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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

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# Comment Deadline: December 15, 2019

#### EOS/ESD (ESD Association, Inc.)

#### Revision

BSR/ESD S541-202x, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items - Packaging Materials (revision of ANSI/ESD S541-2018)

This document applies to packaging used to store, transport, and protect ESDS electronic items during all phases of production and distribution. This document does not address protection from EMI/RFI/EMP or protection of volatile materials.

#### Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: cearl@esda.org

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

#### Revision

BSR/NSF 4-202x (i25r2), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2016)

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

#### Click here to view these changes in full

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

BSR/NSF 49-202x (i149r1), Safety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49 -2019)

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 (BSCs) 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 optional copy to psa@ansi.org) to: arose@nsf.org

#### BSR/NSF 58-202x (i89r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2018)

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

#### Click here to view these changes in full

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

#### BSR/NSF 62-202x (i38r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2018)

This standard establishes minimum materials, design and construction, and performance requirements for point-of-use and point-ofentry drinking water distillation systems and the components used in these systems. Distillation systems covered by this standard are designed to reduce specific chemical contaminants from potable drinking water supplies. Systems covered under this standard may also be designed to reduce microbiological contaminants, including bacteria, viruses, and cysts, from potable drinking water supplies. It is recognized that a system may be effective in controlling one or more of these contaminants, but systems are not required to control all.

#### Click here to view these changes in full

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

## UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 79A-202x, Standard for Safety for Power-Operated Pumps for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent (E0 - E85) (revision of ANSI/UL 79-2016)

The following topic is being proposed: (1) Revisons to add CE40a test fluid requirements.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

BSR/UL 651-202x, Standard for Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings (revision of ANSI/UL 651-2018) (1) Clarifications to Schedule 40 and 80 for use with 90° Wire Performance Testing.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

BSR/UL 746B-202x, Standard for Safety for Polymeric Materials - Long Term Property Evaluations (revision of ANSI/UL 746B-2019) The intent of this proposal is to revise the guidelines for the use of Generic RTI Rating for Polyetherimide (PEI) in Table 7.1.

#### Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

BSR/UL 773A-202x, Standard for Safety for Nonindustrial Photoelectric Switches for Lighting Control (revision of ANSI/UL 773A-2018) This proposal for UL 773A covers: Addition of requirements for manufacturer's recommended field wiring terminal tightening torque to Clause 8.1.13.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

BSR/UL 827-202x, Standard for Safety for Central-Station Alarm Services (revision of ANSI/UL 827-2019)

Secondary power supply modification.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

BSR/UL 1203-202x, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations (revision of ANSI/UL 1203-2019)

This proposal for UL 1203 provides revisions to the proposal document dated August 30, 2019 to include +60°C and -60°C explosion testing with test factors using precompression explosion testing equipment per comments received.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

# Comment Deadline: December 30, 2019

## AAFS (American Academy of Forensic Sciences)

#### New Standard

BSR/ASB BPR 049-202x, Best Practice Recommendation for Lifting of Footwear and Tire Impression Evidence (new standard)

This document provides the best practice recommendations for personnel responsible for lifting footwear and tire impressions. The recommendations set forth in this document optimize the recovery of impressions. The procedures included in this document may not cover all aspects of lifting footwear or tire impressions. Deviations from this document may/may not preclude examination of recovered impressions. This document is not intended as a substitute for training in the lifting of footwear and tire track evidence.

Single copy price: Free

Obtain an electronic copy from: Document will be provided electronically on ASB website: www.asbstandardsboard.org/notice-ofstandard-development-and-coordination

Order from: Document will be provided electronically and free of charge on AAFS Standards Board website www.asbstandardsboard. org.

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

#### BSR/ASB Std 018-202x, Validation Standards for Probabilistic Genotyping Systems (new standard)

This standard sets forth the requirements to be used by laboratories for the validation of probabilistic genotyping systems related to interpreting autosomal STR results. Amelogenin is not covered by this standard. Laboratories are advised to review their validation for compliance with this standard, supplement validation where necessary, and modify existing protocols accordingly.

#### Single copy price: Free

Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments will be provided electronically on ASB website:http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/

Order from: All ASB Documents are available on the ASB website: www.asbstandardsboard.org

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

BSR/ASB STD 093-202x, Standard Test Method for the Examination and Testing of Firearms (new standard)

This document establishes standard procedures for the examination and testing of a firearm by firearm and toolmark examiners or technicians. Following these procedures, an examiner or technician will be able to conduct, document, and report the examination and testing of a firearm.

Single copy price: Free

Obtain an electronic copy from: Document will be provided electronically on ASB website:http://www.asbstandardsboard.org/notice-ofstandard-development-and-coordination/

Order from: Document will be provided electronically and free of charge on AAFS Standards Board website www.asbstandardsboard. org.

Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

# ASSP (ASC A10) (American Society of Safety Professionals)

#### Revision

BSR/ASSP A10.5-202x, Safety Requirements for Material Hoists (revision and redesignation of ANSI/ASSE A10.5 2013)

This standard applies to material hoists used to raise or lower materials during construction, alteration, or demolition. It is not applicable to the temporary use of permanently installed personnel elevators as material hoists.

Single copy price: \$110.00

Obtain an electronic copy from: LBauerschmidt@assp.org

Order from: Lauren Bauerschmidt, (847) 768-3475, LBauerschmidt@assp.org

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

# **CTA (Consumer Technology Association)**

#### New Standard

BSR/CTA 709.8-202x, Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol Specification - Part 8: Control Network Protocol/High Definition Power Line Channel Specification (CNP/HD-PLC) (new standard)

This standard specifies a communication protocol for networked control systems. The protocol provides peer-to-peer communication for networked control using web-services. The standard describes services in layer 1 and layer 2. The layer 1 (physical layer) describes the MAC sub-layer interface to the physical layer. The layer 2 (data link layer), as described in ANSI/CTA 709.1, is integrated in UDP/IP communication using IPv4 and IPv6 protocols.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: Veronica Lancaster, (703) 907-7697, vlancaster@cta.tech

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

BSR/CTA 709.9-202x, Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol Specification - Part 9: Control Network Protocol/Wireless Communication in ISM Bands (LON-ISM-RF) (new standard)

This standard specifies a new, high-speed, long-distance RF media to the current 709 LON standards. The ISM-RF (Industry, Science, Medicine Radio Frequency) transceiver uses unlicensed RF bands and are specific for EU, North America, and other regions through a software-selectable configuration property. This new standard will provide full interoperability and backwards compatibility with any of the current CTA-709 media types using a standard LON-to-LON router. This new media type is suitable for building and home applications as well as smart city and campus applications. It utilizes a meshing software algorithm to ensure broad coverage over long distance without degrading performance. With over 1MB/sec data rates, the primary use cases are for data collection, device monitoring, and control networks where wired devices are not suitable.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: Veronica Lancaster, (703) 907-7697, vlancaster@cta.tech

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

BSR/CTA 2077-202x, Recommendations for Portable Power Charging Markings (new standard) This document establishes a common terminology and overall grading system/evaluation criteria that addresses portable power packs.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: Veronica Lancaster, (703) 907-7697, vlancaster@cta.tech

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

# ECIA (Electronic Components Industry Association)

#### New National Adoption

BSR/EIA 60384-15-202x, Fixed capacitors for use in electronic equipment - Part 15: Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte (identical national adoption of IEC 60384-15:2017 Edition 2.0)

This part of IEC 60384 applies to through-hole/leaded polar and bipolar tantalum electrolyte capacitors with solid and non-solid electrolyte for use in electronic equipment. It includes capacitors for long-life applications and capacitors for general-purpose applications. Capacitors for special-purpose application may need additional requirements.

Single copy price: \$235.00

Obtain an electronic copy from: emikoski@ecianow.org

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

Send comments (with optional copy to psa@ansi.org) to: Edward Mikoski; emikoski@ecianow.org

BSR/EIA 60384-21-202x, Fixed capacitors for use in electronic equipment - Part 21: Sectional specification - Fixed surface mount multilayer capacitors of ceramic dielectric, Class 1 (identical national adoption of IEC 60384-21:2019 Edition 3.0)

This part of IEC 60384 is applicable to fixed unencapsulated surface-mount multilayer capacitors of ceramic dielectric, Class 1, for use in electronic equipment. These capacitors have metallized connecting pads or soldering strips and are intended to be mounted on printed boards, or directly onto substrates for hybrid circuits.

Single copy price: \$281.00

Obtain an electronic copy from: emikoski@ecianow.org

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

Send comments (with optional copy to psa@ansi.org) to: Edward Mikoski; emikoski@ecianow.org

BSR/EIA 60384-22-202x, Fixed capacitors for use in electronic equipment - Part 22: Sectional specification - Fixed surface mount multilayer capacitors of ceramic dielectric, Class 2 (identical national adoption of)

This part of IEC 60384 is applicable to fixed unencapsulated surface mount multilayer capacitors of ceramic dielectric, Class 2, for use in electronic equipment. These capacitors have metallized connecting pads or soldering strips and are intended to be mounted on printed boards, or directly onto substrates for hybrid circuits.

Single copy price: \$366.00

Obtain an electronic copy from: emikoski@ecianow.org

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

Send comments (with optional copy to psa@ansi.org) to: Edward Mikoski; emikoski@ecianow.org

BSR/EIA 60384-26-202x, Fixed capacitors for use in electronic equipment - Part 26: Sectional specification - Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte (identical national adoption of IEC 60384-26:2018 Edition 2.0)

This part of IEC 60384 applies to fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte primarily intended for d.c. applications for use in electronic equipment.

Single copy price: \$235.00

Obtain an electronic copy from: emikoski@ecianow.org

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

Send comments (with optional copy to psa@ansi.org) to: Edward Mikoski; emikoski@ecianow.org

BSR/EIA 62391-1-202x, Fixed electric double-layer capacitors for use in electric and electronic equipment - Part 1: Generic specification (identical national adoption of IEC 62391-1:2015 Edition 2.0)

This part of IEC 62391 applies to fixed electric double-layer capacitors (referred to as capacitor(s) in this standard) mainly used in d.c. circuits of electric and electronic equipment.

Single copy price: \$317.00

Obtain an electronic copy from: emikoski@ecianow.org

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

Send comments (with optional copy to psa@ansi.org) to: Edward Mikoski; emikoski@ecianow.org

## ESTA (Entertainment Services and Technology Association)

#### New Standard

BSR/ES1.9-202x, Event Safety Requirements - Crowd Management (new standard)

This standard is part of a suite of standards currently in development to address requirements for special event safety. It intends to define "crowd management," as distinguished from "crowd control," to provide an overview of crowd management theory and vocabulary, and to apply these terms to certain reasonably foreseeable risks that arise during live events. The standard is intended both to identify minimum standards and requirements, and also to provide questions and suggestions that help event organizers make reasonable choices under the circumstances of their event.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: ESTA, standards@esta.org

Send comments (with optional copy to psa@ansi.org) to: Richard Nix, standards@esta.org

BSR/E1.37-5-202x, General Purpose Messages for ANSI E1.20, RDM (new standard)

This document provides additional Get/Set parameter messages (PIDs) for use with the ANSI E1.20 Remote Device Management protocol.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: Karl Ruling, standards@esta.org

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

## ESTA (Entertainment Services and Technology Association)

#### Reaffirmation

BSR E1.17-2015 (R202x), Entertainment Technology -- Architecture for Control Networks (ACN) (reaffirmation of ANSI E1.17-2015)

ANSI E1.17 is a suite of documents that specifies an architecture, including protocols and language, which may be configured and combined with other standard protocols to form flexible, networked audio, lighting, or other control systems. It can be implemented on networks that support UDP, IP, and related protocols. It is not bound to Ethernet as a transport medium, but Ethernet is an obvious choice.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: Karl Ruling, standards@esta.org

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

BSR E1.19-2015 (R202x), Recommended Practice for the Use of Class A Ground-Fault Circuit Interrupters (GFCIs) Intended for Personnel Protection in the Entertainment Industry (reaffirmation of ANSI E1.19-2015)

The standard is intended to offer guidance, in accordance with existing applicable standards, on how to select, install, use, and maintain ground fault protection devices with nominal 5-mA trip settings in the entertainment industry. The purpose of their use would be to protect persons from shock, and persons and property from fire.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: Karl Ruling, standards@esta.org

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

## ESTA (Entertainment Services and Technology Association)

#### Revision

BSR/E1.20-202x, Entertainment Technology - Remote Device Management over USITT DMX512 Networks (revision of ANSI E1.20 -2010)

The existing ANSI E1.20-2010, Entertainment Technology - Remote Device Management over USITT DMX512 Networks, is being revised to clarify ambiguities, fix bugs, and incorporate some additional features. E1.20 is an extension to USITT DMX512 and ANSI E1.11 that allows for bi-directional communication on the primary data link. This allows a controller to discover RDM-enabled devices on the link, to set starting addresses and other configuration settings, and to request status messages.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: Karl Ruling, standards@esta.org

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

BSR/E1.21-202x, Entertainment Technology - Temporary Structures Used for Technical Production of Outdoor Entertainment Events (revision of ANSI E1.21-2013)

ANSI E1.21-2013 is being revised to both clarify and enhance the requirements for operations management plans, designated person responsibilities, and related requirements pertaining to temporary structures used in the technical production of outdoor entertainment events. ANSI E1.21 establishes a minimum acceptable level of design and performance parameters for their design, manufacturing, use, and maintenance. Its purpose is to ensure structural reliability and safety and to establish a reasonable standard for care to which these structures are designed and used.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: ESTA, standards@esta.org

Send comments (with optional copy to psa@ansi.org) to: Richard Nix

BSR/E1.47-202x, Recommended Guidelines for Entertainment Rigging System Inspections (revision of ANSI E1.47-2017) ANSI E1.47-2017 is being revised to expand and add clarity to its recommendations for inspections of rigging systems used in the entertainment industry.

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: ESTA, standards@esta.org

Send comments (with optional copy to psa@ansi.org) to: Richard Nix, standards@esta.org

BSR E1.4-3-202x, Entertainment Technology - Manually Operated Hoist Rigging Systems (revision and partition of ANSI E1.4-2014)

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

Single copy price: Free

Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public\_review\_docs.php

Order from: ESTA, standards@esta.org

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

## **NENA (National Emergency Number Association)**

#### New Standard

BSR/NENA STA-014.2-202x, NENA Standard for Communication Center/PSAP Daily Personnel Operations (new standard)

Update existing NENA Standard 54-001 (11/18/2004) to include today's ever-increasing workload, staffing issues, and retention challenges. PSAPs are in need of and have requested definitive guidance regarding issues of scheduling and use of electronics in the workplace. This is the 2nd Public Review on substantive edits only which are highlighted in yellow.

Single copy price: Free

Obtain an electronic copy from: Download from https://dev.nena.org/higherlogic/ws/public/document? document\_id=17411&wg\_id=af17344c-bc98-4ad7-9785-c9b0d7e0c1ba or email darnold@nena.org

Order from: Download from https://dev.nena.org/higherlogic/ws/public/document?document\_id=17411&wg\_id=af17344c-bc98-4ad7 -9785-c9b0d7e0c1ba or email darnold@nena.org

Send comments (with optional copy to psa@ansi.org) to: Delaine Arnold, darnold@nena.org, 727-312-3230

# **NSF (NSF International)**

#### Revision

BSR/NSF 49-202x (i141r1), Biosafety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49 -2019)

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 (BSCs) 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.

Single copy price: Free

Obtain an electronic copy from: https://standards.nsf.org/apps/group\_public/download.php/51523/49i141r1%20-%20Definitions% 20Update%20-%20JC%20memo%20and%20ballot.pdf

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

BSR/NSF 358-1-202x (i4r1), Polyethylene Pipe and Fittings for Water-Based Ground-Source Geothermal Heat Pump Systems (revision of ANSI/NSF 358-1-2017)

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

Single copy price: Free

Obtain an electronic copy from: https://standards.nsf.org/apps/group\_public/download.php/51525/358-1i4r1%20JC%20memo%20&% 20ballot.pdf

Order from: Jason Snider, (734) 418-6660, jsnider@nsf.org

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

## SCTE (Society of Cable Telecommunications Engineers)

#### Revision

BSR/SCTE 132-202x, Test Method for Reverse Path (Upstream) Bit Error Rate (revision of ANSI/SCTE 132-2012)

Since the introduction of Cablelabs DOCSIS 3.1 specifications, QAM channels have been sharing the upstream spectrum with OFDMA channels. Through Proactive Network Maintenance (PNM), DOCSIS 3.1 specifications leverage CMTS and cable modem features and capabilities to enable measurement and reporting of network conditions and their effects. These measurements include FEC statistics (BER) as measured by the CMTS on upstream OFDMA channels. Accordingly, the scope of this test was not broadened to cover OFDMA channels. Instead, the reader is referred to the DOCSIS 3.1 specifications.

Single copy price: \$50.00

Obtain an electronic copy from: admin@standards.scte.org

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

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

BSR/SCTE 231-202x, General Test Procedures for Evaluation of Energy Efficiency Metrics and in Support of Functional Density Metrics (revision of ANSI/SCTE 231-2016)

Cable operator networks are large expansive networks that involve hundreds if not thousands of miles of coaxial or fiber cable, powered by power supplies in the outside plant and connecting customers to critical infrastructure facilities such as hubs, headends, data centers, regional, and national distribution datacenters. In these facilities is a vast array of equipment responsible for the production and support of the cable operator's products and services such as voice, video, data, home automation and security, and Wi-Fi. The importance of powering all of these devices in the critical facilities is ever increasing as the customer expectation is for 100% availability due to the critical nature of the services being provided to business and residential customers. Standard methodologies are needed to measure the energy consumption for the various network element classes as well as measuring the density of hardware to meet the needs of optimizing critical space.

Single copy price: \$50.00

Obtain an electronic copy from: admin@standards.scte.org

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

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

BSR/SCTE 232-202x, Key Performance Metrics: Energy Efficiency & Functional Density of CMTS, CCAP, and Time Server Equipment (revision of ANSI/SCTE 232-2016)

This document is the second of multiple parts in a series that provides the cable operator with a standard reference to determine how well a piece of rack or shelf equipment performs in terms of minimizing the power required to do its particular job. In addition, this standard provides the means to quantify the amount of useful work the equipment provides per physical space. This part of the series focuses on the CMTS, CCAP, and other related cable operator critical facility equipment.

Single copy price: \$50.00

Obtain an electronic copy from: admin@standards.scte.org

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

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

# UL (Underwriters Laboratories, Inc.)

#### Reaffirmation

BSR/UL 1738-2014 (R202x), Standard for Venting Systems for Gas-Burning Appliances, Categories II, III, and IV (reaffirmation of ANSI/UL 1738-2014)

Reaffirmation and continuance of the third edition of the Standard for Venting Systems for Gas-Burning Appliances, Categories II, III, and IV as an American National Standard.

Single copy price: Free

Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx

Order from: http://www.shopulstandards.com

Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

# VC (ASC Z80) (The Vision Council)

## Revision

BSR Z80.21-202x, Instruments - General-Purpose Clinical Visual Acuity Charts (revision of ANSI Z80.21-2010 (R2015))

This standard applies to displays of optotypes for all clinical visual acuity measurement systems that use recognition of high-contrast optotypes and that are designed for general use including optotypes printed on opaque media, those intended for transillumination, electronically generated or projected displays. It does not apply to special testing of visual acuity, e.g., low-vision or low-contrast charts.

Single copy price: \$60.00

Obtain an electronic copy from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org

Order from: ascz80@thevisioncouncil.org

Send comments (with optional copy to psa@ansi.org) to: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org

# **Comment Deadline: January 14, 2020**

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

# ANS (American Nuclear Society)

## Revision

BSR/ANS 2.27-202x, Criteria for Investigations of Nuclear Facility Sites for Seismic Hazard Assessments (revision of ANSI/ANS 2.27 -2008 (R2016))

This standard provides requirements and recommended practices for conducting investigations and acquiring data sets needed to characterize seismic sources for probabilistic seismic hazard analysis of both vibratory ground motion and permanent tectonic surface deformation. The datasets provide information for site response and soil structure interaction (SSI) effects needed for design of nuclear facilities. The datasets are also used to evaluate other seismically induced ground failure hazards (e.g., liquefaction, ground settlement, slope failure).

Single copy price: \$133.00

Obtain an electronic copy from: orders@ans.org

Order from: orders@ans.org

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

BSR/ANS 2.29-202x, Probabilistic Seismic Hazard Analysis (revision of ANSI/ANS 2.29-2008 (R2016))

This standard provides criteria and guidance for performing a Probabilistic Seismic Hazard Analysis (PSHA) that is used in the design and construction of nuclear facilities, i.e., facilities that store, process, test, or fabricate radioactive materials in such form and quantity that a nuclear risk to the workers, to the off-site public, or to the environment may exist. These include, but are not limited to, nuclear fuel manufacturing facilities; nuclear material waste processing, storage, fabrication, and reprocessing facilities; uranium enrichment facilities; tritium production and handling facilities; radioactive materials laboratories; and nuclear reactors.

Single copy price: \$138.00

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

# **Technical Reports Registered with ANSI**

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

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

## Comment Deadline: December 15, 2019

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

#### Reaffirmation

INCITS/ISO/IEC TR 14496-7:2004 [R2019], Information technology - Coding of audio-visual objects - Part 7: Optimized reference software for coding of audio-visual objects, a Technical Report prepared by INCITS and registered with ANSI (reaffirm technical report)

Specifies the encoding tools that enhance both the execution and quality for the coding of visual objects as defined in ISO/IEC 14496 -2. There are five visual tools, including: Fast Motion Estimation; Fast Global Motion Estimation; Fast and Robust Sprite Generation; Optimized Reference Software for Simple Profile with Fast Variable Length Decoder Technique; and Error Resilience Tools with RVLC. The platform-specific optimization is not currently addressed. The error resilience tools are separately implemented based on the Momusys reference software.

Single copy price: \$87.00

Order from: www.ansi.org

Send comments (with optional copy to psa@ansi.org) to: Barbara Bennett, (202) 737-8888, comments@standards.incits.org

# **Project Withdrawn**

In accordance with clause 4.2.1.3.3 Discontinuance of a standards project of the ANSI Essential Requirements, 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:

## **ECIA (Electronic Components Industry Association)**

BSR/EIA 364-38D-2014 (R201x), Cable Pull-Out Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-38D-2014)

This standard establishes a test method to determine the axial tensile load that can be applied to a mated pair of connectors and the holding effect of a connector cable clamp without causing any detrimental effects upon the cable or connector when subjected to inadvertent axial tensile loads.

Inquiries may be directed to Laura Donohoe, (571) 323-0294, Idonohoe@ecianow.org

BSR/EIA 364-60A-2008 (R201x), General Methods for Testing of Contact Finishes for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-60A-2008 (R2014))

Inquiries may be directed to Laura Donohoe, (571) 323-0294, Idonohoe@ecianow.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.

#### **CEMA (Conveyor Equipment Manufacturers Association)**

Contact:Naylu GarcesPhone:(239) 260-8009E-mail:naylu@cemanet.orgOffice:5672 Strand Court

Suite 2 Naples, FL 34110

BSR/CEMA Standard No. 401-202x, Roller Conveyors - Non-Powered (reaffirmation and redesignation of ANSI/CEMA 401-2003 (R2015))

BSR/CEMA Standard No. 402 (R202x), Belt Conveyors (reaffirmation and redesignation of ANSI/CEMA 402-2003 (R2015))

- BSR/CEMA Standard No. 403 (R202x), Belt Driven Live Roller Conveyors (reaffirmation and redesignation of ANSI/CEMA 403 -2003 (R2015))
- BSR/CEMA Standard No. 550-202x, Classification and Definitions of Bulk Materials (revision and redesignation of ANSI/CEMA 550-2003 (R2015))

#### **CTA (Consumer Technology Association)**

Contact: Veronica Lancaster Phone: (703) 907-7697 E-mail: vlancaster@cta.tech

Office: 1919 South Eads Street Arlington, VA 22202

- BSR/CTA 709.8-202x, Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol Specification: Part 8: Control Network Protocol/High Definition Power Line Channel Specification (CNP/HD-PLC) (new standard)
- BSR/CTA 709.9-202x, Open Data Communication in Building Automation, Controls and Building Management - Control Network Protocol Specification: Part 9: Control Network Protocol/Wireless Communication in ISM Bands (LON-ISM-RF) (new standard)
- BSR/CTA 2077-202x, Recommendations for Portable Power Charging Markings (new standard)

#### ECIA (Electronic Components Industry Association)

Contact: Laura Donohoe Phone: (571) 323-0294 E-mail: Idonohoe@ecianow.org Office: 13873 Park Center Road Suite 315 Herndon, VA 20171

BSR/EIA 364-121-202x, Coupling Pin Strength Test Procedure for Electrical Connector Accessories (new standard) BSR/EIA 60384-15-202x, Fixed capacitors for use in electronic equipment - Part 15: Sectional specification: Fixed tantalum capacitors with non-solid or solid electrolyte (identical national adoption of IEC 60384-15:2017 Edition 2.0)

BSR/EIA 60384-21-202x, Fixed capacitors for use in electronic equipment - Part 21: Sectional specification - Fixed surface mount multilayer capacitors of ceramic dielectric, Class 1 (identical national adoption of IEC 60384-21:2019 Edition 3.0)

BSR/EIA 60384-22-202x, Fixed capacitors for use in electronic equipment - Part 22: Sectional specification - Fixed surface mount multilayer capacitors of ceramic dielectric, Class 2 (identical national adoption of)

BSR/EIA 60384-26-202x, Fixed capacitors for use in electronic equipment - Part 26: Sectional specification - Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte (identical national adoption of IEC 60384-26:2018 Edition 2.0)

BSR/EIA 62391-1-202x, Fixed electric double-layer capacitors for use in electric and electronic equipment - Part 1: Generic specification (identical national adoption of IEC 62391-1:2015 Edition 2.0)

## EOS/ESD (ESD Association, Inc.)

(revision of ANSI/ESD S541-2018)

Contact:	Christina Earl
Phone:	(315) 339-6937
E-mail:	cearl@esda.org
Office:	7900 Turin Rd., Bldg. 3

Rome, NY 13440 BSR/ESD S541-202x, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items - Packaging Materials

## NSF (NSF International)

Contact:	Allan Rose
Phone:	(734) 827-3817
E-mail:	arose@nsf.org
Office:	789 N. Dixboro Road
	Ann Arbor, MI 48105-9723

- BSR/NSF 4-202x (i25r2), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2016)
- BSR/NSF 49-202x (i92r9), Biosafety Cabinetry Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)
- BSR/NSF 49-202x (i141r1), Biosafety Cabinetry Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)
- BSR/NSF 49-202x (i149r1), Safety Cabinetry Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)

- Contact: Jason Snider
- **Phone:** (734) 418-6660
- E-mail: jsnider@nsf.org
- Office: 789 N. Dixboro Road Ann Arbor, MI 48105-9723
- BSR/NSF 358-1-202x (i4r1), Polyethylene Pipe and Fittings for Water-Based Ground-Source Geothermal Heat Pump Systems (revision of ANSI/NSF 358-1-2017)
- Contact: Monica Leslie
- Phone: (734) 827-5643
- E-mail: mleslie@nsf.org
- Office: 789 N. Dixboro Road Ann Arbor, MI 48105-9723
- BSR/NSF 58-202x (i89r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2018)
- BSR/NSF 62-202x (i38r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2018)

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

- Contact: Wathma Jayathilake
- Phone: (613) 368-4432
- E-mail: Wathma.Jayathilake@ul.org
- Office: 12 Laboratory Drive Research Triangle Park, NC 27709-3995
- BSR/UL 827-202x, Standard for Safety for Central-Station Alarm Services (revision of ANSI/UL 827-2019)

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

# **Call for Committee Members**

# ASC O1 – Safety Requirements for Woodworking Machinery

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

- o General Interest
- o Government
- o Producer
- o User

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

# **Final Actions on American National Standards**

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

# ASABE (American Society of Agricultural and Biological Engineers)

## Reaffirmation

- ANSI/ASABE EP585-2015 (R2019), Animal Mortality Composting (reaffirmation of ANSI/ASABE EP585-2015): 11/12/2019
- ANSI/ASABE/ISO 12188-2-2015 (R202x), Tractors & machinery for ag & forestry Test procedures for positioning & guidance systems in ag Part
  2: Testing of satellite-based auto-guidance systems during straight & level travel (reaffirm a national adoption ANSI/ASABE/ISO 12188-2-2015): 11/12/2019
- ANSI/ASAE EP545 MAR1995 (R2019), Loads Exerted by Free-Flowing Grain on Shallow Storage Structures (reaffirmation of ANSI/ASAE EP545 MAR1995 (R2015)): 11/12/2019
- ANSI/ASAE S422.1-2015 (R2019), Mapping Symbols and Nomenclature for Erosion and Sediment Control Plans for Land Disturbing Activities (reaffirmation of ANSI/ASAE S422.1-2015): 11/12/2019

# ASME (American Society of Mechanical Engineers)

#### Reaffirmation

- ANSI/ASME B18.8.1-2014 (R2019), Clevis Pins and Cotter Pins (Inch Series) (reaffirmation of ANSI/ASME B18.8.1-2014): 11/12/2019
- ANSI/ASME B18.31.2-2014 (R2019), Continuous Thread Stud, Double-End Stud, and Flange Bolting Stud (Stud Bolt) (Inch Series) (reaffirmation of ANSI/ASME B18.31.2-2014): 11/12/2019
- ANSI/ASME B18.31.3-2014 (R2019), Threaded Rod (Inch Series) (reaffirmation of ANSI/ASME B18.31.3-2014): 11/12/2019

#### Revision

ANSI/ASME Y14.5.1-2019, Mathematical Definition of Dimensioning and Tolerancing Principles (revision and redesignation of ANSI/ASME Y14.5.1M -1994 (R2012)): 11/7/2019

# ASNT (American Society for Nondestructive Testing)

#### Revision

- ANSI/ASNT CP-105-2020, Topical outlines for qualification of nondestructive personnel (revision of ANSI/ASNT CP-105-2015): 11/7/2019
- ANSI/ASNT CP-189-2020, Qualification and certification of nondestructive personnel (revision and redesignation of ANSI/ASNT CP-189-2016, Addenda 2018): 11/8/2019

# BICSI (Building Industry Consulting Service International)

## Revision

ANSI/BICSI 006-2019, Distributed Antenna System (DAS) Design and Implementation Best Practices (revision of ANSI/BICSI 006-2015): 11/11/2019

# CSA (CSA America Standards Inc.)

#### Revision

- ANSI LC 1-2019/CSA 6.26-2019, Fuel gas piping systems using corrugated stainless steel tubing (revision of ANSI LC 1-2018/CSA 6.26-2018): 11/11/2019
- ANSI Z21.90-2019, Gas Convenience Outlets and Optional Enclosures (same as CSA 6.24) (revision of ANSI Z21.90-2015): 11/11/2019

# **CTA (Consumer Technology Association)**

## New Standard

\* ANSI/CTA 2085-2019, Definitions and Characteristics for VR Video and VR Images (new standard): 11/11/2019

# ECIA (Electronic Components Industry Association)

#### Reaffirmation

- ANSI/EIA 60115-9-2014 (R2019), Fixed resistors for use in electronic equipment - Part 9: Sectional specification: Fixed surface mount resistor networks with individually measurable resistors (reaffirmation of ANSI/EIA 60115-9-2014): 11/12/2019
- ANSI/EIA 60115-9-1-2014 (R2019), Fixed resistors for use in electronic equipment - Part 9-1: Blank detail specification: Fixed surface mount resistor networks with individually measurable resistors - Assessment level EZ (reaffirmation of ANSI/EIA 60115-9-1-2014): 11/12/2019
- ANSI/EIA 60115-8 ed. 2.0-2014 (R2019), Fixed Resistors For Use In Electronic Equipment - Part 8: Sectional Specification Fixed Surface Mount Resistors (reaffirmation of ANSI/EIA 60115-8 ed. 2.0-2014): 11/12/2019
- ANSI/EIA 60384-25-1-2014 (R2019), Fixed capacitors for use in electronic equipment - Part 25-1: Blank detail specification - Surface mount fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte - Assessment level EZ (reaffirmation of ANSI/EIA 60384-25-1 -2014): 11/12/2019
- ANSI/EIA 60384-26-1-2014 (R2019), Fixed capacitors for use in electronic equipment - Part 26-1: Blank detail specification - Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte -Assessment level EZ (reaffirmation of ANSI/EIA 60384-26-1-2014): 11/12/2019
- ANSI/EIA 60440-2014 (R2019), Method of measurement of non-linearity in resistors (reaffirmation of ANSI/EIA 60440-2014): 11/12/2019
- ANSI/EIA 62391-2-2014 (R2019), Fixed electric double-layer capacitors for use in electronic equipment - Part 2: Sectional specification - Electric double layer capacitors for power application (reaffirmation of ANSI/EIA 62391-2-2014): 11/12/2019
- ANSI/EIA 62391-2-1-2014 (R2019), Fixed electric double-layer capacitors for use in electronic equipment - Part 2-1: Blank detail specification - Electric double-layer capacitors for power application - Assessment level EZ (reaffirmation of ANSI/EIA 62391-2-1-2014): 11/12/2019

# **IES (Illuminating Engineering Society)**

#### New Standard

ANSI/IES TM-32-2019, Lighting Practice: Building Information Management (new standard): 11/8/2019

# ISA (International Society of Automation)

#### New Standard

ANSI/ISA 67.01.01-2019, Transducer and Transmitter Installation for Nuclear Safety Applications (new standard): 11/11/2019

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

#### New Standard

INCITS 551-2019, Information technology - SCSI RDMA Protocol - 2 (SRP-2) (new standard): 11/7/2019

# **NSF (NSF International)**

#### Revision

ANSI/NSF 21-2019 (i8r1), Thermoplastic Refuse Containers (revision of ANSI/NSF 21-2015): 11/7/2019

# TIA (Telecommunications Industry Association)

#### Reaffirmation

ANSI/TIA 322-2016 (R2020), Loading Criteria, Analysis, and Design Related to the Installation, Alteration and Maintenance of Communication Structures (reaffirmation of ANSI/TIA 322-2016): 11/11/2019

# UL (Underwriters Laboratories, Inc.)

#### New National Adoption

ANSI/UL 60730-2-15-2019, Standard for Automatic electrical controls - Part 2 -15: Particular requirements for automatic electrical air flow, water flow and water level sensing controls (identical national adoption of IEC 60730 -2-15 and revision of ANSI/UL 60730-2-15-2014): 11/6/2019

#### New Standard

ANSI/UL 330A-2019, Standard for Safety for Hose and Hose Assemblies for Use with Dispensing Devices Dispensing Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations Up To 85 Percent (E0 - E85) (new standard): 11/5/2019

ANSI/UL 9540A-2019, Standard for Safety for Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems (new standard): 11/12/2019

#### Revision

- ANSI/UL 746A-2019c, Standard for Safety for Polymeric Materials Short Term Property Evaluations (revision of ANSI/UL 746A-2019): 11/11/2019
- ANSI/UL 1703-2019b, Standard for Safety for Flat-Plate Photovoltaic Modules and Panels (revision of ANSI/UL 1703-2019): 11/7/2019
- ANSI/UL 60335-2-72-2019, Standard for Safety for Household and Similar Electrical Appliances - Safety - Part 2-72: Particular Requirements for Floor Treatment Machines With or Without Traction Drive, for Commercial Use (revision of ANSI/UL 60335-2-72-2017): 11/8/2019

# VITA (VMEbus International Trade Association (VITA))

#### Revision

ANSI/VITA 65.0-2019, OpenVPX System Standard (revision of ANSI/VITA 65.0 -2017): 11/12/2019

ANSI/VITA 65.1-2019, OpenVPX System Standard - Profile Tables (revision of ANSI/VITA 65.1-2017): 11/12/2019

# **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 BPR 129-202x, Best Practice Recommendations for Internal Validation of Human Short Tandem Repeat Profiling on Capillary Electrophoresis Platforms (new standard)

Stakeholders: Forensic DNA analysis practitioners. Criminal justice system will be the end users.

Project Need: This document identifies best practice recommendations for the internal validation of human short tandem repeat DNA profiling on capillary electrophoresis platforms utilized in forensic laboratories. This document will provide validation consistency across laboratories.

This document provides best practice recommendations for performing an internal validation of a human short tandem repeat (STR) multiplex kit using capillary electrophoresis (CE). This document is to be used as a companion document to the ASB Standard 39, Standard for Internal Validation of Human Short Tandem Repeat Profiling on Capillary Electrophoresis Platforms.

BSR/ASB Std 134-202x, Standard for Identifying and Describing Pathological Conditions and Anomalies in Forensic Anthropology (new standard)

Stakeholders: Forensic anthropologists and the medicolegal community.

Project Need: Identification and description of pathological conditions and anomalies are important components of the forensic anthropology examination. This document is intended to assist practitioners when documenting pathological conditions and anomalies from human skeletal remains. Currently, there are no standards for description of pathologic conditions in human skeletal remains. This document fills that gap.

This standard sets forth techniques and approaches for describing and/or conducting a differential diagnosis of pathological conditions and anomalies from skeletal material and/or radiographic images.

## **ADA (American Dental Association)**

Contact: Paul Bralower, (312) 587-4129, bralowerp@ada.org

211 East Chicago Avenue, Chicago, IL 60611-2678

#### New National Adoption

BSR/ADA Standard No. 160-202x, Soft Lining Materials for Removable Dentures - Materials for Long-Term Use (identical national adoption of ISO 10139-2:2016)

Stakeholders: Manufacturers, dentists.

Project Need: The US TAG voted in favor of ISO 10139-2:2016, Dentistry - Soft lining materials for removable dentures - Part 2: Materials for long-term use. The ADA Standards Committee on Dental Products determined that proceeding with a national adoption was appropriate for the U.S.

This document specifies requirements for softness, adhesion, water sorption, and water solubility, as well as for packaging, marking, and manufacturer's instructions for soft denture lining materials suitable for long-term use. These materials may also be used for maxillofacial prostheses.

## **CEMA (Conveyor Equipment Manufacturers Association)**

Contact: Naylu Garces, (239) 260-8009, naylu@cemanet.org 5672 Strand Court, Suite 2, Naples, FL 34110

#### Reaffirmation

BSR/CEMA Standard No. 401-202x, Roller Conveyors - Non-Powered (reaffirmation and redesignation of ANSI/CEMA 401-2003 (R2015))

Stakeholders: Manufacturers, specifiers, and users of unit handling conveyor systems.

Project Need: It establishes the recommended engineering and application practice for this type of equipment.

The first in a series of standards applying to Unit Handling Conveyors. It describes all the information related to Non-Powered Roller Conveyors: Definitions, Applications, Bearings for Conveyor Rollers, Technical Data.

BSR/CEMA Standard No. 402 (R202x), Belt Conveyors (reaffirmation and redesignation of ANSI/CEMA 402-2003 (R2015))

Stakeholders: Manufacturers, specifiers, and users of unit handling conveyor systems

Project Need: It establishes the recommended design and application engineering practice for unit handling belt conveyors. Second in a series of standards applying to Unit Handling Conveyors. It describes all the information related to Belt Conveyors: Definitions, Applications, Technical Data, and Examples.

BSR/CEMA Standard No. 403 (R202x), Belt Driven Live Roller Conveyors (reaffirmation and redesignation of ANSI/CEMA 403-2003 (R2015))

Stakeholders: Manufacturers, specifiers, and users of unit handling conveyor systems.

Project Need: It establishes the recommended design and application engineering practice for this type of conveyor.

Third in the Unit Handling series. It describes all the information related to Belt Driven Live Roller Conveyors: Definitions, Applications, Technical Data, and Examples.

#### Revision

BSR/CEMA Standard No. 550-202x, Classification and Definitions of Bulk Materials (revision and redesignation of ANSI/CEMA 550 -2003 (R2015))

Stakeholders: Manufacturers, specifiers, and users of conveyor systems.

Project Need: Since many materials are handled in their natural state, the material properties in this publication should be considered guidelines and testing of the specific bulk material being handled is strongly recommended.

Provide a precise definition and accurate classification of materials according to their individual handling characteristics under a specific combination of conditions of temperature, humidity, sizes, and distribution of lumps, friability, and so on, including all factors that influence the selection of proper types and sizes of conveyors: horizontal, inclined, or vertical.

### ECIA (Electronic Components Industry Association)

Contact: Laura Donohoe, (571) 323-0294, Idonohoe@ecianow.org

13873 Park Center Road, Suite 315, Herndon, VA 20171

#### New Standard

BSR/EIA 364-121-202x, Coupling Pin Strength Test Procedure for Electrical Connector Accessories (new standard)

Stakeholders: Electronics, Electrical, and Telecommunications industries.

Project Need: Create new American National Standard.

Test method to cover the tests for coupling thread strength that are currently referenced in EIA-364, Table 5a.

## **IES (Illuminating Engineering Society)**

Contact: Patricia McGillicuddy, (917) 913-0027, pmcgillicuddy@ies.org 120 Wall Street, Floor 17, New York, NY 10005

#### New Standard

BSR/IES RP-202x Control Narrative, Control Narratives and Sequences of Operation for Lighting Control Systems (new standard)

Stakeholders: Lighting practitioners, electrical engineers, architects, interior designers, building owners/managers, lighting distributors, luminaire/light source manufacturers, regulatory agencies, energy efficiency organizations, the general public.

Project Need: This RP will identify and provide a standard method of describing lighting control system operation in design documents (plans and specs). This document will demonstrate a method for: (a) Designers to create a control intent narrative that presents a plain-language description to allow an owner to review and get buy-in for how the lighting control system will function; (b) Designers to create contractually enforceable language and diagrams for operation of a lighting control system. The benefits of having a clear sequence of operation are: (a) Reduced redesign; (b) Reduced risk for designers and contractors; (c) Manufacturers, vendors, and contractors have a clear understanding of what they are bidding on, installing, and programming; and (d) Commissioning providers can conduct a test with repeatable results and enforce correction of deficiencies fairly.

Designers have a number of tools at their disposal, including control zoning, specifications, one-line wiring diagrams, device settings, and lighting and electrical panel schedules. Arguably, the most important is the written lighting control narrative, which describes the lighting controls, including a sequence of operation, or description of system outputs in response to various inputs. The written control narrative may be considered most important because it informs everything else. Going beyond what drawings can communicate, it provides a common guide and reference for the project.

## **NSF (NSF International)**

Contact: Monica Leslie, (734) 827-5643, mleslie@nsf.org 789 N. Dixboro Road, Ann Arbor, MI 48105-9723

#### New Standard

BSR/NSF 524-202x, Rapid Water Sensors for Chemical and Microbiological Contaminants (new standard)

Stakeholders: Military, municipalities, users on wells, small-community water providers, consumers, wastewater treatment operators, EPA, FDA, USDA, WHO, UNICEF, FEMA, others involved in humanitarian and disaster relief, and manufacturers (food, pharma, others).

Project Need: Rapid, including in-line, sensors are becoming increasingly researched to fill a need by those who are not connected to consistently safe water supplies, those whose supplies are of variable quality or at risk of compromise, those who use water for processing/manufacturing, those needing to use source waters of unknown microbiological and chemical quality – such as the warfighters in forward operations, communities in low resource settings, those on household wells, emergency situations, and for routine monitoring of municipally supplied drinking water. These products are beginning to find their way to the market and an assurance of their performance is needed prior reliance on them for monitoring and alerting of unacceptable water quality for the intended purpose.

Evaluation of rapid water sensors, including in-line, for performance against sensor claims, including sensitivities and discrimination of methods and false positives. Includes sensors intended for use in untreated (source water), high- and low-quality waters, waters used in manufacturing, and treated drinking quality (municipal) supplies.

BSR/NSF 525-202x, Certified Safe Packaging and Disposable - Health and Environmental Effects (new standard)

Stakeholders: Packaging manufacturers, consumer goods industry stakeholders, regulators, retail; trade association; research.

Project Need: There has been an increase in public interest/demand for packaging/disposable safety and sustainability consideration with respect to certain chemicals, some regulatory normative drivers also exist, etc.

Evaluation of product and/or packaging materials for chemical extractables and exposure for intended use.

## SCTE (Society of Cable Telecommunications Engineers)

Contact: Kim Cooney, (800) 542-5040, kcooney@scte.org 140 Philips Rd, Exton, PA 19341

#### Revision

BSR/SCTE 54-202x, Digital Video Service Multiplex and Transport System Standard for Cable Television (revision of ANSI/SCTE 54 -2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

This document describes the transport subsystem characteristics and normative specifications of the in-band Service Multiplex and Transport Subsystem Standard for Cable Television.

BSR/SCTE 91-202x, Specification for 5/8-24 RF & AC Equipment Port, Female (revision of ANSI/SCTE 91-2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

The purpose of this specification is to serve as a recommended guideline for the physical dimensions of all female 5/8 - 24 equipment ports for RF and AC powering that are used in the 75-ohm RF broadband communications industry. It is not the purpose of this standard to specify the details of manufacturing.

BSR/SCTE 130-07-202x, Digital Program Insertion - Advertising Systems Interfaces - Part 7: Physical Transport and Logical Protocols (revision of ANSI/SCTE 130-7-2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

This document describes the Digital Program Insertion Advertising Systems Interfaces' transport protocols required for the exchange of messages defined in the individual parts of the SCTE 130 specification.

BSR/SCTE 145-202x, Test Method for Second Harmonic Distortion of Passives Using a Single Carrier (revision of ANSI/SCTE 145 -2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

The purpose of this document is to establish the standard methodology to measure second harmonic distortion in a Cable Telecommunication System passive at high signal-level conditions (50 - 60 dBmV). Due to the difficulty in acquiring multi-carrier signal generators with both 55 dBmV output and intermod beats at -120 dBc, the test procedure will use a single carrier source test method.

BSR/SCTE 151-202x, Mechanical, Electrical, and Environmental Requirements for RF Traps and Filters (revision of ANSI/SCTE 151 -2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

The purpose of this specification is to provide the mechanical, electrical, and environmental requirements for broadband radio frequency (RF) Trap and Filter devices whose primary purpose is to provide a fixed attenuation of RF signal(s) at user-defined frequencies while preserving adjacent topology.

BSR/SCTE 210-202x, Energy and Density Benchmark Measurement (revision of ANSI/SCTE 210-2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

Cable operator networks are large expansive networks that involve hundreds if not thousands of miles of coaxial or fiber cable powered by power supplies in the plant and connecting customers to critical infrastructure facilities such as hubs, headends, data centers, regional and national distribution datacenters.

BSR/SCTE 211-202x, Energy Metrics for Cable Operator Access Networks (revision of ANSI/SCTE 211-2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

This document contains metrics for measuring the energy efficiency of access networks (ANs) that are utilized to transport information between a service provider and a plurality of users. For the purposes of this document, the AN includes all active and passive equipment between the headend or hub, referred to in this standard as the "hub," and the demarcation point at the user premises. This document does not include any equipment inside the hub, nor does it include any customer premises equipment (CPE).

BSR/SCTE 212-202x, Cable Operator Energy Audit Framework for Establishment of Energy Baseline (revision of ANSI/SCTE 212 -2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

Defines how cable operators should audit power consumption and accurately establish an energy baseline for inside and outside plant, excluding any customer-powered equipment.

BSR/SCTE 213-202x, Energy Metrics for Cable Operator Edge and Core Facilities (revision of ANSI/SCTE 213-2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

This document provides a metric to help operators measure how effective changes in the service impact energy consumption from both a high-level and functional work perspective.

BSR/SCTE 214-03-202x, MPEG DASH for IP-Based Cable Services - Part 3: DASH ISO BMFF Profile (revision and redesignation of ANSI/SCTE 214-3-2015)

Stakeholders: Cable Telecommunications Industry

Project Need: Update current technology.

This part of the standard defines a profile of MPEG DASH, which is based on the ISO BMFF Common Profile. It also defines inband carriage of information typically present in cable systems – such as closed captioning and cue messages – in DASH ISO-BMFF media segments. This profile is a combination of generic restrictions in SCTE 214-1 and restrictions specific to ISO-BMFF specified in this standard.

BSR/SCTE 216-202x, Adaptive Power System Interface Specification (APSIS™) (revision of ANSI/SCTE 216-2015)

Stakeholders: Cable Telecommunications Industry.

Project Need: Update current technology.

This document is part of the work being done in SCTE's Standards Energy Management Subcommittee (EMS). The Adaptive Power System Interface Specification (APSISTM) working group under the EMS is responsible for the creation and updates of this document. The document was developed for the benefit of the cable industry and includes contributions by cable operators, vendors, and industry support organizations. While the initial intent of this document is to support the cable industry, the process, methodology and results of this effort may be applicable to other telecommunications networks.

# 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.

#### AAFS

American Academy of Forensic Sciences

410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 453-1036 Web: www.aafs.org

ADA (Organization) American Dental Association

211 East Chicago Avenue Chicago, IL 60611-2678 Phone: (312) 587-4129

Web: www.ada.org

#### ANS

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

ASABE American Society of Agricultural and Biological Engineers

2950 Niles Road Saint Joseph, MI 49085 Phone: (269) 932-7027

Web: www.asabe.org

#### ASME

American Society of Mechanical Engineers Two Park Avenue M/S 6-2B New York, NY 10016-5990 Phone: (212) 591-8489 Web: www.asme.org

#### ASNT

American Society for Nondestructive Testing 1711 Arlingate Lane P.O. Box 28518 Columbus, OH 43228-0518 Phone: (800) 222-2768 Web: www.asnt.org

# ASSP (ASC A10)

American Society of Safety Professionals 520 N. Northwest Hwy.

Park Ridge, IL 60068 Phone: (847) 768-3475 Web: www.assp.org

#### BICSI

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

#### CEMA

Conveyor Equipment Manufacturers Association 5672 Strand Court Suite 2 Naples, FL 34110 Phone: (239) 260-8009 Web: www.cemanet.org

#### CSA

CSA America Standards Inc. 8501 E. Pleasant Valley Road Cleveland, OH 44131 Phone: (216) 524-4990 Web: www.csagroup.org

#### СТА

Consumer Technology Association 1919 South Eads Street Arlington, VA 22202 Phone: (703) 907-7697 Web: www.cta.tech

#### ECIA

Electronic Components Industry Association 13873 Park Center Road Suite 315 Herndon, VA 20171 Phone: (571) 323-0294 Web: www.ecianow.org

## EOS/ESD

ESD Association, Inc. 7900 Turin Rd., Bldg. 3 Rome, NY 13440 Phone: (315) 339-6937 Web: www.esda.org

#### ESTA

Entertainment Services and Technology Association

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

#### IES Illum

Illuminating Engineering Society 120 Wall Street, Floor 17 New York, NY 10005 Phone: (917) 913-0027 Web: www.ies.org

web. www.ies.org

ISA (Organization) International Society of Automation 67 Alexander Drive Research Triangle Park, NC 27709 Phone: (919) 990-9228

Web: www.isa.org

#### ITI (INCITS)

InterNational Committee for Information Technology Standards 700 K Street NW Suite 600 Washington, DC 20001 Phone: (202) 737-8888 Web: www.incits.org

#### NENA

National Emergency Number Association

16603 Meadow Cove Street Tampa, FL 33624-1283 Phone: (727) 312-3230 Web: www.nena.org

#### NSF

NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 827-5643 Web: www.nsf.org

#### SCTE

Society of Cable Telecommunications Engineers 140 Philips Rd Exton, PA 19341 Phone: (800) 542-5040 Web: www.scte.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. 12 Laboratory Drive

Research Triangle Park, NC 27709 -3995 Phone: (613) 368-4427 Web: www.ul.com

VC (ASC Z80)

The Vision Council 225 Reinekers Lane Alexandria, VA 22314 Phone: 585-387-9913 Web: www.z80asc.com

#### νίτα

VMEbus International Trade Association (VITA)

929 W. Portobello Avenue Mesa, AZ 85210 Phone: (602) 281-4497 Web: www.vita.com

# **ISO & IEC Draft International Standards**

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

#### Comments

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

## ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

- ISO 15002/DAmd2, Flow-metering devices for connection to terminal units of medical gas pipeline systems Amendment 2 12/30/2019, \$29.00
- ISO/DIS 10079-4, Medical suction equipment Part 4: General requirements 12/19/2019, FREE

#### **CORROSION OF METALS AND ALLOYS (TC 156)**

ISO/DIS 23449, Corrosion of metals and alloys - Multielectrode arrays for corrosion measurement - 1/30/2020, FREE

#### **ENVIRONMENTAL MANAGEMENT (TC 207)**

- ISO/DIS 14009, Environmental management systems Guidelines for incorporating material circulation in design and development 1/30/2020, \$112.00
- ISO/DIS 14065, Greenhouse gases Environmental information -Requirements for bodies validating and verifying environmental information - 1/31/2020, FREE

#### FERTILIZERS AND SOIL CONDITIONERS (TC 134)

- ISO/DIS 22145, Fertilizers and soil conditioners Mineral soil amendments - Determination of total Calcium and Magnesium content - 1/5/2020, FREE
- ISO/DIS 23381, Determination of Salt Out (Crystallization) Temperature of Liquid Fertilizers - 1/5/2020, FREE

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

- ISO 7010/DAmd109, Graphical symbols Safety colours and safety signs - Registered safety signs - Amendment 109: Safety sign M033: Close safety bar of chairlift - 11/11/2026, \$29.00
- ISO 7010/DAmd110, Graphical symbols Safety colours and safety signs - Registered safety signs - Amendment 110: Safety sign M034: Open safety bar of chairlift - 11/11/2026, \$29.00
- ISO 7010/DAmd111, Graphical symbols Safety colours and safety signs - Registered safety signs - Amendment 111: Safety sign M035: Immediately leave the tow-track in the event of falling -11/11/2026, \$29.00

#### **IMPLANTS FOR SURGERY (TC 150)**

ISO/DIS 27186, Active implantable medical devices - Four-pole connector system for implantable cardiac rhythm management devices - Dimensional and test requirements - 1/31/2020, \$155.00

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

- ISO/DIS 21233, Heavy commercial vehicles and buses Vehicle dynamics simulation and validation Closing-curve test 1/30/2020, \$67.00
- ISO/DIS 11992-3, Road vehicles Interchange of digital information on electrical connections between towing and towed vehicles Part 3: Application layer for equipment other than brakes and running gear 2/1/2020, \$185.00

#### SIEVES, SIEVING AND OTHER SIZING METHODS (TC 24)

ISO/DIS 13322-2, Particle size analysis - Image analysis methods -Part 2: Dynamic image analysis methods - 1/27/2020, \$125.00

## SPORTS AND RECREATIONAL EQUIPMENT (TC 83)

ISO/DIS 23223, Alpine ski boots with improved walking soles -Interface with alpine ski-bindings - Requirements and test methods -1/24/2020, \$107.00

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

ISO/DIS 7083, Technical Product Documentation - Symbols used on technical product documentation - Proportions and dimensions - 1/31/2020, \$165.00

#### **TEXTILES (TC 38)**

ISO/DIS 5079, Textile fibres - Determination of breaking force and elongation at break of individual fibres - 1/2/2020, FREE

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

- ISO/DIS 8909-1, Equipment for harvesting Forage harvesters Part 1: Vocabulary 1/24/2020, FREE
- ISO/DIS 8909-2, Equipment for harvesting Forage harvesters Part 2: Specification of characteristics and performance - 1/24/2020, FREE



ISO/DIS 8909-3, Equipment for harvesting - Forage harvesters - Part 3: Test methods - 1/24/2020, \$67.00

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

ISO/IEC DIS 27034-4, Information technology - Security techniques -Application security - Part 4: Validation and verification - 1/31/2020, FREE

# **IEC Standards**

- 2/1974/FDIS, IEC 60034-2-3 ED1: Rotating electrical machines Part 2-3: Specific test methods for determining losses and efficiency of converter-fed AC motors, /2019/12/2
- 21/1027/FDIS, IEC 62932-1 ED1: Flow battery energy systems for stationary applications - Part 1: Terminology and general aspects, /2019/12/2
- 21/1029/FDIS, IEC 62932-2-2 ED1: Flow battery energy systems for stationary applications - Part 2-2 Safety requirements, /2019/12/2
- 21/1028/FDIS, IEC 62932-2-1 ED1: Flow battery energy systems for stationary applications Part 2-1: Performance general requirements and test methods, /2019/12/2
- 21A/718/FDIS, IEC 63056 ED1: Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries for use in electrical energy storage systems, /2019/12/2
- 25/683/CDV, IEC 80000-6 ED2: Quantities and units Part 6: Electromagnetism, 2020/1/31
- 35/1436/FDIS, IEC 60086-6 ED1: Primary batteries Part 6: Guidance on environmental aspects, /2019/12/2
- 36/475/CD, IEC 62217 ED3: Polymeric HV insulators for indoor and outdoor use - General definitions, test methods and acceptance criteria, 2020/1/31
- 40/2712/CD, IEC 60938-2 ED3: Fixed inductors for electromagnetic interference suppression Part 2: Sectional specification on Power Line Chokes, 2020/1/31
- 40/2711/CD, IEC 60938-1 ED3: Fixed inductors for electromagnetic interference suppression Part 1: Generic specification, 2020/1/31
- 45/877/CDV, IEC 63048 ED1: Mobile remotely controlled systems for nuclear and radiological applications General requirements, 2020/1/31
- 45A/1298/NP, PNW 45A-1298: Nuclear Power Plants Electrical power systems - Coordination and interaction with electric grid, 2020/1/31
- 45B/949/CD, IEC 62694 ED2: Radiation protection instrumentation -Backpack-type radiation detector (BRD) for the detection of illicit trafficking of radioactive material, 2020/1/31
- 45B/951/CD, IEC 62618 ED2: Radiation protection instrumentation -Spectroscopy-based alarming Personal Radiation Detectors (SPRD) for the detection of illicit trafficking of radioactive material, 2020/1/31
- 47/2600/FDIS, IEC 62779-4 ED1: Semiconductor devices -Semiconductor interface for human body communication - Part 4: Capsule endoscope, /2019/12/2
- 47/2601/CD, IEC 62830-8 ED1: Semiconductor devices -Semiconductor devices for energy harvesting and generation - Part 8: Test and evaluation methods of flexible and stretchable supercapacitors for use in low power electronics, 2020/1/31
- 47E/689/FDIS, IEC 60747-18-2 ED1: Semiconductor devices Part 18 -2: Semiconductor bio sensors - Evaluation process of lens-free CMOS photonic array sensor package modules, /2019/12/2

- 48D/713/CD, IEC 61587-6 ED2: Mechanical structures for electrical and electronic equipment - Tests for IEC 60917 and IEC 60297 series - Part 6: Security aspects for indoor cabinets, 2020/1/31
- 57/2162/CD, IEC 62351-14 ED1: Power systems management and associated information exchange Data and communications security Part 14: Cyber security event logging, 2020/1/31
- 59F/390/DTS, IEC TS 62885-1 ED3: Surface cleaning appliances -Part 1: General requirements on test material and test equipment, 2020/1/31
- 65E/688/NP, PNW 65E-688: Intelligent Device Management Part 2: Normative Requirements and Recommendations, 2020/1/31
- 77A/1061/NP, PNW TS 77A-1061 ED1: Electromagnetic compatibility (EMC) - Part 3-16: Limits - Limits for harmonic currents produced by energy supplying equipment connected to public low-voltage systems with a rated current less than or equal to 75 A per phase, 2020/1/31
- 77A/1060/Q, Amendment 2 for IEC 61000-3-3 ED. 3.0, /2019/12/2
- 80/948/CD, IEC 63173-1 ED1: Maritime navigation and radiocommunication equipment and systems - Data Interface - Part 1: S-421 Route Plan Based on S-100, 020/1/3/
- 85/707/CD, IEC 61557-12/AMD1 ED2: Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC Equipment for testing, measuring or monitoring of protective measures Part 12: Power metering and monitoring devices (PMD), 2020/1/31
- 85/708/CD, IEC 61557-17 ED1: Electrical safety in low voltage distribution systems up to 1000V AC and 1500V DC Equipment for testing, measuring and monitoring of protective measures Part 17: Non-contact voltage indicators, 2020/1/31
- 86A/1975/FDIS, IEC 60794-1-21/AMD1 ED1: Amendment 1: Optical fibre cables Part 1-21: Generic specification Basic optical cable test procedures Mechanical tests methods, /2019/12/2
- 86B/4252/NP, PNW 86B-4252: Fibre optic interconnecting devices and passive components Fibre optic connector interfaces,
- 91/1620/CD, IEC 61189-5-301 ED1: Test methods for electrical materials, printed boards and other interconnection structures and assemblies Part 5-301: Test methods for printed board assemblies Soldering paste using fine solder particles, 2020/1/31
- 100/3311/CDV, IEC 60268-22 ED1: Sound system equipment -Electrical and mechanical measurements (TA 20), 2020/1/31
- 113/513/DTS, IEC TS 62607-5-4 ED1: Nanomanufacturing Key control characteristics Part 5-4: Energy band gap measurement of nanomaterials by electron energy loss spectroscopy (EELS), 2020/1/31
- 113/514/DTS, ISO TS 21356-1: Nanotechnologies Structural characterization of graphene Part 1: Graphene from powders and dispersions, 2020/1/31
- 121B/95A/CD, IEC TR 60890 ED3: A method of temperature-rise verification of low-voltages switchgear and controlgear assemblies by calculation, 2020/1/24
- 121B/94A/CD, IEC TR 61439-0 ED3: Low-voltage switchgear and controlgear assemblies Part 0: Guidance to specifying assemblies, 2020/1/24
- JTC1-SC25/2926/CD, ISO/IEC 11801-1/AMD1 ED1: Amendment 1 -Information technology - Generic cabling for customer premises -Part 1: General requirements, 2020/1/31
- JTC1-SC25/2927/DTR, ISO/IEC TR 11801-9908 ED1: Information Technology - Generic cabling for customer premises - Part 9908: Guidance for the support of higher speed applications over optical fibre channels, 020/1/3/

# **Newly Published ISO Standards**



Listed here are new and revised standards recently approved and promulgated by ISO - the International Organization for Standardization. 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/IEC JTC 1 Technical Reports**

ISO/IEC TR 30105-7:2019, Information technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes - Part 7: Exemplar for maturity assessment, \$138.00

## ACOUSTICS (TC 43)

- ISO 389-7:2019, Acoustics Reference zero for the calibration of audiometric equipment - Part 7: Reference threshold of hearing under free-field and diffuse-field listening conditions, \$68.00
- ISO 20270:2019, Acoustics Characterization of sources of structureborne sound and vibration - Indirect measurement of blocked forces, \$185.00

## AGRICULTURAL FOOD PRODUCTS (TC 34)

- ISO 19036:2019, Microbiology of the food chain Estimation of measurement uncertainty for quantitative determinations, \$185.00
- ISO 21983:2019, Guidelines for the harvesting, transportation, separation of stigma, drying and storage of saffron before packing, \$45.00

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

ISO 11197:2019, Medical supply units, \$185.00

# INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

ISO 21919-1:2019, Automation systems and integration - Interfaces for automated machine tending - Part 1: Overview and fundamental principles, \$103.00

#### **INDUSTRIAL FANS (TC 117)**

ISO 12759-4:2019, Fans - Efficiency classification for fans - Part 4: Driven fans at maximum operating speed, \$138.00

#### **INDUSTRIAL TRUCKS (TC 110)**

ISO 5053-2:2019, Industrial trucks - Vocabulary - Part 2: Fork arms and attachments, \$45.00

#### MACHINE TOOLS (TC 39)

ISO 16092-4:2019, Machine tools safety - Presses - Part 4: Safety requirements for pneumatic presses, \$162.00

# MATERIALS FOR THE PRODUCTION OF PRIMARY ALUMINIUM (TC 226)

ISO 14428:2019, Carbonaceous materials for the production of aluminium - Cold and tepid ramming pastes - Expansion/shrinkage during baking, \$68.00

#### **OPTICS AND OPTICAL INSTRUMENTS (TC 172)**

ISO 11551:2019, Optics and photonics - Lasers and laser-related equipment - Test method for absorptance of optical laser components, \$103.00

#### PACKAGING (TC 122)

ISO 4180:2019, Packaging - Complete, filled transport packages -General rules for the compilation of performance test schedules, \$138.00

## ROAD VEHICLES (TC 22)

- ISO 22241-1/Amd1:2019, Diesel engines NOx reduction agent AUS 32 Part 1: Quality requirements Amendment 1, \$19.00
- ISO 21956:2019, Road vehicles Ergonomics aspects of transport information and control systems - Human machine interface specifications for keyless ignition systems, \$68.00

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

ISO 2440:2019, Flexible and rigid cellular polymeric materials -Accelerated ageing tests, \$45.00

#### SMALL TOOLS (TC 29)

ISO 12165:2019, Tools for moulding - Components of compression and injection moulds and diecasting dies - List of equivalent terms and symbols, \$162.00

#### **TEXTILES (TC 38)**

ISO 1833-15:2019, Textiles - Quantitative chemical analysis - Part 15: Mixtures of jute with certain animal fibres (method by determining nitrogen content), \$45.00

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

ISO 15003:2019, Agricultural engineering - Electrical and electronic equipment - Testing resistance to environmental conditions, \$138.00

## WATER QUALITY (TC 147)

ISO 22125-1:2019, Water quality - Technetium-99 - Part 1: Test method using liquid scintillation counting, \$138.00

ISO 22125-2:2019, Water quality - Technetium-99 - Part 2: Test method using inductively coupled plasma mass spectrometry (ICP-MS), \$138.00

# ISO Technical Reports TRADITIONAL CHINESE MEDICINE (TC 249)

ISO/TR 23975:2019, Traditional Chinese medicine - Priority list of single herbal medicines for developing standards, \$209.00

# **ISO Technical Specifications**

# ENERGY MANAGEMENT AND ENERGY SAVINGS (TC 301)

ISO/TS 50044:2019, Energy saving projects (EnSPs) - Guidelines for economic and financial evaluation, \$185.00

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

ISO/IEC 18013-4:2019, Personal identification - ISO-compliant driving licence - Part 4: Test methods, \$232.00

# **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 <u>http://www.nist.gov/notifyus/</u>.

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-regulatoryprograms/usa-wto-tbt-inquiry-point

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

# **American National Standards**

# **Call for Members**

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

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

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

Membership in the INCITS Executive Board is open to all directly and materially affected parties in accordance with INCITS membership rules. To find out more about participating on the INCITS Executive Board, contact Jennifer Garner at jgarner@itic.org or visit

http://www.incits.org/participation/membership-info for more information.

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

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

# Society of Cable Telecommunications

# **ANSI Accredited Standards Developer**

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

SCTE is currently seeking to broaden the membership base of its consensus bodies and is interested in new members in all membership categories to participate in new work in fiberoptic 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.

# **PINS Correction**

**Designation Change** 

# BSR/ASHRAE Standard 226-201x (now BSR/ASHRAE Standard 23-202x)

The ASHRAE standard proposal, BSR/ASHRAE Standard 226-201x, which first appeared in the PINS section of Standards Action November 30, 2018 is being changed to BSR/ASHRAE Standard 23-202x. The title remains the same: Methods for Performance Testing Positive Displacement Refrigerant Compressors and Compressor Units. Please direct inquires to Steven Ferguson, sferguson@ashrae.org, (404) 636-8400, ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

# ANSI Accredited Standards Developers

# Reaccereditation

ASC S1 – Acoustics; S2 – Mechanical Vibration and Shock; S3 – Bioacoustics; and S12 – Noise

# Comment Deadline: December 16, 2019

The Acoustical Society of America (ASA) has submitted revisions to the currently accredited operating procedures for Accredited Standards Committees S1, Acoustics; S2, Mechanical Vibration and Shock; S3, Bioacoustics; and S12, Noise, under which they were last reaccredited in 2018. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact the Secretariat of ASCs: Ms. Nancy A. Blair-DeLeon, Standards Manager, Acoustical Society of America, 1305 Walt Whitman Road, Suite 300, Melville, NY 11747; phone: 516.576.2341; e-mail: standards@acousticalsociety.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 ASA by December 16, 2019, with a copy to the ExSC Recording Secretary in ANSI's New York Office (e-mail: <u>Jthompso@ANSI.org</u>).

# Decorative Hardwoods Association (DHA – formerly known as the Hardwood Plywood Veneer Association)

# Comment Deadline: December 16, 2019

The Decorative Hardwoods Association (DHA – formerly known as the Hardwood Plywood Veneer Association), an ANSI member and Accredited Standards Developer (ASD), has submitted revisions to its currently accredited operating procedures for documenting consensus on DHA-sponsored American National Standards, under which it was last reaccredited in 2017. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Mr. Brian Sause, Consultant, Decorative Hardwoods Association, 42777 Trade West Drive, Sterling, VA 20166; phone: 703.435.2900, ext. 127; email: standards@decorativehardwoods.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 DHA by December 16, 2019, with a copy to the ExSC Recording Secretary in ANSI's New York Office (e-mail: <u>Jthompso@ANSI.org</u>).

# Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)

# Comment Deadline: December 16, 2019

The Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), an ANSI member and Accredited Standards Developer (ASD), has submitted revisions to its currently accredited operating procedures for documenting consensus on RESNA-sponsored American National Standards, under which it was last reaccredited in 2018. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Ms. Yvonne Meding, Secretary, Assistive Technology Standards Board, Rehabilitation Engineering and Assistive Technology Society of North America, 1560 Wilson Boulevard, Suite 850, Arlington, VA 22209-1903; phone: 703.524.6686; e-mail: YMeding@resna.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 RESNA by December 16, 2019, with a copy to the ExSC Recording Secretary in ANSI's New York Office (e-mail: Jthompso@ANSI.org).



# American National Standards (ANS) – Where to find Procedures, Guidance, Interpretations and More...

Please visit ANSI's website (<u>www.ansi.org</u>) for resources that will help you to understand, administer and participate in the American National Standards (ANS) process. Documents posted at these links are updated periodically as new documents and guidance are developed, whenever ANS-related procedures are revised, and routinely with respect to lists of proposed and approved ANS. The main ANS-related link is <u>www.ansi.org/asd</u> and here are some direct links as well as highlights of information that is available:

- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): <u>www.ansi.org/essentialrequirements</u>
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): <u>www.ansi.org/standardsaction</u>
- Accreditation information for potential developers of American National Standards (ANS): <u>www.ansi.org/sdoaccreditation</u>
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): <u>www.ansi.org/asd</u>
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: <u>www.ansi.org/asd</u>
- American National Standards Key Steps: <u>www.ansi.org/anskeysteps</u>
- American National Standards Value: <u>www.ansi.org/ansvalue</u>
- ANS Web Forms for ANSI-Accredited Standards Developers PINS, BSR8|108, BSR11, Technical Report: <u>www.ansi.org/PSAWebForms</u>
- Information about standards Incorporated by Reference (IBR): <u>www.ansi.org/ibr</u>
- ANSI Education and Training: <u>www.standardslearn.org</u>

If you have a question about the ANS process and cannot find the answer quickly, please send an email to psa@ansi.org.

Please also visit Standards Boost Business at <u>www.standardsboostbusiness.org</u> for resources about why standards matter, testimonials, case studies, FAQs and more.

If you are interested in purchasing an American National Standard, please visit <u>https://webstore.ansi.org/</u>

## 428 **7.3.2 Electric Field Shielding**

While no specific test methods are provided, the end user is encouraged to evaluate electric field shielding concepts using practical methods such as monitoring interior package electric field penetration to determine packaging suitability. See Annex H for clarification.

- 432 NOTE: Electric field shielding does not necessarily imply EMI/RFI/EMP shielding.
- 433

# 434 8.0 ESD PACKAGING TECHNICAL REQUIREMENTS

- 435 ESD Protective Packaging shall be defined for all ESDS item movement inside and outside EPA.
- 436

# 437 8.1 Material Properties

- Table 3 provides test methods for determining material classifications for finished packages and materials. When possible, testing should be performed on the finished package.
- 440

# 441 8.2 Material Identification

# 442 8.2.1 ESD Protective Symbol

- ESD protective packaging shall should be marked with the ESD protective symbol as described in
   ANSI/ESD S8.1.
- 445

# 446 8.2.2 Material Classification

447 ESD protective packaging should be marked with the proper material classification per 448 Section 7.0 as:

- Charge Generation: low charging
- Resistance: conductive or dissipative
- Shielding: discharge shielding or electric field shielding
- Use of multiple classifications is acceptable.
- 453

# 454 8.2.3 Traceability

455 Packaging should be marked with information that allows traceability to the packaging 456 manufacturer and to the manufacturer's date/lot code information. The date/lot code should allow 457 traceability to quality control information pertaining to the manufacture of a specific lot of 458 packaging.

459

Revision to NSF/ANSI 4 – 2016 Issue 25, Revision 1 (July 2019)

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of strikeout and additions by grey highlighting. Rationale Statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI International Standard for Food Equipment —

Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transport Equipment

5 Design and construction

# 5.48 Food warming equipment

Food warming equipment intended solely for the display of foods that are not potentially hazardous shall have a permanently attached label that states: "Not for the storage or display of potentially hazardous foods." The label shall be clearly visible to the user after installation of the equipment and the testing in Sections 6.1, 6.2, and/or 6.7 does not apply.

**Rationale**: The intention behind the recently added 5.48, Food warming equipment, is for equipment intended for holding non-potentially hazardous foods where the name of the product alone was not sufficient to convey this intention (e.g., food warmer instead of popcorn warmer, pretzel warmer, etc.), then a marking could be applied to instruct the user that the appliance is "Not for the storage or display of potentially hazardous foods." The proposed revision further clarifies that food warming equipment is exempt from performance testing that would otherwise be required by 6.1, 6.2, and/or 6.7.

Revision to NSF/ANSI 49 – 2018 Issue 149, Revision 1 (November 2019)

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of strikeout and additions by grey highlighting. Rationale Statements are in *red italics* and only used to add clarity; these statements will NOT be in the finished publication.]

# NSF/ANSI International Standard for Biosafety Cabinetry —

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

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# 2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this Standard. At the time of publication, the indicated editions were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the most recent editions of the documents indicated below.

ACGIH, Industrial Ventilation: A Manual of Recommended Practice ACGIH, Industrial Ventilation (30<sup>th</sup> Edition): A Manual of Recommended Practice: for Design: for Operation and Maintenance<sup>1</sup>

ANSI 226.1 Test No. 17<sup>2</sup>

ANSI/NFPA 70 National Electrical Code, 1999 2020<sup>3</sup>

APHA Compendium of Methods for Microbiological Examination of Foods, 1976 (Spore staining techniques)<sup>4</sup>

APHA Standard Methods for the Examination of Water and Wastewater, Seventeenth Edition (Standard dilution plate methods)<sup>4</sup>

ASHRAE 111-2008 (RA 2017) Practices for Measurement, Testing, Adjusting and Balancing of Building Heating, Ventilation, Air-Conditioning and Refrigeration Systems<sup>5</sup>

IEEE/ASTM SI 10 American National Standard for Metric Practice<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> American Conference of Governmental Industrial Hygienists. 1330 Kemper Meadow Dr., Cincinnati, OH 45240 <www.acgih.org>.

<sup>&</sup>lt;sup>2</sup> American Public Health Association. 800 I Street NW, Washington, DC 20001 <www.apha.org>.

<sup>&</sup>lt;sup>3</sup> National Fire Protection Association. 1 Batterymarch Park, Quincy, MA 02269 <www.nfpa.org>.

<sup>&</sup>lt;sup>4</sup> American Public Health Association. 800 I Street NW, Washington, DC 20001 <www.apha.org>.

<sup>&</sup>lt;sup>5</sup> American Society of Heating, Refrigerating, and Air-Conditioning Engineers. 1791 Tullie Circle, N. E. Atlanta, GA 30329 <www.ashrae.org>.

<sup>&</sup>lt;sup>6</sup>ASTM International. 100 Barr Harbor Dr., West Conshohocken, PA 19428 <www.astm.org>.

Revision to NSF/ANSI 49 – 2018 Issue 149, Revision 1 (November 2019)

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IEST-RP-CC001 Recommended Practice for HEPA Filters<sup>7</sup> IEST-RP-CC001.5 HEPA and ULPA Filters<sup>7</sup>

IEST-RP-CC007 IEST-RP-CC007.2 Testing ULPA Filters7

IEST-RP-CC013 Institute of Environmental Sciences Recommended Practice, Tentative, August, 19867

IEST-RP-CC021 IEST-RP-CC021.3 Testing HEPA/ULPA Filter Media<sup>7</sup>

MIL-F-51079B Filters, Particulate, High Efficiency, Fire Resistant, Biological Use<sup>8</sup>

NIOSH Pocket Guide: bis(chloromethyl)ether9

OSHA, CFR 29 § 1910.100 Bloodborne Pathogens<sup>10</sup>

The Lighting Handbook: Reference and Application, 10th Edition, 201111

UL 94 Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances<sup>12</sup>

UL 61010A-1 UL Standard for Safety Electrical Equipment for Laboratory Use; Part 1: General Requirements<sup>12</sup>

UL 61010-1 UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements<sup>12</sup>

Rationale: intent here is to update the Normative References in Standard 49

<sup>&</sup>lt;sup>7</sup> Institute of Environmental Sciences and Technology. 5005 Newport Drive, Suite 506, Rolling Meadows, IL 60008-1699 <www.iest.org>.

<sup>&</sup>lt;sup>8</sup> US Department of Defense, Navy Publishing and Printing Service Office. 700 Robins Ave., Philadelphia, PA 19111-5094 <www.defenselink.mil/pubs/>.

<sup>&</sup>lt;sup>9</sup> NIOSH, Department of Health and Human Services (DHHS). Publications Office, 4676 Columbia Pkwy., Cincinnati, OH 45226 <www.cdc.gov/niosh/>.

<sup>&</sup>lt;sup>10</sup> Superintendent of Documents, US Government Printing Office. Washington, DC 20402 <www.gpo.gov>.

<sup>&</sup>lt;sup>11</sup> Illuminating Engineering Society. 120 Wall Street, Floor 17, New York, NY 10005-4001 <www.iesna.org>.

<sup>&</sup>lt;sup>12</sup> Underwriters Laboratories. 333 Pfingsten Rd., Northbrook, IL 60062-2096 <www.ul.com>.

Revision to NSF/ANSI 58-2018 Issue 89 Revision 1 (October 2019)

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NSF/ANSI Standard for Drinking Water Treatment Units –

# Reverse Osmosis Drinking Water Treatment Systems

# 6 Minimum performance requirements

- \_
- 6.9 TDS reduction, recovery rating, and efficiency rating claims
- 6.9.1 TDS reduction claims

RO drinking water treatment systems shall reduce the influent challenge level of  $750 \pm 40$  mg/L TDS by at least 75.0% when tested in accordance with Section 6.9.

Contaminant	Individual influent sample point limits <sup>1</sup> (mg/L)	Average influent challenge level (mg/L)	Maximum Minimum allowable <del>product water level</del> reduction ( <del>mg/L)</del>	US EPA Method(s)	Compound		
TDS	750 ± 20%	750 ± 40	<del>187</del> 75.0	160.1	NaCl		
<sup>1</sup> Equals average influent challenge concentration variability plus one of the following, in order of availability:							
<ol> <li>Acceptable continuing calibration verification (CCV) limits stated in the appropriate US EPA Method.</li> <li>Acceptable spike recoveries as stated in the appropriate US EPA Method.</li> <li>Opinion of laboratory preferences and the appropriate gravitation of the preference of the spike recoveries as stated in the appropriate US EPA Method.</li> </ol>							

Table 6.1Contaminant reduction requirements

3. Opinion of laboratory professionals – no guidance available in US EPA Method.

# 7 Elective performance claims – Test methods

# 7.1 Chemical reduction claims

Claims for the reduction of additional specific contaminants may be made by the manufacturer when tested in accordance with this Standard.

# 7.1.1 Volatile organic chemical (VOC) reduction claims

Revision to NSF/ANSI 58-2018 Issue 89 Revision 1 (October 2019)

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Systems with carbon filters downstream of the permeate storage tank shall be tested in accordance with NSF/ANSI 53. VOC reduction for nonintegral carbon filters downstream of the RO membrane shall be tested in accordance with Section 7.1.1.1 or 7.1.1.2.

NOTE — Each unique model designation shall claim a capacity no greater than the least reduction capacity that has been verified through testing to NSF/ANSI 42, NSF/ANSI 53, or NSF/ANSI 58 section for VOC reduction.

Claims for chemical reduction may be made for a group of VOCs and other organic chemicals shown in Table 7.1 when tested in accordance with Section 7.1.1. The system shall reduce the arithmetic mean of the influent challenge concentration of chloroform at  $300 \pm 30 \mu g/L$  at each sample point by at least 95.0% when tested in accordance with Section 7.1.1.

NOTE — The use of chloroform as the surrogate is limited to systems using an activated carbon filter component to accomplish the VOC reduction.

### 7.1.2 Inorganic chemical reduction claims

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### 7.1.2 Inorganic chemical reduction claims

Claims for inorganic chemical reduction may be made for the specific contaminants shown in Table 7.2. To qualify for a specific contaminant reduction claim, the system shall reduce the level of the contaminant from the influent challenge level so that the arithmetic mean of all product water sample results and 90% of the individual product water samples is are less than or equal to the maximum allowable product water concentration in Table 7.2 when tested in accordance with Section 7.1.2.

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### 7.1.3 Nitrate / nitrite reduction claims

Claims for nitrate / nitrite reduction shall be tested at a system pressure applicable to the intended end use in accordance with Section 7.1.3. To qualify for a nitrate / nitrite reduction claim, the system shall reduce the level of the contaminant from the influent challenge level so that the arithmetic mean of all product water sample results and 90% of the individual product water samples is are less than or equal to the maximum allowable product water concentration in Table 7.3.

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NSF/ANSI Standard for Drinking Water Treatment Units –

## **Drinking Water Distillation Systems**

### 7 Elective performance claims – Test methods

Claims for the reduction of additional specific contaminants may be made by the manufacturer when tested in accordance with this Standard.

### 7.1 Inorganic chemical reduction claims qualified by TDS surrogate testing

Based on the study Evaluation of Total Dissolved Solids as a Surrogate Parameter for the Reduction of Inorganic Contaminants by Distillation Systems, conducted for the Water Quality Association by NSF International, 1991, TDS may be used as a surrogate for verifying the reduction of arsenic, barium, cadmium, chromium, copper, lead, and selenium to equal to or below the MCL when tested in accordance with Section 6.1.5 and achieving a minimum TDS percent reduction of 99.0% (see Annex A for rationale and supporting data.)

### 7.2 Inorganic chemical reduction

Claims for inorganic chemical reduction may be made for the specific contaminants shown in Table 7.1. The system shall reduce the level of the contaminant from the influent challenge level so that the arithmetic mean of all effluent concentration results and 90% of individual effluent concentration results are less than or equal to the maximum effluent concentration in Table 7.1 when tested in accordance with Section 7.2.

. . 7.4 Microbiological reduction .

### 7.4.7 Acceptance criteria

The number of B. atrophaeus colony forming units per mL recovered in TSA from the effluent samples shall indicate a minimum 6.00 log reduction from the influent sample concentrations at each sampling point.

Rationale: Removed the language under NSF/ANSI 58 and 62 that allows for 10% of samples to not meet the effluent requirement under the contaminant reduction protocols, as this was inconsistent with the requirements for filter products and deemed inappropriate. The task group formed at the 2019 DWTU JC meeting has confirmed that this will have minimal impact on certified products.

BSR/UL 79A, Standard for Safety for Power-Operated Pumps for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent (E0 - E85)

### 1. Revisions to add CE40a test fluid requirements

<u>1.7 Products intended to be rated for use with gasoline or gasoline/ethanol blends with nominal ethanol concentrations:</u>

a) Up to 25 percent (E0 - E25) shall be evaluated using the CE25a test fluid as the only applicable test fluid;

b) Up to 40 percent (E0 - E40) shall be evaluated using both the CE25a and CE40a test fluid, or;

c) Up to 85 percent shall be evaluated using both the CE25a and the CE85a test fluid<u>s.</u>

5.1.1.1 A metallic part, in contact with the fuels anticipated by these requirements, shall be resistant to the action of the fuel if degradation of the material will result in leakage of the fuel or if it will impair the function of the device. For all fuel ratings, see Corrosion due to fluid, 5.1.2.1. For products rated for gasoline/ethanol blends with nominal ethanol concentrations greater than 25 40 percent, see Metallic materials - system level, 5.1.3.

5.1.3.1 Combinations of metallic materials in products rated for use with gasoline/ethanol blends with nominal ethanol concentrations greater than 25 40 percent shall be chosen to reduce degradation due to galvanic corrosion in accordance with 5.1.3.2 - 5.1.3.4

40.2 All tests shall be performed using the test fluids specified for that test. No substitution of test fluids is allowed. When the test indicates that CE25a, CE40a or CE85a are to be used, the test fluid shall be prepared as described in Supplement SA.

41.1.1 The test outlined in 41.2 – 41.4 is to be performed on one or two samples of the device. If the product is rated for use with gasoline or a gasoline/ethanol blend with a nominal ethanol concentration of up to 25 percent (E0 - E25), then the test shall be performed using the CE25a test fluid. If the product is rated for use with gasoline or a gasoline/ethanol blends with a nominal ethanol concentration of up to 40 percent (E0 -E40), then the test shall be performed using both the CE25a and CE40a test fluids. If the product is rated for use with a gasoline/ethanol blend with a nominal ethanol concentration above 25 of up to 85 percent, then the test shall be performed using both the CE25a and CE85a test fluids. See Supplement SA for the test fluids.

52.2 For products rated for gasoline or gasoline/ethanol blends with a nominal ethanol concentration of up to 25 percent (E0 - E25), the test shall be performed on one set of

samples using the CE25a test fluid. If the product is rated for use with gasoline or a gasoline/ethanol blends with a nominal ethanol concentration of up to 40 percent (E0 -E40), then the test shall be performed using both the CE25a and CE40a test fluids. If the product is rated for gasoline/ethanol blends with a nominal ethanol concentration above 25 of up to 85 percent, then the test shall be performed on two sets of samples using both the CE25a and CE85a test fluids. See Supplement SA for the test fluids. Each set of samples shall be immersed (completely submerged) in vessels containing the applicable test fluids for 168 hours at 23 ±2°C (73.4 ±3.6°F).

53.2 For products rated for gasoline or gasoline/ethanol blends with a nominal ethanol concentration of up to 25 percent (E0 - E25), the test shall be performed on one set of samples using the CE25a test fluid. If the product is rated for use with gasoline or a gasoline/ethanol blends with a nominal ethanol concentration of up to 40 percent (E0 -E40), then the test shall be performed using both the CE25a and CE40a test fluids. If the product is rated for gasoline/ethanol blends with a nominal ethanol concentration above 25 of up to 85 percent, then the test shall be performed on two sets of samples using both the CE25a and CE85a test fluids. See Supplement SA for the test fluids. Each set of samples shall be immersed (completely submerged) in vessels containing the applicable test fluids for 168 hours at 23 ±2°C (73.4±3.6°F).

56.4 For products rated for gasoline or gasoline/ethanol blends with a nominal ethanol concentration of up to 25 percent (E0 - E25), the test shall be performed on one set of samples using the CE25a test fluid. If the product is rated for use with gasoline or a gasoline/ethanol blends with a nominal ethanol concentration of up to 40 percent (E0 -E40), then the test shall be performed using both the CE25a and CE40a test fluids. For products rated for gasoline/ethanol blends with ethanol concentrations above 25 of up to 85 percent, the test shall be performed on two sets of samples, with one set exposed to the CE25a test fluid and the second set exposed to the CE85a test fluid. See Supplement SA for the test fluids. The specimens are to be exposed for 168 hours (7) days) to saturated vapors of the applicable test fluids as separate tests.

75.1 Each pump shall be marked with the following:

The manufacturer's name, trade name, trademark or other descriptive a) markings by which the organization responsible for the product is capable of being identified.

b) A distinctive catalog number or the equivalent to specifically identify the pump.

Ut copyrif For electrically powered pumps, the electrical rating, as normally appearing c) on each motor for Class I, Group D hazardous locations, on the nameplate of submersible-type pumps.

> d) For pneumatic powered pumps, the maximum air pressure.

For pumps for use with or in dispensing systems and vapor recovery e) pumps, the maximum outlet pressure.

For hydraulic powered pumps, the maximum inlet pressure. f)

The date or other dating period of manufacturer not exceeding any three **g**)

Exception: The date of manufacturer may be abbreviated or appearing in an established or otherwise acceptable code.

For pumps without motors, the direction of rotation and maximum h) revolutions per minute (rpm) that the pump can be operated.

Pumps shall be marked to indicate the fuel rating for which they are i) intended. The marking shall be "Gasoline" for pumps rated for gasoline only, shall be "E25" for pumps rated for gasoline and gasoline/ethanol blends with nominal ethanol concentrations up to 25 percent ethanol (E0 - E25), "E40" for pumps rated for gasoline and gasoline/ethanol blends with nominal ethanol concentrations up to 40 percent ethanol (E0 - E40) or "E85" for pumps rated for gasoline and gasoline/ethanol blends with nominal ethanol concentrations up to 85 percent ethanol (E0 - E85). This marking shall be prominently displayed to identify the pump.

75.4 When a pump assembly has provision for storing a hose-nozzle valve, it shall be marked with the following information

For E85 rated pumps, the wording "Use only the following:" and the brand a) names and specific model designations of permitted combinations of hose assemblies, breakaway couplings, swivel connectors, and hose nozzle valves to be used.

For E25 rated pumps, the wording "Use only E25 rated hanging hardware," b) or the equivalent.

For E40 rated pumps, the wording "Use only E40 rated hanging hardware," C) or the equivalent.

For gasoline rated pumps, the wording "Use only appropriately rated ed) hanging hardware," or the equivalent.

Marking shall be located where it will be seen by the responsible personnel when performing the intended assembly.

### SA.1 Details

There are two three test fluids that are applicable for tests in this standard. The fluids are designated by a format that fits the form of CEXXa; where "C" indicates ASTM Reference Fuel C (50% Isooctane, 50% Toluene); "E" indicates synthetic ethanol (designated CDA20); "XX" indicates percentage amount of the ethanol that is added to the solution; and "a" indicates aggressive elements that are added to the synthetic ethanol. The aggressive elements are used to represent contaminants that can be found in actual use and are used to help represent the worst case test fluid. The aggressive elements are mixed in accordance with the Recommended Practice for Gasoline, Alcohol, and Diesel Fuel Surrogates for Material Testing, SAE J1687.

The aggressive elements include deionized water, sodium chloride, sulfuric acid, and glacial acetic acid. Table SA.1 outlines the amounts of each of these elements in one liter of aggressive ethanol.

Component	Units	1 Liter of CE85a	1 Liter of CE40a	1 Liter of CE25a		
ASTM Reference Fuel C	Liter	0.150	<u>0.600</u>	0.750		
Synthetic Ethanol	Liter	0.843	<u>0.397</u>	0.248		
Deionized Water	Liter	0.007	<u>0.003</u>	0.002		
Sodium Chloride	Gram	0.003	<u>0.002</u>	0.001		
Sulfuric Acid	Milliliter	0.010	<u>0.005</u>	0.003		
Glacial Acetic Acid	Milliliter	0.050	0.020	0.010		

### Aggressive ethanol test fluid

Table SA.1

CE25a consists of a 75% ASTM Reference Fuel C and 25% aggressive ethanol mixture. <u>CE40a consists of a 60% ASTM Reference Fuel C and 40% aggressive ethanol mixture</u>. CE85a consists of a 15% ASTM Reference Fuel C and 85% aggressive ethanol mixture. These <u>two</u> fluids may be used to condition samples as noted in each specific test that indicates that these fluids are to be used. The test fluids are to be prepared just prior to use to minimize effects on the test fluid. The aggressive ethanol is corrosive and changes can occur to the solution from interactions with the storage and transfer containers. Exposure to air and or moisture may also effect the test fluid.

Products intended to be rated for use with gasoline or gasoline/ethanol blends with nominal ethanol concentrations up to 25 percent (E0 - E25) shall be evaluated using the CE25a test fluid as the only applicable test fluid. If the product is rated for use with gasoline or a gasoline/ethanol blends with a nominal ethanol concentration of up to 40

percent (E0 - E40), then the test shall be performed using the CE40a test fluid. Products intended to be rated at gasoline/ethanol blends with nominal ethanol concentration greater than 25 percent shall be evaluated using both the CE25a test fluid and the CE85a test fluid.

For products evaluated using the CE25a test fluid, one sample is required to be conditioned in accordance with the test sequence in Section 28. For products evaluated in each using the CE40a test fluid, one sample is required to be conditioned in accordance with the test sequence in Section 28. For products using both CE25a and CE85a or CE40a and CE85a test fluids, two samples are required to be conditioned, one in each fluid, in

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BSR/UL 651, Standard for Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings

### 1. Clarifications to Schedule 40 and 80 for use with 90° Wire Performance Testing

## PROPOSAL

# from UL. 1. Clarifications to Schedule 40 and 80 for use with 90° Wire Performance Testing

6.15.1.3 A total of 90 215 specimens of the 2 (53) trade size of rigid PVC conduit, each 6 inches (150 mm) long, are to be used for the test (see 6.15.2.1.1 concerning extra specimens needed for preliminary tests). Seventy five 198 specimens are to be placed upright in a full-draft circulating-air oven maintained at a temperature of 80.0 ±1.0°C (176.0 ±1.8°F) on open wooden racks and spaced to maintain the full circulation of air around and through the specimens. The remaining 15 17 specimens are to be unaged and unconditioned. At the end of each of the five eleven time intervals indicated below. a set of 15 18 specimens is to be removed from the over 3 specimens for preliminary tests (as necessary) and 15 specimens for test) and given 16 - 96 hours to cool in still air to a temperature of 23.0 ±2.0°C (73.4 ±3.6°F). The specimens are to be laid one at a time on a flat steel plate that is 1/2 inch (13 mm) thick and are to be impacted by means of a solid right-circular steel cylinder with a flat impact face having rounded edges. The cylinder used is to be chosen as indicated in 6.15.2.1.1 from three sizes, each size cylinder having a diameter of 2 inches (51 mm) and a weight not less than; 10 lb (4.54 kg), 20 lb (9.1 kg), and 40 lb (18.1 kg). All 15 specimens, for test, of the unaged and unconditioned specimens are to be impacted after respective periods of oven aging for 60, <u>90,120, 150, 180, 210, 240, 270, 300, 330</u> and 360 days. The up-and-down method described in 6.15.2 is to be used.

6.15.1.4 The average impact strength is to be determined as indicated in 6.15.2.3 for each of the six twelve sets of specimens tested. The six twelve averages are then to be plotted as a function of time (the set of unaged specimens is to be plotted as having been aged for zero days). The six points so plotted are to be joined by a smooth curve. The resulting impact-strength degradation curve shall show a leveling off of impact strength at 50 percent or more of the average impact strength calculated for the set of unaged specimens. If a plateau is reached at 180 days, at 240 days or beyond at any of the other identified points 180 or 240 days, aging of the 360-day specimens may be discontinued and those specimens may be discarded without being tested.

6.15.2.1.1 Preliminary tests are to be conducted, using as many extra specimens as needed, to determine the approximate height from which the steel cylinder has to fall to produce a crack, split, or tear that is visible on the outside surface of a specimen. An unacceptable result is to be recorded if the impact made by the steel cylinder causes any crack, split, or tear longer than 1/32 inch (0.8 mm) on the outer surface of a specimen. The weight of the steel cylinder to be used in the preliminary tests is the weight from the three weights described in 6.15.1.3 that produces an unacceptable

crack, split, or tear in a specimen from a height of 24 - 120 inches (600 - 3000 mm) taken in increments of 6 inches (150 mm). The approximate height determined from this procedure is to be recorded in inches or mm as  $H_0$ .

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BSR/UL 746B, Standard for Safety for Polymeric Materials – Long Term **Property Evaluations** 

### 1. Proposal to Revise Guidelines for the Use of Generic RTI Rating for Polyetherimide (PEI) in Table 7.1

Table 7.1 Relative thermal indices based upon past fiel structure <sup>a</sup>	d-test performa	nce and chemical
Material	ISO designation	Generic thermal
Polyamide <sup>b</sup>	PA	65
Polycarbonate <sup>b</sup>	PC 🙏	80
Polycarbonate/Siloxane Copolymer <sup>k</sup> i	PC/Siloxane	80
Polyethylene terephthalate -		
molding resin <sup>b</sup>	PET	75
film (0.25 mm maximum)	<b>PET</b>	105
molding resin <sup>b</sup> film (0.25 mm maximum) Polybutylene (polytetramethylene) terephthalate <sup>b</sup>	PBT	75
Polyphenylene Ether (including PS, PA, PP, or TPE modified) <sup>j</sup> Polypropylene <sup>b,h</sup> g Polyetherimide <sup>g</sup> Polyethersulfone	PPE	65
Polypropylene <sup>b,h g</sup>	PP	65
Polyetherimide <sup>g</sup>	PEI	105
Polyethersulfone	PES	105
Polyether Ether Ketone	PEEK	130
Polyphthalamide <sup>m</sup> !	PPA	85
Polyphenylene Solfide <sup>b</sup>	PPS	130
Polyimide film (0.25 mm maximum)	PI	130
Molded Phenol Formaldehyde <sup>c</sup>	PF	150
Molded Melamine Formaldehyde <sup>c,d</sup> and Molded metamine formaldehyde/phenol formaldehyde <sup>c,d</sup>	MF, MF/PF	
specific gravity < 1.55		130
specific gravity ≥ 1.55		150
Polytetrafluoroethylene	PTFE	
Without inert fillers and/or reinforcements		180
With inert fillers and/or reinforcements		130
Polychlorotrifluoroethylene	PCTFE	150

Fluorinated ethylene propylene	FEP	150
Poly(tetrafluoroethylene, hexafluoropropylene, vinylidenefluoride) <sup>i <u>k</u></sup>	TFE/HFP/VDF	130
Ethylene/Tetrafluoroethylene	E/TFE	105
Urea Formaldehyde <sup>c</sup>	UF	100
Acrylonitrile - butadiene - styrene <sup>b</sup>	ABS	60
Silicone - molding resin <sup>c,d</sup>		150
Silicone rubber -		60 150 150 150
molding resin	SIR	150
addition-cure, vinyl, platinum catalyzed		150
molding resin addition-cure, vinyl, platinum catalyzed room-temperature vulcanizing, condensation or heat-cured paste Epoxy - molding resin <sup>c,d</sup> powder coating materials casting or potting resin <sup>b,i <u>h</u></sup> Molded diallyl phthalate <sup>c,d</sup> Molded unsaturated polyester <sup>c,d</sup> alkyd (AMC), bulk (BMC), dough (DMC), sheet (SMC), thick (TMC), and pultrusion molding compounds	RTV	105
Ероху -		
molding resin <sup>c,d</sup>		130
powder coating materials	AN A	105
casting or potting resin <sup>b,i <u>h</u></sup>	<b>E</b> P	90
Molded diallyl phthalate <sup>c,d</sup>	440	130
Molded unsaturated polyester <sup>c,d</sup>	UP	
alkyd (AMC), bulk (BMC), dough (DMC), sheet (SMC),		
thick (TMC), and pultrusion molding		105 <sup>e</sup> (electrical)
		130 (mechanical)
Liquid crystalline thermotropic aromatic polyester <sup>f</sup>	LCP	130
Ligno-cellulose laminate		60
Vulcanized fiber		90
Cold-molded phenolic, melamine or melamine- phenolic compounds <sup>d</sup> -		
specific gravity< 1.55		130
specific gravity ≥ 1.55		150
Cold-molded inorganic (hydraulic-cement, etc.)		200
Integrated mica, resin-bonded -		
epoxy, alkyd or polyester binder		130
phenolic binder		150
silicone binder		200

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<sup>a</sup> Generic thermal index is for homopolymer and for the compounding of the same type or relative resins, either grafted or ungrafted only, unless a specific copolymer or blend is indicated. In the case of alloys, the lowest generic index of any component shall be assigned to the composite. The term "grafted" means all of the monomer reacts to form a polymer, and the polymer chain forms a chemical bond. The term "ungrafted" means that the two types of polymer chains entwine with each other by mechanical blending to form a chemical composite.

<sup>b</sup> Includes glass-fiber reinforcement and/or talc, asbestos, mineral, calcium carbonate, compounding of the same type of resins, either grafted or ungrafted and other inorganic fillers.

<sup>c</sup> Includes only compounds molded by high-temperature and high-pressure processes such as injection, compression, pultrusion, and transfer molding and match-metal die molding; excludes compounds molded by open-mold or low-pressure molding processes such as hand lay-up spray-up, contact bag, filament winding, rotational molding, and powder coating (fluidized bed, electrostatic spray, hot dip, flow coating).

<sup>d</sup> Includes materials having filler systems of fibrous (other than synthetic organic) types but excludes fiber reinforcement systems using resins that are applied in liquid form. Synthetic organic fillers are to be considered acceptable at temperatures not greater than 105°C.

<sup>e</sup> Except 130°C generic thermal index if the material retains at least 50% of its unaged dielectric strength after a 504-hour exposure at 180°C in an air circulating oven. Specimens are to be tested in a dry, as molded condition. Specimens that are removed from the oven are to be cooled over desiccant for at least 2 hours prior to testing.

<sup>f</sup> Includes only wholly aromatic liquid crystalline thermotropic polyesters; wholly aromatic polyester/amides and wholly aromatic polyester/ethers; excluding amorphous, lyotropic and liquid crystalline aliphatic-aromatic polyesters which are aliphatic in the backbone chain or main chain, and substituted aromatic polyesters (except for methyl or aromatic).

<sup>9</sup> Includes only polyetherimide molding resin.

<sup>h</sup><sup>g</sup> Includes polypropytene copolymers containing not more than 25% ethylene comonomer, by weight.

<sup>4</sup> Multi-part liquid epoxy materials incorporating acid anhydride or aromatic amine curing agents receive a 130°C generic thermal index.

<sup>11</sup> Includes only those polyphenylene ether materials (polystyrene, polyamide, polypropylene, or thermoplastic elastomer modified) in which the PPE component is not less than 30% of the total composition by weight and that have a Heat Deflection Temperature of at least 70°C at a load (fiber stress) of 1.80 M Pa (264 psi).

PC/Siloxane Copolymers in which siloxane comprises less than, or equal to, 5% of the total material composition by weight.

<sup>±</sup> Must have a minimum peak melting point of 160 °C, with less than 25% VDF monomer by weight and the remainder being fully fluorinated monomers.

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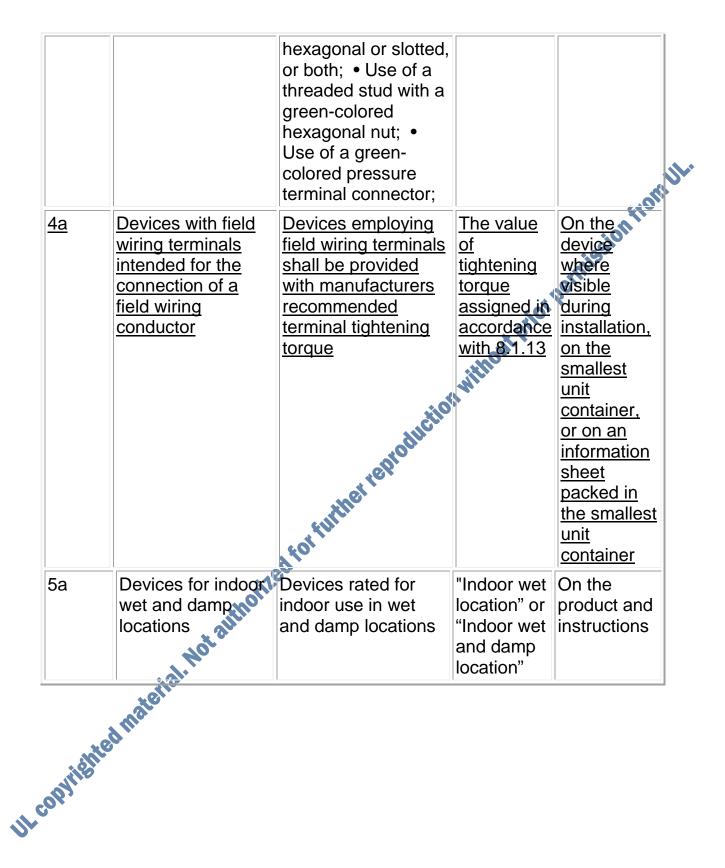
### BSR/UL 773A, Standard for Safety for Nonindustrial Photoelectric Switches for Lighting Control

1. Addition of Requirements for Manufacturer's Recommended Field Wiring Terminal Tightening torque to Clause 8.1.13

instructions shall appear on the device where visible during installation, on the smallest unit container, or on an information sheet packed in the smallest unit container Instructions shall appear on the device where visible during installation, on the smallest unit container, or on an information sheet packed in the smallest unit container in accordance with table 42.1 Ref. 4a. Table 42.1 Markings and instructions \*Note: only the affected portion of table 42.1, Marking and instructions, is shown below\*\*

stion below\*\*

Ref	Type of devices	Statement	Marking	Location
3 e)	All devices	Amps or watts or VA derated in relation to the number of gangable devices (See <u>22.6</u> )	A, W or VA	On the instructions
4	Devices with terminal intended for the connection of an equipment bonding/grounding conductor	A terminal intended for the connection of an equipment bonding/grounding conductor shall be identified by: • The bonding/grounding symbol shown (IEC Publication 417, Symbol No. 5019) on or adjacent to the terminal or on a wiring diagram provided on the product. • Use of a wire-binding screw with a green-colored head that is	Ground terminal	On the product



### BSR/UL 827, Standard for Safety for Secondary Power Supply Modification

### 11.5 Secondary Power Supply

11.5.1 A secondary (standby) supply shall be provided to supply energy to the entire load created by the equipment necessary for the operation of the station in the event of failure of the primary power supply. The secondary power supply shall consist of either:

a) When the MEW calculation is 999 or less, a storage battery or batteries of one sufficient capacity to operate the load for a 24-hour period;

b) When the MEW calculation is <u>49,999</u> <del>9,999</del> or less, a permanently installed, automatic-starting, engine-driven generator having sufficient capacity to power the load and a storage battery/ batteries or UPS with a 4-hour capacity; or

c) When the MEW calculation is <u>50,000</u> <del>10,</del>000 or greater, two or more permanently installed engine- driven generators. With the largest capacity engine-driven generator out of service, the remaining engine-driven generator(s) shall be capable of supplying power to operate the load. These generators may be configured in either of the following ways:

- 1) In a redundant configuration in which only one of the engine-driven generators will start and assume the load when the supply of primary power fails, and the remaining generator(s) will start and assume the load in the event of a failure of the first engine driven generator. In this configuration a standby battery supply that complies with 11.6.1 shall be provided.
- 2) In a resilient configuration in which all of the engine-driven generators will start and assume the load when the supply of primary power fails. Once the supply of power to the load has been stabilized, the engine-driven generators that are not required to support the load may or may not continue to operate. In the event of the failure of any of the engine-driven generators that are supplying the load, the remaining engine-driven generators shall supply the needed power to the load. In this configuration, a standby battery supply that complies with 11.6.1 shall be provided. See Table 11.1.

d) When the MEW <u>calculation</u> is 100,000 or greater, a resilient configuration in which all of the engine- driven generators will start and assume the load when the supply of primary power fails shall be used. Once the supply of power to the load has been stabilized, the engine-driven generators that are not required to support the load may or may not continue to operate. In the event of the failure of any of the engine-driven generators that are supplying the load, the remaining engine- driven generators shall supply the needed power to the load. In this configuration, a standby battery supply that complies with 11.6.1 shall be provided. See Table 11.1.

≤ 999 0 0 0 0 0 0 0 24 hr Battery None 9,009 49,999 1 1 1 1 0 4 h <sup>b</sup> Generator 4 hr battery 00,000 2 <sup>a</sup> 2 1 2 1 0 15 min <sup>b</sup> Generator Generator 90,000 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator 9100,00 2 <sup>a</sup> 2 1 0 0 15 min <sup>b</sup> Generator 9100,00 2 <sup>a</sup> 2 100,00 2 <sup>a</sup> 2 <sup>b</sup>
9,99949,99911104 hbGenerator4 hr battery10,000 $50,000$ 2 $4 \cdot 2$ 1115 minbGeneratorGenerator10,000 $50,000$ 2a21015 minbGeneratorGenerator $2 \cdot 100,000$ $2^a$ 21015 minbGeneratorGenerator $\geq 100,000$ $2^a$ 21015 minbGeneratorGeneratorhis is an N+ resilient-configuration in which two or more generators start at the same time with at least one assuming
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≥ 100,000 2 <sup>a</sup> 2 1 0 15 min <sup>b</sup> Generator Generator his is an N+ resilient-configuration in which two or more generators start at the same time with at least one assuming
his is an N+ resilient-configuration in which two or more generators start at the same time with at least one assuming
his is an N+ resilient-configuration in which two or more generators start at the same time with at least one assuming

## Table 11.1Secondary power configurations

BSR/UL 1203, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

1. This proposal provides revisions to the proposal document dated August 30, 2019 to include +60°C and -60°C explosion testing with test factors using precompression explosion testing equipment per comments received.

### PROPOSALS

21.29A.1.1 All test sample joints are to be based upon the manufacturers maximum specified gap, and tested with not less than 115% of the minimum specified joint length. Specially prepared test samples having modified joint lengths, gaps and engagements shall be employed. For Groups A, B, or A and B, test factors per 21.23 and 21.26 are also required to be introduced into the test pressure or test gap in addition to the test factors above by multiplying the test factor of 21.23 or 21.26, as applicable, by the test factor of Table 21.29A.

### Table 22.1

### Safety factors for determining the strength of an enclosure

Enclosure material or part	Test factor for calculations <u>hydrostatic</u> pressure test for ambient to <u>-25°C<sup>d</sup></u>	Test factor for <u>hydrostatic</u> pressure test for ambient to equipment rated and marked as low as minus 50°C <sup>a</sup> (minus 58°F)		Test factor for <del>hydrostatic pressure tests <u>calculations to</u> _25°C</del>	
Cast metal	54	<u>-40°C</u>	<u>-50°C</u> 6	<u>-60°C</u>	4 <u>5</u>
Non- metallic <u>other</u> <u>than glass</u>		<u>ء۔</u> 1	<u></u> e	<u>2</u>	4
<u>Glass</u>	<u>+0 -4</u>	<u>6</u>	<u>6</u>	<u>6.5</u>	<u>2</u>
Fabricated steel and aluminum	4 <u>3</u> b	4.5	<u>4.5</u>	<u>4.8</u>	3 <sup>₽</sup> 4
Cover bolts or screws	3	<u>4.54</u>	<u>4.5</u>	<u>4.8</u>	3
<sup>a</sup> For Group C or D equipment in accordance with the Exception to 21.29 list item b), where the equipment is not subject to pressure piling.					

<sup>b</sup> The enclosure shall withstand a hydrostatic pressure of at least twice the maximum internal explosion pressure without permanent distortion and at least three times the maximum internal explosion pressure without rupture.

<u><sup>c</sup> Undefined.</u>

d Applies to equipment tested in accordance with 21.29 list items a) and c).

SB1.29, item b) changes:

b) For equipment for use in Group C or D classified locations, rated not less than minus 50 60°C (minus 58 76°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in SB1.3(a), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 22.1, based upon room ambient explosion pressure tests; or

SB1.29A.1.1 All test sample are to be based upon the manufacturers maximum specified gap, and tested with not less than 115% of the minimum specified joint length. Specially prepared test samples having modified joint lengths, gaps and engagements shall be employed.

SB1.29A.1.1 second paragraph after Table SB1.29A changes: For Groups A, B, or A and B, test factors per SB1.23 and SB1.26 are also required to be Leonite termineter to the term introduced into the test pressure or test gap in addition to the test factors above by multiplying the test factor of 21.23 or 21.26, as applicable, by the test factor of Table SB1.29A.