>270.9 (42.0)</u>

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NSF/ANSI International Standard for Biosafety Cabinetry —

Biosafety Cabinetry: Design, Construction, Performance, and Field Certification

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5.25 Alarms

5.25.1 Sliding sash alarm

Sliding sash enclosures shall include an audible and visual alarm, activated when the sash is raised (1.0 in (25 mm)) above or positioned (1.0 in (25 mm)) below the manufacturer's specified opening height.

5.25.2 Internal cabinet supply/exhaust fan interlock alarm

When a cabinet contains both an internal downflow and exhaust fan, they shall be interlocked so that the downflow fan shuts off whenever the exhaust fan fails. An audible and visual alarm shall signal the failure. If the downflow fan fails, the exhaust fan shall continue to operate, and an audible and visual alarm shall signal the failure.

5.25.3 Type B cabinet exhaust alarm

Type B cabinets shall be exhausted by a remote fan. Once the cabinet is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate a 20% loss of exhaust volume within 15 s. The internal cabinet fan(s) shall be interlocked to shut off at the same time the alarms are activated. Type B cabinets shall not initiate cabinet blower startup until sensors determine appropriate exhaust flow.

5.25.4 Type A1 or A2 canopy exhaust alarm

Type A1 or A2 cabinets may be connected to an exhaust system via a canopy connection and exhausted by a remote fan. Once the cabinet and canopy is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate within 15 s a loss of capture of room air using a visible medium to verify at the canopy air intake(s). The cabinet fan(s) must remain in operation when the alarm is activated.

5.25.5 Type C1 canopy exhaust alarm

Once the cabinet and canopy is set or certified in its acceptable airflow range, audible and visual alarms shall be required to indicate within 15 s a loss of capture of room air using a visible medium to verify at the canopy air intake(s).

- when the Type C1 is connected to a canopy that directs the BSC's exhaust air into the room during an exhaust system failure, the cabinet fan(s) must remain in operation for a maximum of 5 minutes when the alarm is activated.
- when the Type C1 is connected to a canopy that directs the BSC's exhaust air into the exhaust duct during an exhaust system failure:

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- the cabinet downflow and exhaust blowers must shut down within 15 s of loss of capture of the visible medium, or;
- the default shut down time of 15 s may be lengthened to a maximum of 5 minutes if:
 - a risk assessment indicates the BSC, the work being done in it, and the exhaust system it is connected to is appropriate, as outlined in Annex E, Section E.3, and
 - the BSC is connected to an exhaust duct that has been verified to meet or exceed Seal Class A, (a leakage of less than 3.0 CFM per 100 ft² of duct surface area at 1.0 inch w.g. (0.091 m³/min per 10.0 m² of duct surface area at 250 Pa) as described in HVAC Air Duct Leakage Test Procedures - 2012¹, and
 - the cabinet provides the user an indication of the remaining time until the BSC blowers shut off.

When Type C1 BSCs are connected to an exhaust system and there is insufficient exhaust volume, the BSCs shall not initiate downflow or exhaust blower startup.

5.25.6 Type A1, A2, or C1 cabinet low inflow alarm

Type A1, A2, or C1 cabinets may contain an inflow alarm system to alert the user of a potential loss of personnel protection. When present, an audible and visual alarm shall be required to indicate within 15 s of reaching the manufacturer-specified inflow alarm set point.

When starting the cabinet blowers from a dead stop, the inflow alarm must activate a visual indication until the cabinet either enters into a visually indicated warm up period not to exceed 2 minutes or the appropriate inflow velocity is achieved to ensure proper alarm system function

If the manufacturer-specified inflow velocity alarm set point is more than 10 ft/min (0.051 m/s) less than the nominal inflow velocity, the test as specified in Annex A.6.3.1.h will be performed with the inflow velocity at this set point ± 3.0 ft/min (0.015 mm/s).

If the manufacturer-specified inflow velocity alarm set point is no more than 10 ft/min (0.051 m/s) less than the nominal inflow velocity, the inflow alarm point shall be tested as specified in Annex A.6.3.1.h.

Rationale: These two paragraphs were reworded for clarity following TG straw poll. The difference between the manufacturer's nominal set point and the alarm point does not have a tolerance. For example, the nominal set point is 105 fpm and the alarm set point is 97 fpm. To say a difference of 10 ± 3 fpm suggests the point where the requirement applies is actually 13 fpm. Also changed mm/s units to m/s as mm/s is not used anywhere else in the standard. Successfully balloted straw poll language is above in strike out.

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A.6.3 Personnel protection test (system challenged with 1×10^8 to 8×10^8 *B. subtilis* spores in 5 min)

A.6.3.1 Method

- a) Set the cabinet at the nominal set point airflow velocities.
 -
 -

¹ Sheet Metal and Air Conditioning Contractors National Association, 4201 Lafayette Center Drive Chantilly, Virginia 20151-1219 <www.smacna.org>

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- h) For new and major modification redesign cabinet models, repeat the above steps setting the airflow velocities at 10 ± 3.0 ft/min (0.051 ± 0.015 m/s) less than the nominal set points for both downflow and inflow, except as noted below.

When an inflow alarm is present on a Type A1, A2, or C1 BSC, the appropriate cabinet blower(s) speed shall be reduced (from nominal set point) without damper adjustment (if one is present), until the inflow alarm is activated.

- If the manufacturer-specified inflow velocity alarm set point is more than 10 ft/min (0.051 m/s) less than the nominal inflow velocity, the test as specified in this section will be performed with the inflow velocity at this alarm set point ± 3.0 ft/min (0.015 mm/s).
- If the manufacturer-specified inflow velocity alarm set point is no more than 10 ft/min (0.051 m/s) less than the nominal inflow velocity, the inflow alarm point shall be tested as specified in in this section.

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F.7 Site installation assessment tests

F.7.1 Purpose

These tests are performed to verify that the biosafety cabinet is integrated properly into the facility.

F.7.2 Apparatus

- owner's manual; and
- a visible source of cold smoke such as titanium tetrachloride.

F.7.3 Method

F.7.3.1 Alarm functions

F.7.3.1.1 Sash alarms

~~On cabinets equipped with a sliding sash, it shall be raised 1.0 in (2.5 cm) above and lowered 1.0 in (2.5cm) below the manufacturer's recommended height. Signaling of an audible and visual alarm shall be verified for both conditions. For cabinets that have been tested and certified to editions of NSF/ANSI standard 49 earlier than the 2014 edition, alarm activation is only required when the sash is raised 1.0 in (25 mm) above the manufacturer's recommended height.~~

When cabinets are equipped with a sliding sash, an alarm shall be activated when the sash is raised or lowered 1.0 in (25 mm) above or below the manufacturer's specified opening height. For cabinets that have been tested and certified to editions of NSF/ANSI standard 49 earlier than the 2014 edition, alarm activation is only required when the sash is raised 1.0 in (25 mm) above the manufacturer's recommended height.

Sash alarm on cabinets:

- a) Shall be tested at the time of alarm verification.
- b) Raise and lower sliding window above and below the manufacturer's recommended height. Audible and visual alarm shall indicate window position above or below ± 1.0 in (25 mm).
- c) Reported values shall be:

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- Name of test (sash alarm test)
- pass or fail

F.7.3.2 Exhaust airflow alarms (excluding building automation systems)

Whenever an alarm is present to monitor the exhaust airflow, its operation must be verified. The alarm's operation shall be verified at every certification.

F.7.3.2.1 Exhaust alarm system – Type B1 or B2

Supply fan interlock on B cabinets:

- a) Shall be tested at time of alarm verification.
- b) Reduce exhaust volume 20% once the cabinet is set or certified in its acceptable airflow range, and verify that audible and visual alarms indicate a loss of exhaust volume within 15 s. The internal cabinet fan(s) shall be interlocked to shut off at the same time the alarms are activated.
- c) Reported values shall be:
 - Name of test (exhaust alarm test)
 - pass or fail

NOTE – For direct connected Type B1 or B2 BSCs, measure the static pressure in the duct-work between the cabinet and duct-mounted balancing dampers.

F.7.3.2.2 Exhaust alarm system – Type A1 or A2 canopy connection

The canopy connection on Type A1 or A2 cabinets:

- a) Shall be tested at time of alarm verification.
- b) Introduce a visible medium source into the canopy air intake(s) while slowly reducing the exhaust volume until there is a loss of capture of the visible medium into the canopy air intake(s). The audible and visual canopy alarms shall respond within 15 s, and the cabinet fan(s) will continue to operate.
- c) Reported values shall be:
 - Name of test (Type A canopy exhaust alarm test)
 - pass or fail

NOTE - Direct connected Type A1 or A2 cabinets shall not be considered in compliance with the standard.

F.7.3.2.3 Exhaust alarm system - Type C1

The canopy connection on a Type C1 BSC that directs its exhaust into the room:

- shall be tested at the time of alarm verification, and
- introduce a visible medium source into the canopy air intake(s) while slowly reducing the exhaust volume until there is a loss of capture of the visible medium into the canopy air intake(s). The audible and visual canopy alarms shall respond within 15 s, and the cabinet fan(s) will continue to operate for a maximum of 5 minutes.

The canopy connection on a Type C1 BSC that directs its exhaust into the exhaust duct:

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- shall be tested at the time of alarm verification, and
- introduce a visible medium source into the canopy air intake(s) while slowly reducing the exhaust volume until there is a loss of capture of the visible medium into the canopy air intake(s). The audible and visual canopy alarms shall respond within 15 s, and the cabinet fan(s) will shut off.

The cabinet blowers may continue to operate, directing exhaust air into the duct system for a maximum of 5 minutes, provided the following test is successfully completed:

- measure the inflow velocity using a DIM with the cabinet and facility exhaust system operating normally. Turn off the facility exhaust fan. Do not close any control valves in the ductwork. Wait 15 seconds after the cabinet alarm has activated and measure the inflow velocity again, using a DIM.
- the average inflow velocity, as measured with a DIM after 15 seconds of alarm operation, shall not be reduced more than 10 FPM from the velocity measured immediately prior to turning off the facility exhaust fan.

When Type C1 BSCs are connected to an exhaust system and there is insufficient exhaust volume, the BSCs shall not initiate downflow or exhaust blower startup.

Reported values shall be:

- Name of test (Type C exhaust alarm test)
- pass or fail

F.7.3.3 Cabinet alarm systems – Type A1, A2, or C1

When a Type A1, A2, or C1 BSC has an inflow alarm system, its function shall be verified at every certification (F.7.3.3.1).

F.7.3.3.1 Airflow alarm system - Type A1, A2, or C1

The airflow alarm system on Type A1, A2, or C1 cabinets:

- a) Shall be tested at the time of alarm verification.
- b) Using a DIM to measure inflow, reduce velocity to the manufacturer's designated low alarm point. Audible and visual alarms shall respond within 15 s to indicate low airflow alarm.
- c) Reported values shall be:
 - Name of test (airflow alarm test)
 - pass or fail

F.7.3.3.2 Internal supply/exhaust fan interlock alarm – Type A1, ~~A2~~, or C1

The supply fan interlock alarm on Type A1, ~~A2~~, or C1 cabinets:

- a) Shall be tested on Type A1, ~~A2~~, or C1 cabinets:
- b) Interrupt the operation of the cabinets exhaust fan per manufacturer's instructions. Audible and visual alarm shall respond within 15 s as well as the interruption of the cabinet's supply fan.
- c) Reported values shall be:
 - Name of test (type A fan interlock/alarm test)
 - pass or fail

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Annex F
(normative)

Field tests

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F.7.3.2.2 Exhaust alarm system – Type A1 or A2 canopy connection

F.7.3.2.2.1 Maintain inflow velocity using canopy connection on Type A1 or Type A2 cabinets:

- a) Shall be tested at time of alarm verification if using non-NSF listed canopy.
- b) De-energize or block the facility exhaust system from the cabinet. Measure inflow velocity of the cabinet. The measured velocity shall be no more than 8.0 ft/min (0.041 m/s) below the lowest value of the inflow velocity range stated on the cabinet data plate.

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Language below has been voted in successfully in previous revision ballots, and is offered here for reference but is no longer up for vote

F.7.3.2.2.2 Containment loss of canopy connection on Type A1 or A2 cabinets:

- a) Shall be tested at time of alarm verification.
- b) Introduce a visible medium source into the canopy air intake(s) while slowly reducing the exhaust volume until there is a loss of capture of the visible medium into the canopy air intake(s). The audible and visual canopy alarms shall respond within 15 s, and the cabinet fan(s) will continue to operate.
- c) Direct connected Type A1 or A2 cabinets shall not be considered in compliance with the standard.

3 Definitions

3.XX. **Modified Canopy Installation:** Installation of any canopy other than a designated acceptable option for a NSF Listed Biosafety Cabinet.

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F.7 Site installation assessment tests

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F.7.3 Method

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F.7.3.2 Exhaust airflow alarms and interlocks (~~excluding building automation systems~~)

Whenever an alarm is present to monitor the exhaust airflow from the cabinet connection to the external system, its operation must be verified. ~~The alarm's operation~~ Operation of the cabinet's alarm and interlock if present shall be verified at every certification.

Rationale: the current phrase “excluding building automation systems” is ambiguous enough to cause some field certifiers to misinterpret the intent of the test, and not test the alarm of the BSC itself if it is connected to a BAS

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NSF/ANSI Standard
for Sustainability –

Environmental Leadership and Corporate Social Responsibility Assessment of Servers

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12.2.1 Optional - Environmental and social responsibility reporting on nine suppliers (corporate)

Manufacturer shall publicly disclose corporate environmental and social responsibility performance using the key performance indicators (or indicators) listed in Table 12.1.

The disclosure for this criterion shall include performance information for at least nine suppliers, and shall include three of the manufacturer's top six suppliers (by annual spend, fiscal or calendar) of each of the following three types of components, if applicable, for the product covered by this Standard:

- principal storage device(s)
- processor(s) (CPU)
- printed circuit board(s)

The suppliers included in the disclosure may change from year to year. If there are less than three suppliers for a component type named above, every supplier for that component type shall be included in the public disclosure.

Manufacturer may publicly disclose key performance indicators by supplier or in aggregate. Supplier names are not required in the public disclosure.

Reporting format and frequency:

- disclosures shall be publicly available on the manufacturer's website. It is acceptable to provide a link on the manufacturer's website to the disclosure on the supplier's website.
- data shall be reported consistent with the Topic-specific Standards in the GRI Sustainability Reporting Standards (GRI Standards) listed in Table 12.1. Manufacturers or suppliers may use a reporting framework or program other than the GRI Standards (e.g., CDP, Electronic Industry Citizenship Coalition (EICC), or Sustainability Accounting Standards Board (SASB)) if it can be demonstrated how the required Topic-specific Standards in Table 12.1 map to the alternative framework or program.

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- publication of a full report or reports ‘in accordance’ with the GRI Standards is not required, but would meet the requirements of this criterion if the report(s) covers the indicators specified in this criterion.
- performance against the indicators shall be reported and publicly disclosed at least annually.

Manufacturer may claim up to 2 points for this criterion. To claim 1 point, any 6 of the indicators listed in Table 12.1 shall be publicly disclosed for all 9 suppliers. To claim 2 points, all 10 of the 12 GRI indicators listed in Table 12.1 shall be publicly disclosed for all 9 suppliers.

Table 12.1

Key Performance Indicators	Consistent with topic-specific GRI standard disclosure
Energy consumption outside of the organization	302-2
Energy intensity	302-3
Reduction of energy consumption	302-4
Direct GHG emissions (Scope 1)	305-1
Energy indirect GHG emissions (Scope 2)	305-2
Materials used by weight or volume	301-1
Total water withdrawal by source	303-1
Water recycled and reused or Water discharge by quality and destination	303-3 or 306-1
Waste by type and disposal method	306-2
Freedom of association and collective bargaining	407-1
Operations with risk for forced or compulsory labor	409-1
Operations with risk for incidents of child labor	408-1

Point value: maximum 2

Geographic applicability: This criterion shall be declared the same in all countries or regions for which the product is declared to conform to this Standard. The approach used to conform to this criterion may vary by country or region.

Verification requirements:

- a) URL for public disclosure on manufacturer’s website for the scope of suppliers covered by the criterion
- b) if the manufacturer has less than 3 suppliers for any of the 3 listed components, a signed statement from manufacturer stating the number of suppliers of the component.
- c) if claiming 1 point, identification of which 6 indicators in Table 12.1 are addressed in the public disclosure for each of the nine suppliers. If claiming 2 points, identification of which 10 indicators in Table 12.1 are addressed in the public disclosure for each of the nine suppliers. ~~Note: if claiming 2 points, public disclosure must include all 12 of the indicators in Table 12.1.~~

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d) for each disclosure that uses a reporting framework or program other than GRI, demonstration of how the key performance indicators map to the Topic-specific GRI Standard disclosures in Table 12.1.

e) demonstration of at least one public disclosure for nine suppliers must be available at the time of first declaration to the criterion, and annually thereafter.

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Note - Provided below are two versions of the criterion revisions.

- 1) The first version below is the OFFICIAL ballot showing the proposed revisions in using ~~strikeout~~ for proposed removal of existing text and grey highlights to indicate the proposed new text. Only the revisions for this NSF Ballot (426i7r1) are shown.
- 2) The second version, provided within the RED BOX is for informational purposes only and is not part of this official ballot. The revisions for this ballot merged with the revisions NSF Ballots 426i3r1 and 426i5r1 are shown for clarity. NSF Ballots 426i3r1 and 426i5r1 revisions are shown in red text are NOT included in this ballot.

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12.4.3 Optional - Certification to social responsibility performance standard (corporate)

Manufacturer shall ensure that all facilities of three of its 6 top suppliers (by annual spend, fiscal or calendar) that manufacture each of three main components (principal storage device(s); processor(s) (CPU); and printed circuit board(s)), if applicable, for the product are:

— certified by accredited certification bodies to Social Accountability (SA) 8000³⁹. Certification bodies shall be accredited by an authorized accreditation body to certify to the SA8000. The certification shall be no older than three years. (2 points)

Optional points shall only be awarded for SA8000 certification if all facilities designated above are certified to SA8000. If there are fewer than three suppliers for a component type named above, every supplier for that component shall conform to this criterion;

Or

— audited to the EICC/RBA Code of Conduct¹⁵ using the Validated Audit Process (VAP). (1 point)

Optional point shall only be awarded for VAP audits if a certificate has been issued by the VAP Operations Management Team to verify that for each facility:

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— initial validated audit reports contained no major or priority non-conformance findings. ~~as defined by the EICC VAP and shall be no older than two years.~~ If the facility was determined to be Low Risk¹ as defined by the EICC/RBA VAP, the initial report shall be no older than four years. If the facility was determined to be Medium or High Risk² as defined by the EICC/RBA VAP, the initial report shall be no older than two years.

Or

— closure audit report confirming that all major ~~and~~ priority non-conformance corrective actions resulting from previous VAP audits were remedied within time frame specified by the EICC/RBA (i.e. RBA VAP Gold Recognition Certificate). The initial audit report shall be no older than two years.

Or

— closure audit report confirms that all non-conformance corrective actions resulting from previous VAP audits were remedied within the time frame specified by the EICC/RBA (i.e. RBA VAP Platinum Recognition Certificate). The initial audit report shall be no older than four years.

Optional point shall be awarded for EICC/RBA VAP audits if all facilities designated above meet the VAP audit requirements or facilities meet a combination of VAP audits and SA8000 certification.

If there are fewer than three suppliers for a component type named above, every supplier for that component shall conform to this criterion.

Point value: 1 or 2

Geographic applicability: This criterion shall be declared the same in all countries or regions for which the product is declared to conform to this Standard. The approach used to conform to this criterion may vary by country or region.

Verification requirements:

- a) demonstration of certification to SA8000 or EICC/RBA VAP audits for all facilities of 3 of its 6 top suppliers that manufacture the 3 components listed above, if applicable, for the product declared to conform to this criterion, including either:
 - i. certificate to SA8000 2 years prior to product declaration or product verification for all facilities of 3 largest suppliers that manufacture the 3 components; or
 - ii. certificate issued by the EICC/RBA VAP Operations Management Team for facilities of 3 of its 6 top suppliers that manufacture the 3 components listed above for the product declared to conform to this criterion. Initial audit reports must be issued within the timeframes specified below and ~~Each certificate must be issued within 2 years of product declaration or product verification and~~ verify that:

¹ Currently defined by EICC/RBA as ≥ 180 of 200 points

² Currently defined by EICC/RBA as < 180 of 200 points

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— the initial validated audit report contained no major or priority non-conformance findings. If the facility was determined to be Low Risk, the initial report must be issued within 4 years of product declaration or product verification. If the facility was determined to be Medium or High Risk, the initial report must be issued within 2 years of product declaration or product verification.

or

— the closure audit report confirms that all major and/or priority non-conformance corrective actions were remedied within the time frame specified by the VAP EICC/RBA (i.e. RBA VAP Gold Recognition Certificate). The initial audit report must be issued within 2 years of product declaration or product verification.

or

— the closure audit report confirms that all non-conformance corrective actions were remedied within the time frame specified by the EICC/RBA (i.e. RBA VAP Platinum Recognition Certificate). The initial audit report must be issued within 4 years of product declaration or product verification.

b) if the manufacturer has fewer than 3 suppliers of components listed in a), a signed statement from a company official stating the number of suppliers the company has for the product declared to the criterion.

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Clarification ONLY: Information provided within the red text box is not officially part of the ballot and is provided for clarity ONLY. NSF currently has two other ballots open (NSF Ballots 426i3r1 and 426i5r1) to address additional revisions to this criterion. For reference purposes only, we have merged the revisions from these ballots above for clarity and included the combined language below; however, please note that this is for informational purposes only. All RED text is for clarification ONLY and not a part of the official ballot. The official balloted language you are voting on is provided outside the text box.

Merged Language for Informational Purposes Only:

12.4.3 Optional - Certification to social responsibility performance standard (corporate)

Manufacturer shall ensure that all **supplier owned or operated** facilities of three of its 6 top suppliers (by annual spend, fiscal or calendar) that manufacture each of three main components (principal storage device(s); processor(s) (CPU); and printed circuit board(s)), if applicable, for the product are:

— certified by accredited certification bodies to Social Accountability (SA) 8000³⁹. Certification bodies shall be accredited by an authorized accreditation body to certify to the SA8000. The certification shall be no older than three years. (2 points)

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Optional points shall only be awarded for SA8000 certification if all facilities designated above are certified to SA8000. If there are fewer than three suppliers for a component type named above, every supplier for that component shall conform to this criterion;

Or

— audited to the EICC/RBA Code of Conduct¹⁵ using the Validated Audit Process (VAP). (1 point)

Optional point shall only be awarded for VAP audits if a certificate has been issued by the VAP Operations Management Team to verify that for each facility:

— initial validated audit reports contained no major or priority non-conformance findings. ~~as defined by the EICC VAP and shall be no older than two years.~~ If the facility was determined to be Low Risk³ as defined by the EICC/RBA VAP, the initial report shall be no older than four years. If the facility was determined to be Medium or High Risk⁴ as defined by the EICC/RBA VAP, the initial report shall be no older than two years.

Or

— closure audit report confirming that all major ~~or~~ and priority non-conformance corrective actions resulting from previous VAP audits were remedied within time frame specified by the EICC/RBA (i.e. RBA VAP Gold Recognition Certificate). The initial audit report shall be no older than two years.

Or

— closure audit report confirms that all non-conformance corrective actions resulting from previous VAP audits were remedied within the time frame specified by the EICC/RBA (i.e. RBA VAP Platinum Recognition Certificate). The initial audit report shall be no older than four years.

Optional point shall be awarded for EICC/RBA VAP audits if all facilities designated above meet the VAP audit requirements or facilities meet a combination of VAP audits and SA8000 certification.

If there are fewer than three suppliers for a component type named above, every supplier for that component shall conform to this criterion.

NOTE — For the purpose of this criterion “facility” is defined as a manufacturing site that is majority owned or operated by one of the suppliers within the scope of this criterion.

Point value: 1 or 2

Geographic applicability: This criterion shall be declared the same in all countries or regions for which the product is declared to conform to this Standard. The approach used to conform to this criterion may vary by country or region.

³ Currently defined by EICC/RBA as ≥ 180 of 200 points

⁴ Currently defined by EICC/RBA as < 180 of 200 points

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Verification requirements:

- a) demonstration of certification to SA8000 or EICC/RBA VAP audits for all **supplier owned or operated** facilities of 3 of its 6 top suppliers that manufacture the 3 components listed above, if applicable, for the product declared to conform to this criterion, including either:
- i. certificate to SA8000 **issued within 32** years prior to product declaration or product verification for all **supplier owned or operated** facilities of 3 largest suppliers that manufacture the 3 components; or
 - ii. certificate issued by the EICC/RBA VAP Operations Management Team for all **supplier owned or operated** facilities of 3 of its 6 top suppliers that manufacture the 3 components listed above for the product declared to conform to this criterion. Initial audit reports must be issued within the timeframes specified below and ~~Each certificate must be issued within 2 years prior to of product declaration or product verification and~~ verify that:
 - the **initial validated audit report contained**s no major or priority non-conformance findings. If the facility was determined to be Low Risk, the initial report must be issued within 4 years of product declaration or product verification. If the facility was determined to be Medium or High Risk, the **initial report must be issued within 2 years of product declaration or product verification.**

or

 - the closure audit report confirms that all major ~~and~~ priority non-conformance corrective actions were remedied within the time frame specified by the ~~VAP~~ EICC/RBA (i.e. RBA VAP Gold Recognition Certificate). The initial audit report must be issued within 2 years of product declaration or product verification.

or

 - the closure audit report confirms that all non-conformance corrective actions were remedied within the time frame specified by the EICC/RBA (i.e. RBA VAP Platinum Recognition Certificate). The initial audit report must be issued within 4 years of product declaration or product verification.
- b) if the manufacturer has fewer than 3 suppliers of components listed in a), a signed statement from a company official stating the number of suppliers the company has for the product declared to the criterion.

BSR/UL 60335-2-8, Standard for Household and Similar Electrical Appliances, Part 2: Particular Requirements for Shavers, Hair Clippers, and Similar Appliances

1. Nonpolarized attachment plugs for Class II shavers

PROPOSAL

25 Supply connection and external flexible cords

This clause of Part 1 is applicable except as follows

25.1DV.101 DR Modification to add the following to 25.1 of the Part 1:

An appliance having an appliance inlet for connection to the supply mains shall be provided with a DETACHABLE CORD. An appliance that is required to employ a polarized attachment plug as specified in 25.1DV.1.1 and that is supplied with a DETACHABLE CORD shall also employ an appliance inlet of the polarized type.

25.1DV.1.1 DR Modification to replace 25.1DV.1.1 of the Part 1 with the following:

The SUPPLY CORD of appliances incorporating a screwshell type lampholder ~~or~~ and of appliances, other than Class II shavers, incorporating a manually operated, mains connected, single-pole switch intended for appliance on-off operation shall be fitted with a polarized attachment plug. The switch shall be electrically connected to a terminal or lead intended for connection to an ungrounded conductor of the supply circuit.

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BSR/UL 489, Standard for Safety for Molded-Case Circuit Breakers, Molded-Case Switches and Circuit-Breaker Enclosures, UL 489

7.1.9.1 A circuit breaker shall be capable of withstanding for 1 minute without breakdown the application of a 48 - 62 Hz essentially sinusoidal potential of 1000 V plus twice the voltage that is to be applied between the parts in question, when the breaker is connected in accordance with its maximum voltage rating:

- a) Between line and load terminals with the breaker open - with the breaker in the tripped and off positions. The test voltages shall be based on the voltage rating of the circuit breaker. The test voltage for a circuit breaker rated for a wye-connected system shall be based on the phase-to-phase voltage;
- b) Between terminals of opposite polarity with the breaker closed. The test voltages shall be based on the voltage rating of the circuit breaker. The test voltage for a circuit breaker rated for a wye-connected system shall be based on the phase-to-phase ~~phase-to-neutral~~ voltage; and
- c) Between live parts and the overall enclosure, as described in 7.1.1.25, with the breaker both open and closed. The test voltage for a circuit breaker rated for a wye connected system shall be based on the phase-to-neutral voltage.

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BSR/UL 705, Standard for Safety for Power Ventilators

36.21 A ventilator employing more than one power source shall be provided with a disconnect for each power supply and the following warning: "WARNING: RISK OF ELECTRIC SHOCK. CAN CAUSE INJURY OR DEATH: FOR UNITS SUPPLIED BY MULTIPLE SOURCES, DISCONNECT ALL REMOTE ELECTRIC POWER SUPPLIES BEFORE SERVICING", in letters not less than 3.2 mm (1/8 in) high, or the equivalent. This marking shall be located on all panels providing access to hazardous voltage uninsulated live parts.

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BSR/UL 1773, Standard for Safety for Termination Boxes

1. Removal of Requirements for Inlet Assemblies for Cord Connections of Generators Used in Conjunction with Transfer Switch Equipment

~~1.5 These requirements do not cover equipment connected only by bus bars for both input and output circuits, nor equipment containing switching devices, relays, or overcurrent protective devices. These requirements also do not cover busway fittings known as "End Cable Tap Boxes" which are covered by the Standard for Busways, UL 857. This standard specifically does not apply to:~~

- ~~a) Equipment connected only by bus bars for both input and output circuits;~~
- ~~b) Equipment containing switching devices, relays, or overcurrent protective devices;~~
- ~~c) Busway fittings known as "End Cable Tap Boxes" which are covered by the Standard for Busways, UL 857; and~~
- ~~d) Inlet assemblies for cord connection of generators used in conjunction with transfer switch equipment which are covered by the Standard for Transfer Switch Equipment, UL 1008, Annex J, Inlet Assemblies for Transfer Switch Equipment.~~

~~10.5.6 Single pole inlet(s) provided for the equipment grounding conductor shall be green or green with yellow stripes unless marked in accordance with 26.9.8 26.9.6.~~

~~10.5.7 Single pole inlet(s) provided for the grounded circuit conductor shall be white or gray unless marked in accordance with 26.9.8 26.9.6.~~

~~10.5.8 Equipment shall use a single source of supply only. Equipment with single pole inlets shall not be used for parallel conductors unless marked in accordance with 26.9.9 26.9.7.~~

~~26.9.6 Enclosed inlets for cord connection of generators shall be marked "For power inlet only. Not for use as an outlet." This marking shall be located so as to be visible when inserting the connector into the inlet. Where single pole inlets are provided for the equipment grounding conductor in accordance with 10.5.6 or the grounded circuit conductor in accordance with 10.5.7 and are not the color specified, all inlet connections shall be marked to indicate the ungrounded, grounded, and equipment grounding terminations.~~

~~26.9.7 Enclosed inlets for cord connection of generators shall be provided with instructions or markings stating: "When used to power a structure, this inlet must be used in conjunction with transfer equipment". Termination boxes utilizing single pole inlets intended to have paralleled conductors on a single circuit shall be marked:~~

“WARNING - Risk of Fire - Not For Multiple Circuits. Single Circuit With Parallel Conductors Only.” The marking shall be adjacent to the inlets. The word “WARNING” shall be in minimum 1/8 inch (3.2 mm) high letters and the remaining text in minimum 1/16 inch (1.6 mm) high letters.

26.9.8 Where single pole inlets are provided for the equipment grounding conductor in accordance with 10.5.6 or the grounded circuit conductor in accordance with 10.5.7 and are not the color specified, all inlet connections shall be marked to indicate the ungrounded, grounded, and equipment grounding terminations. All equipment shall be marked with the following or other equivalent marking: “FOR USE BY QUALIFIED PERSONNEL ONLY” and “The routing of inlet conductors, the making and breaking of inlet connectors, and the energization and de-energization of supply shall be performed by qualified personnel only.” This marking shall be 1/16 inch (1.6 mm) high letters. The words “FOR USE BY QUALIFIED PERSONNEL ONLY” shall be in minimum 1/8 inch (3.2 mm) high letters.

Exception: The marking is not required on equipment with the following features:

- a) The current rating is 150 amperes or less.
- b) Inlet connection is through a polarized multi-pole inlet in which the grounding conductor makes contact first and breaks contact last.

26.9.9 Termination boxes utilizing single pole inlets intended to have paralleled conductors on a single circuit shall be marked: “WARNING - Risk of Fire - Not For Multiple Circuits. Single Circuit With Parallel Conductors Only.” The marking shall be adjacent to the inlets. The word “WARNING” shall be in minimum 1/8 inch (3.2 mm) high letters and the remaining text in minimum 1/16 inch (1.6 mm) high letters. The intended connection for each pin of a multi-pole inlet shall be marked on the equipment.

26.9.10 All equipment shall be marked with the following or other equivalent marking: “FOR USE BY QUALIFIED PERSONNEL ONLY” and “The routing of inlet conductors, the making and breaking of inlet connectors, and the energization and de-energization of supply shall be performed by qualified personnel only.” This marking shall be 1/16 inch (1.6 mm) high letters. The words “FOR USE BY QUALIFIED PERSONNEL ONLY” shall be in minimum 1/8 inch (3.2 mm) high letters.

Exception: The marking is not required on equipment with the following features:

- a) The current rating is 150 amperes or less.
- b) Inlet connection is through a polarized multi-pole inlet in which the grounding conductor makes contact first and breaks contact last.

26.9.11 The intended connection for each pin of a multi-pole inlet shall be marked on the equipment.

BSR/UL 2443-201X, Standard for Safety for Flexible Sprinkler Hose with Fittings for Fire Protection Service

1. Permanency of Marking

24.3 The markings specified in 24.1 - 24.2 shall be permanent, such as:

- a) By being molded, stamped, cast; or
- b) By use of paint-stenciled, stamped, or etched corrosion resistant metal nameplate, permanently secured to the flexible sprinkler hose; or
- c) By indelible stamping on a pressure-sensitive label. Ordinary usage, handling, and storage of the product are to be considered in determining the permanence of marking. Adhesive attached marking and labeling systems shall comply with the indoor- or outdoor-use requirements in the Standard for Marking and Labeling Systems, UL 969.

2. Thermoplastic Inlet Fittings

6.1 Flexible sprinkler hose with threaded end fittings shall be constructed of metallic pressure retaining components and have a rated pressure of 175 psig (1.21 Mpa) or higher.

Exception: The end fittings of flexible sprinkler hose are permitted to be constructed of thermoplastic material complying with the applicable requirements of UL 1821, Standard for Thermoplastic Sprinkler Pipe and Fittings for Fire Protection Service and when specified in the installation instructions to be connected directly to thermoplastic sprinkler piping.

3. Revisions to Clarify Test Methods and Requirements

17.1 Following exposure to low temperature conditions described in 17.2, a flexible sprinkler hose with fittings intended for dry systems using elastomeric or polymeric seals shall not show signs of leakage.

21.1 Flexible hose with fittings shall withstand without leakage or damage repeated flexing according to the following:

- a) In a U-bend arrangement as shown in Figure 21.1, the number of flexing cycles shall be as follows:
 - 1. Flexible hose with fittings having High Flexibility - 50,000 cycles; and
 - 2. Flexible hose with fittings having Limited Flexibility - 100 cycles.
- b) In an arc-bend arrangement as shown in Figure 21.2, a total of 10 flexing cycles shall be applied to flexible hose with fittings having High or Limited Flexibility.

Following the fatigue tests, the samples shall comply at ~~five~~four times the rated working pressure with the Hydrostatic Pressure and Leakage Test, Section 8.