ANSI STANDARDS ACTION

PUBLISHED WEEKLY BY THE AMERICAN NATIONAL STANDARDS INSTITUTE 25 W43RD STREET NY, NY 10036

VOL. 56, NO. 15 APRIL 11, 2025

CONTENTS

ISSN 0038-9633

Project Initiation Notification System (PINS)

Section 2.5.1 of the *ANSI Essential Requirements* (www.ansi.org/essentialrequirements) describes the Project Initiation Notification System (PINS) and includes requirements associated with a PINS Deliberation. Following is a list of PINS notices submitted for publication in this issue of ANSI Standards Action by ANSI-Accredited Standards Developers (ASDs). Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for information about American National Standards (ANS) maintained under the continuous maintenance option, as a PINS to initiate a revision of such standards is not required. 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 interested parties wishing to receive more information or to submit comments are to contact the sponsoring ANSI-Accredited Standards Developer directly **within 30 calendar days** of the publication of this PINS announcement.

AAFS (American Academy of Forensic Sciences)

Teresa Ambrosius <tambrosius@aafs.org> | 410 North 21st Street | Colorado Springs, CO 80904 www.aafs.org

New Standard

BSR/ASB Std 225-202x, Standard for Skeletal Preparation and Sampling in Forensic Anthropology (new standard)
Stakeholders: Forensic anthropologists and the medicolegal community

Project Need: Currently, there are no documents standardizing the preparation and sampling of skeletal remains for forensic analyses and curation. In order to make skeletal material and features more accessible for forensic anthropological analyses, and to procure material that may have additional investigative value, it is sometimes necessary to sample and/or prepare skeletal remains. This standard recognizes the need to document the condition of remains upon arrival at the forensic anthropology laboratory and throughout the process of preparation and sampling. This standard emphasizes the importance of preparing and/or sampling skeletal remains in a manner that limits or prevents their contamination, unnecessary destruction, and/or adverse alteration.

Interest Categories: Academics and Researchers, General Interest, Jurisprudence and Criminal Justice, Producer, User - Government, User - Non-Government

This standard provides techniques and requirements for documenting, preparing, sampling, and preserving skeletal remains for examination and curation; including limiting or preventing contamination, unnecessary destruction, and/or adverse alteration of the remains.

AAFS (American Academy of Forensic Sciences)

Teresa Ambrosius <tambrosius@aafs.org> | 410 North 21st Street | Colorado Springs, CO 80904 www.aafs.org

New Standard

BSR/ASB Std 226-202x, Standard for Scene Diagramming (new standard)
Stakeholders: Crime Scene Investigators, Crime Scene Reconstructionists

Project Need: This document fills a gap of providing the standardization of diagramming/sketching, which is an important step in any scene processing that provides critical spatial context to the scene and the evidence within it.

Interest Categories: Academics and Researchers, General Interest, Jurisprudence and Criminal Justice, Producer, User - Government, User - Non-Government

This document provides the minimum requirements for when scene diagramming is employed, including manual and electronic measurement, and diagramming methods. Methods of validation, verification, and calibration of measurement equipment are not included in this document.

AAFS (American Academy of Forensic Sciences)

Teresa Ambrosius <tambrosius@aafs.org> | 410 North 21st Street | Colorado Springs, CO 80904 www.aafs.org

New Standard

BSR/ASB Std 227-202x, Standard for the Chemical Testing of Suspected Projectile Impacts for Copper and Lead (new standard)
Stakeholders: Crime Scene Investigators, Crime Scene Reconstructionists

Project Need: This document standardizes the methods for the field application of copper and lead chemical tests for suspected projectile impacts. At this time, there are no existing ANSI standards addressing this topic.

Interest Categories: Academics and Researchers, General Interest, Jurisprudence and Criminal Justice, Producer, User - Government, User - Non-Government

This document provides the requirements for application of copper and lead chemical tests for suspected projectile residues, methods for reagent preparation, field processing, interpretation of results, and documentation of suspected projectile impacts by scene investigators. Chemical processing and enhancement of gunshot residue patterns for the purpose of muzzle-to-target distance determinations or wound ballistics are not included in this standard.

ACCA (Air Conditioning Contractors of America)

David Bixby <david.bixby@acca.org> | 1520 Belle View Boulevard, #5220 | Alexandria, VA 22307 www.acca.org

Addenda

BSR/ACCA 3 Manual S, Addendum c-202x, Residential Equipment Selection (addenda to ANSI/ACCA 3 Manual S-2023)
Stakeholders: HVAC equipment OEMs, HVAC system designers and contractors, code authorities, government bodies, utilities, HVAC training facilities, and consumers

Project Need: The proposed addendum will correct and clarify certain requirements in the Normative Sections of ANSI/ACCA 3 Manual S - 2023, which includes Addendum “a” and “b” approved in 2024.

Interest Categories: The residential HVAC industry, including equipment OEMs, system designers, contractors, state and local code officials, and government bodies

ACCA Manual J provides procedures for selecting and sizing residential cooling equipment, heat pumps, electric heating coils, furnaces, boilers, ancillary dehumidification equipment, and humidification equipment. These procedures emphasize the importance of using OEM equipment performance data that correlates sensible and latent cooling capacity with all the variables that affect performance.

AGMA (American Gear Manufacturers Association)

Phillip Olson <olson@agma.org> | 1001 N. Fairfax Street, Suite 500 | Alexandria, VA 22314 www.agma.org

Revision

BSR/AGMA 9113-AXX, Flexible Couplings - Potential Unbalance and Mass Elastic Properties (Metric Edition) (revision, redesignation and consolidation of ANSI/AGMA 9104-A06 (R2022), ANSI/AGMA 9110-A11 (R2021))
Stakeholders: Manufacturers and users of flexible couplings

Project Need: General update to meet current industry practices and combine related topics into one document.

Interest Categories: Manufacturers, users, and those with general interest including academics

This standard describes potential coupling unbalance and identifies its sources. It also provides information and calculation methods related to mass elastic properties of flexible couplings.

AMCA (Air Movement and Control Association)

Joseph Brooks <jbrooks@amca.org> | 30 West University Drive | Arlington Heights, IL 60004-1893 www.amca.org

Revision

BSR/AMCA 610-202x, Laboratory Methods of Testing Airflow Measurement Stations for Performance Rating (revision of ANSI/AMCA Standard 610-2019)
Stakeholders: Fan manufacturers, building design engineers and architects, end-users, fan testing labs, and associations within the HVAC industry

Project Need: To establish uniform methods for laboratory testing of airflow measurement stations.

Interest Categories: Government Agency; Compliance; Testing Laboratory; User/Purchaser; Technical Manager; Academic Expert; Other Expert; General Interest

This standard covers field-installed airflow measurement stations for heating, ventilating and air-conditioning applications. This standard establishes uniform test methods for the determination of the performance characteristics and accuracy of airflow measurement stations under varied airflow rates and conditions. It is not the purpose of this standard to specify testing procedures to be used for design, production or in-field measurement practice.

ASTM (ASTM International)

Lauren Daly <accreditation@astm.org> | 100 Barr Harbor Drive | West Conshohocken, PA 19428-2959 www.astm.org

New Standard

BSR/ASTM WK94295-202x, New Specification for Eye Protectors for Basketball, Soccer, Volleyball (new standard)
Stakeholders: Eye Safety for Sports Industry

Project Need: No standards currently exist for eye protection in this area of sports

Interest Categories: Producer, User, General Interest

This specification will cover eyewear used in sports involving large spherical playing balls such as basketball, soccer, volleyball, etc.

ASTM (ASTM International)

Lauren Daly <accreditation@astm.org> | 100 Barr Harbor Drive | West Conshohocken, PA 19428-2959 www.astm.org

New Standard

BSR/ASTM WK94296-202x, New Specification for Eye Protectors for Flag Football (new standard)
Stakeholders: Eye Safety for Sports Industry

Project Need: No standard currently exists that covers eye protection in the sport of flag football.

Interest Categories: Producer, User, General Interest

This specification will cover the steps for testing the safety of eyewear used in the sport of flag football.

CfOC (Center for Offsite Construction, School of Architecture and Design, New York Institute of Technology)

Mathew Ford <mford05@nyit.edu> | 1855 Broadway | New York, NY 10023 https://www.nyit.edu/academics/architecture-and-design/center-for-offsite-construction/

New Standard

BSR/CfOC/ICC 1220-202x, Standard on Configurations and Connections for Off-Site Construction (new standard)
Stakeholders: Manufacturers, builders, design professionals, building owners, building developers, regulatory agencies, testing and certification agencies

Project Need: Off-site construction lacks uniform standards for connecting module-to-module and building-to-module. The result is that these connections are often redesigned on a project-by-project basis leading to inconsistency and inefficiency. Standardized design criteria will offer interoperability between modules, unlocking a resilient marketplace of modular products.

Interest Categories: (a) producer; (b) user; (c) general interest

This standard provides requirements for the location and specifications of module-to-module and building-to-module connections for essential building systems including structural, plumbing, electrical, mechanical, fire protection, and data. It also provides for the standardization of dimensions of modular components. This Standard includes componentized, panelized, and modularized elements. The standard is intended to serve as design criteria adopted by owners, designers, manufacturers, lenders, and governments to support efficiency and certainty in the delivery of off-site construction components and projects. The standard will leverage existing standards for interconnections where available.

ECIA (Electronic Components Industry Association)

Laura Donohoe <ldonohoe@ecianow.org> | 13873 Park Center Road, Suite 315 | Herndon, VA 20171 www.ecianow.org

Reaffirmation

BSR/EIA 296-F-2015 (R202x), Lead Taping of Components in Axial Lead Configuration for Automatic Handling (reaffirmation of ANSI/EIA 296-F-2015 (R2019))
Stakeholders: Electronics, electrical and telecommunications industries

Project Need: Reaffirm current American National Standard

Interest Categories: User, Producer, General Interest

This Standard includes the lead taping requirements for components having axial configured leads, provided these components may be taped in accordance with the requirements of this document.

ECIA (Electronic Components Industry Association)

Laura Donohoe <ldonohoe@ecianow.org> | 13873 Park Center Road, Suite 315 | Herndon, VA 20171 www.ecianow.org

Reaffirmation

BSR/EIA 747-C-2020 (R202x), Adhesive backed punched plastic carrier taping of singulated bare die and other surface mount components for automatic handling of devices generally less than 1.0 mm thick (reaffirmation of ANSI/EIA 747-C-2020)
Stakeholders: Electronics, electrical and telecommunications industries

Project Need: Reaffirm current ANS

Interest Categories: User, Producer, General Interest

Covers requirements of 8 mm, 12 mm, 16 mm, and 24 mm taping of surface mount components generally less than 1.0 mm thick and requiring high-precision taping for automatic handling of devices such as singulated bare die.

HPS (ASC N13) (Health Physics Society)

Amy Wride-Graney <awride-graney@burkinc.com> | 950 Herndon Parkway, Suite 450 | Herndon, VA 20170 www.hps.org

Revision

BSR HPS N13.44-202x, Standards for a Thyroid Phantom Used in Occupational Monitoring (revision of ANSI HPS N13.44 (R2024))
Stakeholders: All users of radionuclides that potentially circulate in the thyroid including government and government contractors/licenses (e.g., DOE, NRC, DOD, DHS and EPA), private industry, university staff, and nuclear medicine departments

Project Need: Recommended by the workshop on standard phantoms for in vivo radioactivity measurements (Health Phys. 61 893-894, 1991) that an ANSI writing group be established for the thyroid phantom. 2024 reaffirmation recommended revision.

Interest Categories: Government or Regulatory Agency, Professional Society, Trade Association or Labor Union, Technical Expert

This standard defines the thyroid phantom that is to be used for occupational monitoring of workers exposed to radionuclides that potentially circulate in the thyroid. Specifications are given for phantom geometry, construction materials, etc. Optimal use and errors arising from incorrect use will be detailed.

IAPMO (Z) (International Association of Plumbing and Mechanical Officials)

Terry Burger <standards@iapmostandards.org> | 4755 East Philadelphia Street | Ontario, CA 91761 https://www.iapmostandards.org

Revision

BSR/ARCSA/ASPE/IAPMO 63-202x, Rainwater Catchment Systems (revision of ANSI/ARCSA/ASPE 63-2020)
Stakeholders: Developers, civil and plumbing engineers, urban planners, rainwater harvesting personnel, local authorities having jurisdiction

Project Need: This standard is needed to cover the design and installation requirements for rainwater catchment systems. The revisions to this standard will focus on the addition of new acceptable materials, correlate requirements with changes to the Plumbing codes and correct an error from the previous edition. Add Log reduction target methodology and update references as well as add maintenance tables.

Interest Categories: Manufacturer, User, Installer/Maintainer, Research/Standards/Testing Laboratory, Enforcing Authority Consumer, General Interest

The scope of this standard covers requirements for the design and installation of rainwater catchment systems that utilize the principle of collecting and using precipitation from a rooftop and other hard, impervious building surfaces. This standard does not apply to the collection of rainwater from vehicular parking or other similar surfaces.

IAPMO (Z) (International Association of Plumbing and Mechanical Officials)

Terry Burger <standards@iapmostandards.org> | 4755 East Philadelphia Street | Ontario, CA 91761 https://www.iapmostandards.org

Revision

BSR/ARCSA/ASPE/IAPMO 78-202x, Stormwater Harvesting System Design for Direct End-Use Applications (revision of ANSI/ARCSA/ASPE 78-2023)

Stakeholders: Developers, civil and plumbing engineers, urban planners, stormwater harvesting personnel, local authorities having jurisdiction

Project Need: This standard is needed to harvest stormwater for nonpotable and potable applications to reduce pollution to watersheds from combined sewer overflows, reduce downstream flooding, and replenish aquifers through collection, treatment, and use technologies. The purpose of this Standard is to assist engineers, designers, plumbers, builders/developers, landscape and irrigation professionals, state and local government, and end users in implementing a stormwater harvesting system while protecting public health and safety. The revisions to this standard will focus on the addition of requirements for active catchment systems which will include more commercial applications. Add Log reduction target methodology and update references as well as add maintenance tables.

Interest Categories: Manufacturer, User, Installer/Maintainer, Research/Standards/Testing Laboratory, Enforcing Authority Consumer, General Interest

This standard was developed by a joint effort of the American Rainwater Catchment Systems Association (ARCSA) and the American Society of Plumbing Engineers (ASPE). The purpose of this Standard is to assist engineers, designers, plumbers, builders/developers, landscape and irrigation professionals, state and local government, and end users in implementing a stormwater harvesting system while protecting public health and safety. This Standard is intended to apply to new stormwater harvesting installations, as well as alterations, additions, maintenance, and repairs to existing installations. This Standard applies, for example, to the collection of stormwater from the transportation grid (vehicular parking, driving, or other similar surfaces), elevated parking structures, surface public right-of-ways, and storm drain systems.

ICC (International Code Council)

Karl Aittaniemi <kaittaniemi@iccsafe.org> | 4051 Flossmoor Road | Country Club Hills, IL 60478 www.iccsafe.org

Revision

BSR/ICC 903/SRCC 500-202x, Solar Hot Water Storage Tank Standard (revision of ANSI/ICC 903/SRCC 500-2024)
Stakeholders: Consumers, pool and spa builders and designers, architects, solar thermal collector and system designers, solar thermal system installers, sustainability advocates, energy utilities and providers, product manufacturers, standard development organizations, product testing and certification organizations.

Project Need: Construction codes, standards, and incentive programs require minimum criteria and uniform test methods for hot water storage tanks utilized as part of solar water heating systems used in residential and commercial applications. These devices can take a multitude of forms and are not fully addressed by any current consensus standards. Such a standard is needed to ensure minimum safety and durability criteria are met and establish uniform test methods for basic thermal performance metrics. The performance metrics of these tanks are needed to facilitate accurate modeling of solar hot water heating systems for use in building energy modeling and incentive programs. This new standard will create clear, consistent criteria for solar hot water storage tank listing. A standard is also needed to clearly differentiate solar hot water tanks from standalone, unitary, tank-type hot water heaters.

Interest Categories: Manufacturer, Builder, Test Laboratory/Standards Promulgator, User, Utility, Consumer, Govt Regulator

This standard establishes minimum requirements for the design, construction, and testing of hot water storage tanks designed for use as a component within solar water heating systems. It establishes test methods and minimum standards to ensure minimum levels of safety and durability. It also sets uniform test methods for the measurement of key thermal performance and efficiency parameters for these tanks. The standard applies to tanks that are pressurized, unpressurized, with or without integral heat exchangers and with or without integral backup heaters. Construction codes, standards and incentive programs require minimum criteria and uniform test methods for hot water storage tanks utilized as part of solar water heating systems used in residential and commercial applications. These devices can take a multitude of forms and are not fully addressed by any current consensus standards. Such a standard is needed to ensure minimum safety and durability criteria are met and establish uniform test methods for basic thermal performance metrics. The performance metrics of these tanks are needed to facilitate accurate modeling of solar hot water heating systems for use in building energy modeling and incentive programs. This new standard will create clear, consistent criteria for solar hot water storage tank listing. A standard is also needed to clearly differentiate solar hot water tanks from standalone, unitary, tank-type hot water heaters.

ICC (International Code Council)

Karl Aittaniemi <kaittaniemi@iccsafe.org> | 4051 Flossmoor Road | Country Club Hills, IL 60478 www.iccsafe.org

Revision

BSR/ICC 902/APSP 902/SRCC 400-202x, Solar Pool and Spa Heating System Standard (revision of ANSI/ICC 902/APSP 902/SRCC 400-2017 (R2020))
Stakeholders: Consumers, builders, architects, solar thermal collector and system designers, solar thermal system installers, sustainability advocates, energy utilities and providers, product manufacturers, standard development organizations, product testing and certification organizations

Project Need: Sustainable construction codes, standards, and incentive programs require minimum criteria and uniform design, performance evaluation, and installation for solar water-heating systems. This project will revise the standard to remain consistent with current industry practices.

Interest Categories: Manufacturer, Builder, Test Laboratory/Standards Promulgator, User, Utility, Consumer, Govt Regulator

This Standard establishes minimum requirements for the system design, performance evaluation and installation instructions of solar water-heating systems. This Standard is applicable to residential and commercial solar water-heating systems intended for use within swimming-pool, wading-pool, and spa heating. It is applicable to both direct and indirect solar water-heating systems.

MHI (Material Handling Industry)

Patrick Davison <pdavison@mhi.org> | 8720 Red Oak Boulevard, Suite 201 | Charlotte, NC 28217 www.mhi.org

Revision

BSR/ACE 15-202X, Cable-less Controls for Electronic Overhead Traveling Cranes (revision of ANSI/MHI ECMA 15-2018)
Stakeholders: Manufacturing, material handling, supply chain

Project Need: This standard is referenced in the Electronic Overhead Traveling Crane specifications CMAA 70 and CMAA 74 and provide guidance for remote devices used to control crane movements and actions.

Interest Categories: Manufacturer, distributor, user, general interest

This standard provides the minimum requirements and guidelines for cable-less controls of electric overhead traveling cranes. A cable-less control device as referenced in this standard uses radio frequency signals to control the movements and actions of said cranes for applications such as material handling.

MHI (Material Handling Industry)

Patrick Davison <pdavison@mhi.org> | 8720 Red Oak Boulevard, Suite 201 | Charlotte, NC 28217 www.mhi.org

Revision

BSR/ACE 25-202X, AC Inverters for Use on Electric Overhead, Monorail, and Gantry Traveling Cranes (revision of ANSI/MHI ECMA 25-2019)
Stakeholders: Manufacturing, supply chain, material handling

Project Need: This project will update an existing standard

Interest Categories: Manufacturer, distributor, user, general interest

This standard applies to AC Inverters for use on electric overhead, monorail, and gantry traveling cranes. AC Inverters are also referred to as variable frequency drives, adjustable frequency drives, or variable speed drives.

SCTE (Society of Cable Telecommunications Engineers)

Natasha Aden <naden@scte.org> | 140 Philips Road | Exton, PA 19341-1318 www.scte.org

Reaffirmation

BSR/SCTE 249-2018 (R202x), Test Method Common Mode Disturbance (reaffirmation of ANSI/SCTE 249-2018)
Stakeholders: Cable Telecommunications Industry

Project Need: Reaffirm current American National Standard

Interest Categories: Producers, Users, General Interest

The purpose of this test is to determine the common mode disturbance generated by power electronics in active CPE equipment. Since conducted disturbances on the AC port is already a part of FCC testing requirements, this method focuses on measurements of the common mode disturbance on the coaxial port. Common mode disturbance from stand-alone power supplies are conducted through a common ground plane on the CPE device to the outer conductor of the coaxial port. Therefore, stand-alone power supplies are also within the scope of this standard.

TAPPI (Technical Association of the Pulp and Paper Industry)

Sidney Onyekwere <standards@tappi.org> | 15 Technology Parkway, Suite 115 | Peachtree Corners, GA 30092 www.tappi.org

Revision

BSR/TAPPI T 1500 gl-202x, Optical measurements terminology (related to appearance evaluation of paper) (revision of ANSI/TAPPI T 1500 gl-2018)
Stakeholders: Manufacturers of pulp, paper, packaging, or related products, consumers or converters of such products, and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To revise an existing TAPPI/ANSI Standard based on comments received on the draft.

Interest Categories: Producers, Converters, Suppliers of chemical/raw materials, Suppliers of manufacturing equipment, Service and general suppliers, Commercial users, Marketers and Commercial Sellers, Consultants, Educators, General Interest

This glossary defines terms used in the pulp and paper industry relating to both visual and instrumental evaluations of appearance. This technical terminology includes such optical assessments such as brightness, whiteness, color, gloss, opacity, scattering, absorption, etc.

Call for Comment on Standards Proposals

American National Standards

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. e-mail: psa@ansi.org
* Standard for consumer products

Comment Deadline: May 11, 2025

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Julio.Morales@UL.org, https://ulse.org/

Revision

BSR/UL 48-202x, Standard for Safety for Electric Signs (revision of ANSI/UL 48-2023)
This proposal for UL 48 modifies the following topics from the 1-31-25 proposed updates: (3) Hinged panel pinch hazards
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | michael.niedermayer@ul.org, https://ulse.org/

Revision

BSR/UL 1647-202x, Standard for Safety for Motor-Operated Massage and Exercise Machines (revision of ANSI/UL 1647-2020)
Revisions to references to UL 4200A based on Reese's Law.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://csds.ul.com/ProposalAvailable

Comment Deadline: May 11, 2025

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | griff.edwards@ul.org, https://ulse.org/

Revision

BSR/UL 2196-202x, Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables (revision of ANSI/UL 2196-2020)
(1) New Edition of UL 2196, Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables (Recirculation).
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable.

Comment Deadline: May 26, 2025

AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 | tambrosius@aafs.org, www.aafs.org

New Standard

BSR/ASB Std 076-202x, Standard for Training and Certification of Canine Detection of Human Remains: Human Remains on Land (new standard)
To state requirements for the training, certification, and documentation pertaining to canine teams trained to search for human remains on land. This document does not cover mass disaster victim location canine activities, which are covered under separate standards.
Single copy price: Free
Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: https://url.us.m.mimecastprotect.com/s/kd19CL9DG9UPP7LiBfIUy0yOM?domain=aafs.org.
Send comments (copy psa@ansi.org) to: asb@aafs.org

ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 | eparks@abycinc.org, www.abycinc.org

Revision

BSR/ABYC A-31-202x, Battery Chargers and Inverters (revision of ANSI/ABYC A-31-2020)
This standard addresses the design, construction, and installation of permanently installed marine alternating current (AC) battery chargers, inverters, and inverter/chargers. This standard applies to permanently installed marine battery chargers powered by less than 300 VAC providing current at a potential rated voltage of 60 VDC or less, and permanently installed DC to AC marine inverters supplying less than 300 VAC at a frequency of 50 or 60 Hz, and permanently installed inverter/chargers operating in accordance with A-31.1.1 and A-31.1.2.
Single copy price: $50.00
Obtain an electronic copy from: abycinc.org
Send comments (copy psa@ansi.org) to: comments@abycinc.org

Comment Deadline: May 26, 2025

ADA (American Dental Association)

211 E. Chicago Avenue, Chicago, IL 60611-2678 | swickm@ada.org, www.ada.org

National Adoption

BSR/ADA Standard No. 74-202x, Dentistry - Operators Stool (national adoption of ISO 7493:2006 with modifications and revision of ANSI/ADA Standard No. 74-2010 (R2015))
This document specifies requirements, recommendations and test methods for the operator's stool in the dental office as well as requirements for the manufacturer's instructions for use and for marking and packaging. It also covers recommendations to manufacturers on the design of operator's stools. For purposes of this standard, the term "dental operator" includes dentists, dental assistants and dental hygienists.
Single copy price: $80.00
Obtain an electronic copy from: standards@ada.org
Send comments (copy psa@ansi.org) to: standards@ada.org

AGA (ASC B109) (American Gas Association)

400 N. Capitol St., NW, Suite 450, Washington, DC 20001 | lescobar@aga.org, www.aga.org

Reaffirmation

BSR B109.2-2020 (R202x), Diaphragm-Type Gas Displacement Meters (500 Cubic Feet Per Hour Capacity and Over) (reaffirmation of ANSI B109.2-2020)
This standard applies to diaphragm-type gas displacement meters, designed for revenue measurement of fuel gas, having a flow rating of greater than 500 cubic feet per hour (14.16 m3/h) capacity at 0.5-inch water column (125 Pa) differential pressure at base conditions.
Single copy price: Free
Obtain an electronic copy from: https://www.aga.org/b109
Send comments (copy psa@ansi.org) to: Luis Escobar, lescobar@aga.org

AGA (ASC Z223) (American Gas Association)

400 North Capitol Street, NW, Suite 450, Washington, DC 20001 | lescobar@aga.org, www.aga.org

Revision

BSR Z223.1-202x, National Fuel Gas Code (revision of ANSI Z223.1/NFPA 54-2024)
This code offers criteria for the installation and operation of gas piping and gas equipment on consumers' premises. It is the cumulative result of years of experience of many individuals and many organizations acquainted with the installation of gas piping and equipment designed for utilization of gaseous fuels. It is intended to promote public safety by providing requirements for the safe and satisfactory utilization of gas.
Single copy price: Free
Obtain an electronic copy from: https://www.aga.org/nfgc
Send comments (copy psa@ansi.org) to: Luis Escobar, lescobar@aga.org

Comment Deadline: May 26, 2025

AGMA (American Gear Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 | praneis@agma.org, www.agma.org

Reaffirmation

BSR/AGMA ISO 1328-2-A21, Cylindrical Gears - ISO System of Flank Tolerance Classification - Part 2: Definitions and Allowable Values of Double Flank Radial Composite Deviations (reaffirmation of ANSI/AGMA ISO 1328-2-21)
This document establishes a gear tooth classification system relevant to double flank radial composite deviations of individual cylindrical involute gears and sector gears. It provides formulae to calculate tolerances for individual product gears when mated in double flank contact with a master gear.
Single copy price: $166.00 non-member; $83.00 member
Obtain an electronic copy from: tech@agma.org
Send comments (copy psa@ansi.org) to: Todd Praneis, tech@agma.org

AGMA (American Gear Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 | praneis@agma.org, www.agma.org

Withdrawal

BSR/AGMA 2001-D04, Fundamental Rating Factors and Calculation Methods for Involute Spur and Helical Gear Teeth (withdrawal of ANSI/AGMA 2001-D04 (R2016))
This standard specifies a method for rating the pitting resistance and bending strength of spur and helical involute gear pairs. A detailed discussion of factors influencing gear survival and calculation methods are provided.
Single copy price: $390.00 non-member; $195.00 member
Obtain an electronic copy from: tech@agma.org
Send comments (copy psa@ansi.org) to: Todd Praneis, tech@agma.org

ANS (American Nuclear Society)

1111 Pasquinelli Drive, Suite 350, Westmont, IL 60559 | kmurdoch@ans.org, www.ans.org

Reaffirmation

BSR/ANS 59.51-1997 (R202x), Fuel Oil Systems for Safety-Related Emergency Diesel Generators (reaffirmation of ANSI/ANS 59.51-1997 (R2020))
This standard provides functional, performance, and initial design requirements for the fuel oil system for diesel generators that provide safety-related emergency onsite power for light water reactor nuclear power plants. This standard addresses the mechanical equipment associated with the fuel oil system, with the exception of the engine-mounted components. These components, which are mounted directly to the engine structure itself, are excluded except to define interface requirements. It also includes the instrumentation and control functional requirements. The standard excludes motors, motor control centers, switchgear, cables, and other electrical equipment used in the operation of the fuel oil system, except to define interface requirements.
Single copy price: $86.00
Obtain an electronic copy from: orders@ans.org
Send comments (copy psa@ansi.org) to: standards@ans.org

Comment Deadline: May 26, 2025

ANS (American Nuclear Society)

1111 Pasquinelli Drive, Suite 350, Westmont, IL 60559 | kmurdoch@ans.org, www.ans.org

Reaffirmation

BSR/ANS 59.52-1998 (R202x), Lubricating Oil Systems for Safety-Related Emergency Diesel Generators (reaffirmation of ANSI/ANS 59.52-1998 (R2020))
This standard provides functional, performance, and design requirements for lubricating oil systems for diesel generators that provide emergency onsite power for light water reactor nuclear power plants. The standard addresses all mechanical equipment associated with the lubricating oil system, with the exception of engine mounted components. These components, which are mounted directly to engine structure itself, are excluded, except to define interface requirements. This standard also includes the lubricating oil system instrumentation and control functional requirements. It excludes motors, motor control centers, switchgear, cables, and other electrical equipment used in the operation of the lubricating oil system, except to define interface requirements.
Single copy price: $54.00
Obtain an electronic copy from: orders@ans.org
Send comments (copy psa@ansi.org) to: standards@ans.org

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S12.6-2016 (R202x), Methods for Measuring the Real-ear Attenuation of Hearing Protectors (reaffirmation of ANSI/ASA S12.6-2016 (R2020))
This Standard applies to information technology and telecommunications equipment. This Standard specifies:
— the method of determining the declared noise emission values of a batch of machines;
— acoustical and product information to be given in technical documents supplied to users by the manufacturer;
— the method for verifying the declared noise emission values given by the manufacturers.
The uniform methods in this Standard use the noise emission data obtained in accordance with ANSI/ASA S12.10/Part 1, and the statistical methods and procedures specified in ISO 4871 and the ISO 7574 series. The primary declared noise emission value is the declared A-weighted sound power level, LWAd (a statistical maximum value corresponding to Lc in ISO 7574-1). The secondary declared noise emission value is the declared A-weighted emission sound pressure level, LpAm (a mean value), at the operator or bystander positions.
Single copy price: $169.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S12.9-2016/Part 7 (R202x), Quantities and Procedures for Description and Measurement of Environmental Sound - Part 7: Measurement of Low-frequency Noise and Infrasound Outdoors in the Presence of Wind and Indoors in Occupied Spaces (reaffirmation of ANSI/ASA S12.9-2016/Part 7 (R2020))
This standard specifies an engineering method for calculating the attenuation of sound during propagation outdoors in order to predict the levels of environmental noise at a distance from a variety of sources. The method predicts the equivalent continuous A-weighted sound pressure level (as described in parts 1 to 3 of ISO 1996) under meteorological conditions favorable to propagation from sources of known sound emission These conditions are for downwind propagation, as specified in 5.4.3.3 of ISO 1996-2:1987 or, equivalently, propagation under a well-developed moderate ground-based temperature inversion, such as commonly occurs at night. Inversion conditions over water surfaces are not covered and may result in higher sound pressure levels than predicted from this standard. The method also predicts a long-term average A-weighted sound pressure level as specified in ISO 1996-1 and ISO 1996-2.
Single copy price: $147.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S12.51-2012/ISO 3741-2010 (R202x), Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for reverberation test rooms (a nationally adopted international standard) (reaffirm a national adoption ANSI/ASA S12.51-2012/ISO 3741-2010 (R2020))
This part of ANSI/ASA S12.60 is applicable to relocatable classrooms and other relocatable modular core learning spaces of small to moderate size. This standard includes siting requirements, acoustical performance criteria, and design requirements for relocatable classrooms. Annex A (informative) provides commentary information on this standard, and Annex B (normative) provides procedures for determining compliance with the background sound requirements. This standard seeks to provide design flexibility without compromising the goal of obtaining adequate speech intelligibility for all students and teachers in classrooms and learning spaces within the scope of this standard. Acoustical performance criteria are specified in this standard by limits on maximum one-hour A-weighted and C-weighted background noise levels and limits on maximum reverberation times.
Single copy price: $222.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S12.53-2011/Part 1/ISO 3743-1:2010 (R202x), Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for small, movable sources in reverberant fields - Part 1: Comparison method for a hard-walled test room (a nationally adopted international standard) (reaffirm a national adoption ANSI/ASA S12.53-2011/Part 1/ISO 3743-1:2010 (R2020))
This standard gives engineering methods for determining in situ sound power using sound intensity measurements on a measurement surface enclosing a source. It provides guidelines on the acoustical environment, including ambient noise, the measurement surface enclosing the source, and the number of measurements on the surface. This standard does not include specification of instruments or calibration procedures. It is not limited to any one technique of intensity measurement.
Single copy price: $198.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S2.2-1959 (R202x), Standard Methods for the Calibration of Shock and Vibration Pickups (reaffirmation of ANSI/ASA S2.2-1959 (R2020))
This guide is limited to the determination of mobility properties of structures derived from the complex amplitudes of translational and rotational responses and the complex amplitudes of excitation forces and moments within the audio frequency range.
Purpose: This guide delineates the methods and procedures which may be used to determine the structural mobility properties, translational and rotational, of a system of points on a structure. This guide is to be used for guidance only, since the state of the art is still in flux.
NOTE: The term "point" as used in this guide designates a location only. Each "point" has six coordinates d(three translational and three rotational). The term "degree of freedom" is used in this report to designate these coordinates.
Single copy price: $169.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S2.27-2002 (R202x), Standard Guidelines for the Measurement and Evaluation of Vibration of Ship Propulsion Machinery (reaffirmation of ANSI/ASA S2.27-2002 (R2020))
Five methods have been selected as standard methods for the calibration of acceleration velocity, and displacement pickups. They are described in Section 4 of this standard. It is impracticable to calibrate all pickups by one standard method over the entire frequency and amplitude range of vibrations and shocks to be measured by the pickups. Several methods are accordingly described. Each method is limited to u range of frequency and amplitude, and to the weight of pickup that can be calibrated. The limitations may include, in addition, other variables such as volume of the pickup and temperature of operation.
Purpose: This standard is designed to acquaint the user with the general principles of calibration of shock and vibration pickups and to describe concisely several standard methods which have proven to give reliable and reproducible results. Further details concerning these methods are given in the Appendix.
Single copy price: $147.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S2.31-1979 (R202x), Standard Methods for the Experimental Determination of Mechanical Mobility - Part 1: Basic Definitions and Transducers (reaffirmation of ANSI/ASA S2.31-1979 (R2020))
The words and phrases provided here are descriptive of the instruments and methods in common use for shaft alignment of industrial and utility machines. The machines have rotating shafts at speeds of several hundred revolutions per minute and higher. The machines are typically stationary, being attached to a fixed location on a structure, but could also be on a vehicle, such as a watercraft. The definitions are intended to be used in other standards for shaft alignment and general machinery servicing.
Single copy price: $92.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S2.32-1982 (R202x), Standard Methods for the Experimental Determination of Mechanical Mobility - Part 2: Measurements Using Single-Point Translational Excitation (reaffirmation of ANSI/ASA S2.32-1982 (R2020))

This nationally adopted international standard establishes general conditions and procedures for the measurement and evaluation of vibration using measurements made on rotating, non-rotating, and non-reciprocating parts of complete machines. It is applicable to measurements of both absolute and relative radial shaft vibration with regard to the monitoring of radial clearances, but excludes axial shaft vibration. The general evaluation criteria, which are presented in terms of both vibration magnitude and change of vibration, relate to both operational monitoring and acceptance testing. They have been provided primarily with regard to securing reliable, safe, long-term operation of the machine while minimizing adverse effects on associated equipment. Guidelines are also presented for setting operational limits.

Single copy price: $110.00

Obtain an electronic copy from: standards@acousticalsociety.org

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

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S3.7-2016 (R202x), Standard Method for Measurement and Calibration of Earphones (reaffirmation of ANSI/ASA S3.7-2016 (R2020))

This standard describes measurement methods for earphones and earphone transducers using couplers or ear simulators. Guidance is provided for the selection of the appropriate coupler or ear simulator for a given earphone and application. Methods for measurement of calibrated frequency response, input-output linearity, electrical impedance, and non-linear distortion, are described.

Single copy price: $169.00

Obtain an electronic copy from: standards@acousticalsociety.org

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

Comment Deadline: May 26, 2025

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S3.52-2016 (R202x), Standard Measurements of the Threshold of Hearing and Signal Detectability in a Sound Field. (reaffirmation of ANSI/ASA S3.52-2016 (R2020))
This standard specifies an experimental method for evaluation of the intelligibility of synthetic speech, in English, generated by text-to-speech (TTS) synthesis systems. It is intended to be used by developers of applications that incorporate TTS technology, such as e-mail and SMS readers, talking kiosks, e-learning systems, navigation systems, automated messaging services, screen readers for people who are blind, and assistive devices for people who have difficulty speaking. Although this Standard is targeted toward English, many of the recommendations and requirements concerning experimental design, listener selection and training, test materials and procedures, and measurement and analysis of results are sufficiently general to be valid for evaluating the intelligibility of synthetic speech in languages other than English. This Standard describes methodology that is applicable both for comparisons of different TTS systems, and for comparisons of different versions of the same TTS system.
Single copy price: $147.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

Reaffirmation

BSR/ASA S3.55-2015/Part 3/IEC 60318-3:2015 (R202x), Standard Electroacoustics - Simulators of Human Head and Ear - Part 3: Acoustic Coupler for the Calibration of Supra-aural Earphones Used in Audiometry (a Nationally Adopted International Standard) (reaffirm a national adoption ANSI/ASA S3.55-2015/Part 3/IEC 60318-3:2015 (R2020))
This standard specifies an acoustic coupler for objective and reproducible measurements of supra-aural audiometric earphones in the frequency range from 125 Hz to 8000 Hz. The results of these measurements can be used for specifying reference equivalent threshold sound pressure levels (RETSPL) for the calibration of audiometers.
Single copy price: $92.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

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

180 Technology Parkway, Peachtree Corners, GA 30092 | cking@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 140-2023, Method of Test for Evaluating Building Performance Simulation Software (addenda to ANSI/ASHRAE Standard 140-2020)
This addendum adds time series results to the Standard 140 acceptance criteria for the thermal fabric test groups; updates the minimum number of range cases within the test group to pass to reflect the inclusion of more cases to the acceptance criteria; updates Informative Annex B12 to include the procedure for developing the acceptance criteria ranges for time series results; and consolidates the range tables of Normative Annex A3 into fewer tables to make finding the acceptance ranges easier.
Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

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

180 Technology Parkway, Peachtree Corners, GA 30092 | etoto@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE/IES Addendum ca to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
This addendum modifies the Additional Efficiency Requirements located in Section 11, aka “Energy Credits.” This proposed addendum covers three areas: it cleans up and modifies some existing credit language, it introduces new credits, and it modifies the number of required credits.
Single copy price: $35.00
Obtain an electronic copy from: standards.section@ashrae.org
Send comments (copy psa@ansi.org) to: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

180 Technology Parkway, Peachtree Corners, GA 30092 | cking@ashrae.org, www.ashrae.org

Revision

BSR/ASHRAE Standard 41.7-2021R, Standard Methods for Gas Flow Measurement (revision of ANSI/ASHRAE Standard 41.7-2021)
This revision of ANSI/ASHRAE Standard 41.7-2021 prescribes methods for gas flow measurement. The revision also makes it easier for the higher-tier ASHRAE standards to adopt this standard by reference, updates the steady-state criteria requirements, and includes a new uncertainty example prepared in accordance with the latest uncertainty methods.
Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

Comment Deadline: May 26, 2025

MHI (Material Handling Industry)

8720 Red Oak Boulevard, Suite 201, Charlotte, NC 28217 | pdavison@mhi.org, www.mhi.org

Revision

BSR MH16.1-202X, Design, Testing, and Utilization of Industrial Steel Cantilevered Storage Racks (revision of ANSI MH16.1-2023)
This standard specifies the minimum requirements for the structural design, testing, and utilization of industrial steel cantilevered storage racks. A cantilevered rack is a storage system designed to store long, bulky, or irregular materials. They consist of freestanding columns connected to fixed bases that are anchored to the floor. Load arms cantilever from the column to create storage levels. Loads can be placed directly onto the arms and base beams, and the arms can be equipped with beams or rack decking.
Single copy price: $50.00
Obtain an electronic copy from: pdavison@mhi.org
Send comments (copy psa@ansi.org) to: Same

NASBLA (National Association of State Boating Law Administrators)

1020 Monarch Street, Suite 200, Lexington, KY 40513 | mark.chanski@nasbla.org, www.nasbla.org

New Standard

BSR/NASBLA 1200-202x, K-12 Personal Flotation Device Standard (new standard)
This Standard defines general, entry-level knowledge developed for a Kindergarten through 12th grade (K-12) audience about the importance of Personal Flotation Device (PFD) use in, on, or around water. It has been prepared to provide guidance on the application of PFDs for persons engaged in water-related activities. PFDs selected and maintained according to this Standard should give a reasonable assurance of safety from drowning to a person who is immersed in water. This consensus-based standard is designed to support educators and raise the overall level of knowledge, skills, and competencies of the K-12 audience. This standard is not intended to be submitted for consideration as an ISO. IEC, or ISO/IEC JTC-1 standard.
Single copy price: Free
Obtain an electronic copy from: https://bsp.nasbla.org/esp/
Send comments (copy psa@ansi.org) to: Mark Chanski, mark.chanski@nasbla.org

NECA (National Electrical Contractors Association)

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | Jeff.Noren@NECAnet.org, www.neca-neis.org

Revision

BSR/NECA 407-202X, Standard for Installing and Maintaining Panelboards (revision of ANSI/NECA 407-2015)
This Standard describes installation and maintenance procedures for panelboards, and special procedures used for panelboards after adverse operating conditions such as a short-circuit, ground-fault, or immersion in water. This Standard applies to panelboards rated 600 Volts or less, AC and DC, with main disconnects or lugs, and with feeder or branch circuit overcurrent devices. This Standard applies to single panelboards and multi-section panelboards that are installed in the field and used for distributing power for commercial, institutional, and industrial loads in nonhazardous locations both indoors and outdoors.
Single copy price: $30.00 Members; $60.00 Non-Members
Obtain an electronic copy from: jeff.noren@necanet.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

NEMA (ASC C37) (National Electrical Manufacturers Association)

1300 17th St N #900,, Arlington, VA 22209 | Paul.Crampton@nema.org, www.nema.org

Revision

BSR C37.55 202x, Standard for Switchgear - Medium Voltage Metal-Clad Assemblies - Conformance Test Procedures (revision of ANSI C37.55-2020)
This Standard is a conformance testing standard optionally applicable to all medium-voltage metal-clad switchgear assemblies designed, tested, and manufactured in accordance with IEEE Std. C37.20.2, Metal-Clad Switchgear. This standard covers selected tests to demonstrate conformance of the basic switchgear section (which includes the structure, circuit breaker compartments, instrument compartments, buses, and internal connections) with the "Tests" clause of IEEE Std. C37.20.2.
Single copy price: Free
Obtain an electronic copy from: Paul.Crampton@nema.org
Send comments (copy psa@ansi.org) to: Same

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02169 | dbellis@nfpa.org, www.nfpa.org

Revision

BSR/NFPA 30-202x, Flammable and Combustible Liquids Code (revision of ANSI/NFPA 30-2024)
This code shall apply to the storage, handling, and use of ignitible (flammable or combustible) liquids, including waste liquids, as herein defined and classified. This code shall not, however, apply to the specified liquids, fluids, gases, or aerosols excluded specifically in Section 1.1.2 or to any mists, sprays, or foams.
Obtain an electronic copy from: www.nfpa.org/30
Send comments (copy psa@ansi.org) to: www.nfpa.org/30next

SCTE (Society of Cable Telecommunications Engineers)

140 Philips Road, Exton, PA 19341-1318 | naden@scte.org, www.scte.org

New Standard

BSR/SCTE 288 202x, Plug-in Cable Attenuator - Performance Standard (new standard)
This standard defines a common minimum specification of electrical performance and certain mechanical characteristics of plug-in attenuators used in broadband cable network nodes and amplifiers.
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (copy psa@ansi.org) to: standards@scte.org

SCTE (Society of Cable Telecommunications Engineers)

140 Philips Road, Exton, PA 19341-1318 | naden@scte.org, www.scte.org

Reaffirmation

BSR/SCTE 06-2019 (R202x), Composite Distortion Measurements (CSO & CTB) (reaffirmation of ANSI/SCTE 06 -2019)
This document describes a test procedure for the laboratory and production measurement of composite distortion products. There are two types of composite distortions considered: Composite Second Order and Composite Triple Beat. In order to obtain a stable, repeatable measurement, this test procedure describes testing performed with continuous wave (CW) carriers.
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (copy psa@ansi.org) to: standards@scte.org

Comment Deadline: May 26, 2025

SCTE (Society of Cable Telecommunications Engineers)

140 Philips Road, Exton, PA 19341-1318 | naden@scte.org, www.scte.org

Reaffirmation

BSR/SCTE 09-2016 (R202x), Test Method for Cold Bend (reaffirmation of ANSI/SCTE 09-2016)
The purpose of this procedure is to provide instructions on testing the cold bend properties of flexible outdoor polyvinyl chloride (PVC) or polyethylene (PE) cable.
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (copy psa@ansi.org) to: standards@scte.org

SCTE (Society of Cable Telecommunications Engineers)

140 Philips Road, Exton, PA 19341-1318 | naden@scte.org, www.scte.org

Revision

BSR/SCTE 62 2024-202x, Test Method: Noise Figure Testing Procedures (revision of ANSI/SCTE 62-2018)
This procedure defines two methods of measurement for Noise Figure of active Cable Telecommunications equipment. It is intended for measurement of 75 Ω devices having type “F” or 5/824 KS connectors, and for the measurement of true broadband noise as opposed to narrowband disturbances. Test equipment characteristics limit this procedure to frequencies no lower than 10 MHz.
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (copy psa@ansi.org) to: standards@scte.org

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

New Standard

BSR/TAPPI T 807 om-202x, Bursting strength of linerboard (new standard)
This method describes a procedure for measuring the bursting strength of containerboard using a disk-shaped diaphragm. This method may also be used to test paperboard. (See also 11.3.) A specimen is clamped between two platens with circular openings in their centers. An expansible diaphragm is distended through the lower platen by means of hydraulic pressure until the specimen ruptures. The maximum hydraulic pressure when the specimen ruptures is recorded.
Single copy price: Free
Obtain an electronic copy from: Brittaney Lovett, Standards@tappi.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Reaffirmation

BSR/TAPPI T 511 om-2013 (R202x), Folding endurance of paper (MIT tester) (reaffirmation of ANSI/TAPPI T 511 om-2013 (R2020))
This method describes the use of the MIT-type apparatus for the determination of the folding endurance of paper. An exhaust fan arrangement maintains the folding head at room temperature. The MIT tester is suitable for papers of any thickness; however, if the outer fibrous layers of paper thicker than about 0.25 mm (0.01 in.) rupture during the first few folds, the test loses its significance. The procedure for the Schopper-type apparatus is given in TAPPI T 423 “Folding Endurance of Paper (Schopper Type Tester).”
Single copy price: Free
Obtain an electronic copy from: Brittaney Lovett, Standards@tappi.org
Send comments (copy psa@ansi.org) to: Same

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Reaffirmation

BSR/TAPPI T 549 om-2020 (R202x), Coefficients of static and kinetic friction of uncoated writing and printing paper by use of the horizontal plane method (reaffirmation of ANSI/TAPPI T 549 om-2020)
This method describes a horizontal plane procedure for the determination of the coefficient of static and kinetic friction of paper measured when sliding against itself. The horizontal instrument requires some means of movement of the specimen in relation to the surface upon which it rests. The coefficient of friction (COF) is measured directly from the resistance to tangential motion and the applied weight pressing two pieces of paper together. Static COF relates to the force required to initiate movement between two surfaces while kinetic COF relates to the force required to cause continuation of the movement at uniform speed.
Single copy price: Free
Obtain an electronic copy from: Brittaney Lovett, Standards@tappi.org
Send comments (copy psa@ansi.org) to: Same

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Reaffirmation

BSR/TAPPI T 553 om-2020 (R202x), Alkalinity of paper as calcium carbonate (alkaline reserve of paper) (reaffirmation of ANSI/TAPPI T 553 om-2020)
This test method covers the determination of the alkalinity or alkaline reserve of paper, or both. A qualitative test is described that indicates the presence of carbonate. (The detection limit is approximately 5% calcium carbonate.) A quantitative test is described that determines the alkalinity expressed as percent calcium carbonate or alkaline reserve, or both, expressed as moles per kilogram of paper.
Single copy price: Free
Obtain an electronic copy from: Brittaney Lovett, Standards@tappi.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: May 26, 2025

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Reaffirmation

BSR/TAPPI T 558 om-2010 (R202x), Surface wettability and absorbency of sheeted materials using an automated contact angle tester (reaffirmation of ANSI/TAPPI T 558 om-2010 (R2020))
This test method measures the contact angle of a test liquid in contact with a film or a paper substrate under specified test conditions. This test method may be used with any liquid of interest which is compatible with the equipment used, particularly with regard to liquid viscosity, tackiness, and vapor pressure (evaporation). This test method may be used with any substrate of interest, which can be cut to dimensions compatible with the equipment used.
Single copy price: Free
Obtain an electronic copy from: Brittaney Lovett, Standards@tappi.org
Send comments (copy psa@ansi.org) to: Same

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Reaffirmation

BSR/TAPPI T 836 om-2020 (R202x), Bending stiffness, four point method (reaffirmation of ANSI/TAPPI T 836 om -2020)
This procedure specifies the method of determining the bending stiffness, also called flexural rigidity, in the machine and cross directions, of corrugated board using four-point loading. The procedure may also be used for solid boards and paperboard. The method is applicable to boards with a bending stiffness of 0.5 - 200 Nm (4.4 - 1770 lbf • in.).
Single copy price: Free
Obtain an electronic copy from: Brittaney Lovett, Standards@tappi.org
Send comments (copy psa@ansi.org) to: Same

ULSE (UL Standards & Engagement)

1603 Orrington Ave, Evanston, IL 60210 | alan.t.mcgrath@ul.org, https://ulse.org/

National Adoption

BSR/UL 60335-2-40-202X, Household And Similar Electrical Appliances - Safety - Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers (national adoption of IEC 60335-2 -40 with modifications and revision of ANSI/UL 60335-2-40-2022)
Revise the fourth edition of UL 60335-2-40 which deals with the safety of electric heat pumps, including hot-water heat pumps, air conditioners, and dehumidifiers incorporating motor-compressors as well as without motor-compressors. It also deals with hydronic fan coil units, their maximum rated voltages being not more than 300 V for single-phase appliances and 15 000 V for all other appliances. Partial units are within the scope of this Standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Follow the instructions at: https://csds.ul.com/ProposalAvailable

Comment Deadline: May 26, 2025

ULSE (UL Standards & Engagement)
1603 Orrington Ave, Suite 20000, Evanston, IL 60201 | Susan.P.Malohn@ul.org, https://ulse.org/

National Adoption

BSR/UL 61730-2-202x, Standard for Safety for Photovoltaic (PV) Module Safety Qualification - Part 2: Requirements for Testing (national adoption of IEC 61730-2 with modifications and revision of ANSI/UL 61730-2 -2023)
(1) Reorganization of Section, 10.17DV.
(4) Fire Type Testing, including New Fire Type Additions to an Expanded Annex DVB, Type Tests for Fire Performance Characterization of Modules Independent of Roof Coverings
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC | akhira.watson@ul.org, https://ulse.org/

New Standard

BSR/UL 2735-202x, Standard for Electric Utility Meters (new standard)
A proposed New Edition of UL 2735 (Second Ed), Standard for Electric Utility Meters, which includes the requirements for Canada from UL 2735C.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Doreen.Stocker@ul.org, https://ulse.org/

Reaffirmation

BSR/UL 60745-2-19 (R202x), Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2 -19: Particular Requirements For Jointers (reaffirmation of ANSI/UL 607452-2-19-2011 (R2020))
Reaffirmation and continuance of the 1st Edition of the Standard for Safety for Hand-Held Motor-Operated Electric Tools – Safety – Part 2-19: Particular Requirements For Jointers, UL 60745-2-19, as an standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: https://csds.ul.com/Home/ProposalsDefault.aspx.

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Doreen.Stocker@ul.org, https://ulse.org/

Reaffirmation

BSR/UL 60745-2-14-2011 (R202x), Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-14: Particular Requirements for Planers (reaffirmation of ANSI/UL 60745-2-14-2011 (R2020))
Reaffirmation and continuance of the 2nd Edition of the Standard for Hand-Held Motor-Operated Electric Tools – Safety – Part 2-14: Particular Requirements for Planers, UL 60745-2-14, as an standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Send comments (copy psa@ansi.org) to: https://csds.ul.com/Home/ProposalsDefault.aspx

Comment Deadline: May 26, 2025

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC | akhira.watson@ul.org, https://ulse.org/

Revision

BSR/UL 4248-9-202x, Fuseholders - Part 9: Class K (revision of ANSI/UL 4248-9-2007 (R2023))
A proposed New Edition of UL 4248-9, Standard for Fuseholders - Part 9: Class K.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC | akhira.watson@ul.org, https://ulse.org/

Revision

BSR/UL 4248-11-202x, Fuseholders - Part 11: Type C (Edison Base) and Type S Plug Fuse (revision of ANSI/UL 4248-11-2007 (R2023))
A proposed New Edition of UL 4248-11, Standard for Fuseholders - Part 11: Type C (Edison Base) and Type S Plug Fuse.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC | akhira.watson@ul.org, https://ulse.org/

Revision

BSR/UL 4248-12-202x, Fuseholders - Part 12: Class R (revision of ANSI/UL 4248-12-2018 (R2023))
A proposed New Edition of UL 4248-12, Standard for Fuseholders - Part 12: Class R.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC | akhira.watson@ul.org, https://ulse.org/

Revision

BSR/UL 4248-15-202x, Fuseholders - Part 15: Class T (revision of ANSI/UL 4248-15-2007 (R2023))
A proposed New Edition of UL 4248-15, Standard for Fuseholders - Part 15: Class T.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

Comment Deadline: June 10, 2025

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.1-2011 (S202x), Precision Power Transmission Roller Chains, Attachments, and Sprockets (stabilized maintenance of ANSI/ASME B29.1-2011 (R2022))
This Standard covers transmission roller chains, attachments, and sprockets. It is intended to facilitate fulfillment of the needs of users, distributors, and manufacturers of chain sprocket drives on a sound economic basis and in a manner consistent with sound engineering and manufacturing practices.
Single copy price: $39.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.2M-2007 (S202x), Inverted Tooth (Silent) Chains and Sprockets (stabilized maintenance of ANSI/ASME B29.2M-2007 (R2022))
This Standard covers the numbering and dimensions of chains and sprockets, the measurement of chain pitch, basic link dimensions, and sprocket tooth form details.
Single copy price: $49.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.12M-1997 (S202x), Steel Bushed Rollerless Chains Attachments and Sprocket Teeth (stabilized maintenance of ANSI/ASME B29.12M-1997 (R2023))
This Standard provides the following information for steel brushed rollerless chains, attachments, and sprocket teeth.
Single copy price: $43.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.15M-1997 (S202x), Steel Roller Type Conveyor Chains, Attachments, and Sprocket Teeth (stabilized maintenance of ANSI/ASME B29.15M-1997 (R2021))
This Standard covers steel-roller-type conveyor chains which is a series of roller links having steel bushings with rollers to contact the sprocket teeth, alternating with links comprised of sidebars and pins, which articulate in the steel bushings of the roller link.
Single copy price: $43.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

Comment Deadline: June 10, 2025

ASME (American Society of Mechanical Engineers)
Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.17M-1998 (S202x), Hinge Type Flat Top Conveyor Chains and Sprocket Teeth (stabilized maintenance of ANSI/ASME B29.17M-1998 (R2023))
This Standard contains information for hinge-type flat-top conveyor chains and sprocket teeth.
Single copy price: $43.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

ASME (American Society of Mechanical Engineers)
Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.21-2013 (S202x), 700 Class Chains, Attachments, and Sprockets for Water and Sewage Treatment Plants (stabilized maintenance of ANSI/ASME B29.21-2013 (R2023))
This Standard covers 700 Class chains, attachments, and sprocket teeth for water and sewage treatment plants.
Single copy price: $44.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

ASME (American Society of Mechanical Engineers)
Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.27-2002 (S202x), Single Pitch and Double Pitch Hollow Pin Conveyor Chains and Attachments (stabilized maintenance of ANSI/ASME B29.27-2002 (R2021))
This standard covers the dimensional limits required for chain interchangeability on sprockets. It does not provide for interconnectability of chains or individual links from different manufacturers.
Single copy price: $38.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

ASME (American Society of Mechanical Engineers)
Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.100-2011 (S202x), Double-Pitch Roller Chains, Attachments, and Sprockets (stabilized maintenance of ANSI/ASME B29.100-2011 (R2021))
This Standard covers double-pitch roller chains (and their attachments and sprockets) which consist of series of alternately assembled roller links and pin links in which the pins articulate inside the bushings and the rollers are free to turn on the bushings.
Single copy price: $111.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

Comment Deadline: June 10, 2025

ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Stabilized Maintenance

BSR/ASME B29.400-2001 (S202x), Combination H Type Mill Chains and Sprockets (stabilized maintenance of ANSI/ASME B29.400-2001 (R2023))
This Standard is a consolidation of two ASME standards, ASME B29.11M-1994 (Combination Chains, Attachments, and Sprocket Teeth) and ASME B29.14M-1996 ("H" Type Mill Chains, Attachments, and Sprocket Teeth). Combination chains are a series of block links having barrels to contact the sprocket teeth, alternating with links composed of sidebars and pins that articulate in the barrels of the block link. Pins are fixed against rotation in sidebar pitch holes by mechanical locks, such as flats, or by interference fits, or both. Assembly of pins may be from either side or alternated, at the manufacturer's option. The main topics are (a) General chain proportions and designations and (b) Attachments. "H" type mill chains are a series of identical cast offset links having barrels to contact the sprocket teeth and pins that articulate in the barrels of the links. Pins are fixed in the sidebar pitch holes by either press fits and/or mechanical locks, such as flats, to prevent rotation of the pins in the sidebar pitch holes. The main topics are (a) General chain proportions and designations; (b) Attachments; (c) Sprocket tooth forms; and (d) Sprocket design data.
Single copy price: $72.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Lydia Stanford

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE 487.2-202x, Standard for the Electrical Protection of Communication Facilities Serving Electric Supply Locations through the Use of Optical Fiber Systems (new standard)
Safe and reliable methods for the electrical protection of telecommunication facilities serving electric supply locations through the use of optical fiber systems for the entire facility are presented in this standard.
Single copy price: $61.00
Obtain an electronic copy from: https://store.accuristech.com/standards/ieee-487-2-2024?product_id=2903017
Order from: https://store.accuristech.com/
Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Comment Deadline: June 10, 2025

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE 2725.1-202x, Standard for Microwave Structural, Vascular, or Functional Brain Imaging Device Safety (new standard)
Requirements and guidelines for the design of radiofrequency (RF) brain imaging systems, to help protect subjects/users/patients from adverse effects from overexposure to RF electromagnetic energy, and from other electrical, mechanical, chemical, and biological hazards are specified by this standard. This standard is limited to brain imaging devices using a brain machine interface (BMI) that intentionally couples low-level RF electromagnetic energy, in the frequency range between 10 MHz and 20 GHz, into the human head using antennas or probes in direct contact with, or close proximity to, the human head.
Single copy price: $90.00
Obtain an electronic copy from: https://store.accuristech.com/standards/ieee-2725-1-2024?product_id=2909174
Order from: https://store.accuristech.com/
Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

Revision

BSR/IEEE C37.13-202x, Standard for Low-Voltage AC (1058 V and Below) Power Circuit Breakers Used in Enclosures (revision of ANSI/IEEE C37.13-2015)
The following enclosed low-voltage ac power circuit breakers are covered in this standard: (a) stationary or drawout type of two-, three-, or four-pole construction, with one or more rated maximum voltages of 1058 V, 730 V, 635 V (600 V for units incorporating fuses), 508 V, or 254 V for application on systems having nominal voltages of 1000 V, 690 V, 600 V, 480 V, or 240 V; (b) unfused or fused circuit breakers; (c) manually or power operated; and (d) with or without electromechanical or electronic trip devices. Service conditions, ratings, functional components, temperature limitations and classifications of insulating materials, insulation (dielectric) withstand voltage requirements, test procedures, application, and the preferred ratings are discussed in this standard.
Single copy price: $108.00
Obtain an electronic copy from: https://store.accuristech.com/standards/ieee-c37-13-2024?product_id=2581808
Order from: https://store.accuristech.com/
Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Comment Deadline: June 10, 2025

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

Revision

BSR/IEEE C37.27-202x, Guide for Low-Voltage AC (635 V and below) Power Circuit Breakers Applied with Separately-Mounted Current-Limiting Fuses (revision of ANSI/IEEE C37.27-2015)
Application recommendations to assist in selection of separately mounted current-limiting fuses to be installed in series with low-voltage ac power circuit breakers are provided in this guide.
Single copy price: $58.00
Obtain an electronic copy from: https://store.accuristech.com/standards/ieee-c37-27-2024?product_id=2582887
Order from: https://store.accuristech.com/
Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

ULSE (UL Standards & Engagement)

100 Queen Street, Suite 1040, Ottawa, Canada, ON | Jacob.Stewart@ul.org, https://ulse.org/

National Adoption

BSR/UL 12402-9-202x, Standard for Personal Flotation Devices - Part 9: Test Methods (national adoption of ISO 12402-9:2011 with modifications and revision of ANSI/UL 12402-9-2024)
Supports additional waist measurement parameters and instructs the testing laboratory to ensure subjects fit all specified measurements before being tested.
Single copy price: Free
Order from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable.

Comment Deadline: June 10, 2025

ULSE (UL Standards & Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | hilal.elmisilmani@ul.org, https://ulse.org/

National Adoption

BSR/UL 60335-2-53-202x, Standard for Safety for Household and Similar Electrical Appliances - Safety - Part 2 -53: Particular Requirements for Sauna Heating Appliances and Infrared Cabins (national adoption with modifications of IEC 60335-2-53)
This proposed first edition of UL 60335-2-53, IEC adopted standard with national deviations, specifies safety requirements for electric sauna heating appliances and infrared emitting units, with a power input of up to 30 kW, and voltage not exceeding 250 V for single-phase appliances and 480 V for other appliances. The standard applies to appliances intended for both residential and commercial use, including installations in private homes, apartment complexes, hotels, and similar locations.
The standard covers sauna heating appliances of both conventional and thermal storage types, as well as those incorporating a humidifier unit for controlled humidity regulation through water evaporation or atomization. It addresses common safety hazards associated with these appliances, ensuring safe operation in residential and public environments.
This standard does not cover appliances designed for partial-body perspiration, sweating baths where the user's head remains outside the heated space, collapsible sauna baths, room heaters, HVAC-integrated humidifiers, standalone humidifiers, or medical appliances. Additionally, it does not address appliances intended for use in environments with corrosive or explosive atmospheres, such as those containing flammable gases or dust.
While this standard provides comprehensive safety requirements, it does not address specific national regulatory requirements that may apply to sauna installations in certain jurisdictions.
Single copy price: Free
Order from: https://www.shopulstandards.com
Send comments (copy psa@ansi.org) to: Follow the instructions on the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

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:

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

180 Technology Parkway, Peachtree Corners, GA 30092 | tmlisle@ashrae.org, www.ashrae.org

BSR/ASHRAE Standard 78-201X, Method of Testing Flow Capacity of Suction Line Filters and Filter-Driers (revision of ANSI/ASHRAE Standard 78-1985 (R2007))
Send comments (copy psa@ansi.org) to: Tanisha Meyers-Lisle <tmlisle@ashrae.org>

ICC (International Code Council)

4051 Flossmoor Road, Country Club Hills, IL 60478 | kaittaniemi@iccsafe.org, www.iccsafe.org

BSR/ICC 1505-202x, Standard for Inspection, Testing and Maintenance of Energy Storage Systems (ESS) (new standard)
Send comments (copy psa@ansi.org) to: Karl Aittaniemi <kaittaniemi@iccsafe.org>

Project Withdrawn

ICC (International Code Council)

4051 Flossmoor Road, Country Club Hills, IL 60478 | kaittaniemi@iccsafe.org, www.iccsafe.org

BSR/ICC 1510-202x, Acceptance Testing of Energy Storage System (ESS) Facilities (new standard)
Send comments (copy psa@ansi.org) to: Karl Aittaniemi <kaittaniemi@iccsafe.org>

IEEE (Institute of Electrical and Electronics Engineers)

NIST, 100 Bureau Drive M/S 8462, Gaithersburg, MD 20899-8462 | letitia.pibida@nist.gov, www.ieee.org

BSR N42.59-202x, Standard for Measuring the Imaging Performance of Millimeter-Wave Systems for Security Screening of Humans (new standard)
Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Final Actions on American National Standards

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

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

180 Technology Parkway, Peachtree Corners, GA 30092 | mweber@ashrae.org, www.ashrae.org

ANSI/ASHRAE Addendum 62.1d-2022, Ventilation and Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2022) Final Action Date: 3/31/2025 | *Addenda*

ANSI/ASHRAE/ASHE Addendum 170t-2022, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 3/31/2025 | *Addenda*

ANSI/ASHRAE/IES Addendum c to ANSI/ASHRAE/IES Standard 100-2024, Energy and Emissions Building Performance Standard for Existing Buildings (addenda to ANSI/ASHRAE/IES Standard 100-2018) Final Action Date: 3/31/2025 | *Addenda*

ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | accreditation@astm.org, www.astm.org

ANSI/ASTM/ISO 55000-2024, Asset management - Vocabulary, overview and principles (identical national adoption of ISO 55000-2018) Final Action Date: 4/1/2025 | *National Adoption*

ANSI/ASTM/ISO 55001-2024, Asset management - Asset management system - Requirements (identical national adoption of ISO 55001-2024) Final Action Date: 4/1/2025 | *National Adoption*

ANSI/ASTM F3753-2025, Classification for Suffixes to the PE Thermoplastic Pipe Material Designation (TPMD) Code for Polyethylene Pressure Piping (new standard) Final Action Date: 4/2/2025 | *New Standard*

ANSI/ASTM F1023 (R2025), Specification for Dispensers, Powdered Iced Tea (reaffirmation of ANSI/ASTM F1023-2012 (R2018)) Final Action Date: 4/2/2025 | *Reaffirmation*

ANSI/ASTM E23-2025, Test Methods for Notched Bar Impact Testing of Metallic Materials (revision of ANSI/ASTM E23 -2024) Final Action Date: 4/2/2025 | *Revision*

ANSI/ASTM F645-2025, Guide for Selection, Design, and Installation of Thermoplastic Water-Pressure Piping Systems (revision of ANSI/ASTM F645-2018B) Final Action Date: 4/2/2025 | *Revision*

ANSI/ASTM F714-2025, Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter (revision of ANSI/ASTM F714-2024) Final Action Date: 4/2/2025 | *Revision*

ANSI/ASTM F1360-2025, Specification for Ovens, Microwave, Electric (revision of ANSI/ASTM F1360-2024) Final Action Date: 4/2/2025 | *Revision*

ANSI/ASTM F2800-2025, Specification for Recirculating Hood System for Cooking Appliances (revision of ANSI/ASTM F2800-2011 (R2017)) Final Action Date: 3/25/2025 | *Revision*

ANSI/ASTM F2929-2025, Specification for Crosslinked Polyethylene (PEX) Tubing of 0.070 in. Wall and Fittings for Radiant Heating Systems up to 75 psig (revision of ANSI/ASTM F2929-2017 (R2021)) Final Action Date: 4/2/2025 | *Revision*

ANSI/ASTM F3253-2025, Specification for Crosslinked Polyethylene (PEX) Tubing with Oxygen Barrier for Hot- and Cold-Water Hydronic Distribution Systems (revision of ANSI/ASTM F3253-2024) Final Action Date: 4/2/2025 | *Revision*

CSA (CSA America Standards Inc.)

8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

ANSI/CSA R124-2025, A Harmonized Methodology for Reporting the Production Pathway and Carbon Intensity of Hydrogen (new standard) Final Action Date: 4/1/2025 | *New Standard*

ANSI/CSA/Z21.78/CSA 6.20-2025, Combination Gas Controls for Gas Appliances (same as CSA 6.20) (revision of ANSI Z21.78-2010 (R2020)/CSA 6.20-2010 (R2020)) Final Action Date: 4/7/2025 | *Revision*

ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

ANSI E1.17-2015 (R2025), Architecture for Control Networks (reaffirmation of ANSI E1.17-2015) Final Action Date: 4/2/2025 | *Reaffirmation*

ANSI/E1.43-2025, Performer Flying Systems (revision of ANSI E1.43-2016) Final Action Date: 4/2/2025 | *Revision*

HPS (ASC N43) (Health Physics Society)

950 Herndon Parkway, Suite 450, Herndon, VA 20170 | awride-graney@burkinc.com, www.hps.org

ANSI HPS N43.9-2015 (R2025), Gamma Radiography - Specifications for the Design, Testing, and Performance Requirements for Industrial Gamma Radiography System Equipment Using Radiation Emitted by a Sealed Radioactive Source (reaffirmation of ANSI N43.9-2015) Final Action Date: 4/7/2025 | *Reaffirmation*

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | arose@nsf.org, www.nsf.org

ANSI/NSF 7-2025 (i29r2), Commercial Refrigerators and Freezers (revision of ANSI/NSF 7-2023) Final Action Date: 3/31/2025 | *Revision*

PHTA (Pool and Hot Tub Alliance)

1650 King Street, Suite 602, Alexandria, VA 22314 | anowicki@phta.org, www.PHTA.org

ANSI/PHTA/ICC/NPC-12-2025, Standard for the Plastering of Swimming Pools, Spas, and Hot Tubs (revision, redesignation and consolidation of ANSI/APSP/ICC/NPC-12 2016 (Consolidate with ANSI/APSP/ICC/NPC 12, Supplement A-2019)) Final Action Date: 4/2/2025 | *Revision*

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709 | ashley.seward@ul.org, https://ulse.org/

ANSI/UL 60335-2-8-2025, Standard for Safety for Household and Similar Electrical Appliances - Part 2: Particular Requirements for Shavers, Hair Clippers, and Similar Appliances (national adoption of IEC 60335-2-8 with modifications and revision of ANSI/UL 60335-2-8-2021) Final Action Date: 3/31/2025 | *National Adoption*

ANSI/UL 60335-2-34-2025, Standard for Household and Similar Electrical Appliances - Safety - Part 2-34: Particular requirements for motor-compressors (national adoption of IEC 60335-2-34 with modifications and revision of ANSI/UL 60335-2-34-2017) Final Action Date: 3/31/2025 | *National Adoption*

ANSI/UL 1558-2025, Standard for Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear (revision of ANSI/UL 1558-2019) Final Action Date: 4/2/2025 | *Revision*

ANSI/UL 3730-2025, Standard for Safety for Photovoltaic Junction Boxes (revision of ANSI/UL 3730-2024) Final Action Date: 4/2/2025 | *Revision*

Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

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 interested 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 underrepresented categories:

- Producer-Software
- Producer-Hardware
- Distributor
- Service Provider
- Users
- Consultants
- Government
- SDO and Consortia Groups
- Academia
- General Interest

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE's standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.
SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.
Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures.
More information is available at www.scte.org or by e-mail from standards@scte.org.

AGMA (American Gear Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 | praneis@agma.org, www.agma.org

BSR/AGMA 2001-D04, Fundamental Rating Factors and Calculation Methods for Involute Spur and Helical Gear Teeth (withdrawal of ANSI/AGMA 2001-D04 (R2016))

AGMA (American Gear Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 | olson@agma.org, www.agma.org

BSR/AGMA 9113-AXX, Flexible Couplings - Potential Unbalance and Mass Elastic Properties (Metric Edition) (revision, redesignation and consolidation of ANSI/AGMA 9104-A06 (R2022), ANSI/AGMA 9110-A11 (R2021))

AGMA (American Gear Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 | praneis@agma.org, www.agma.org

BSR/AGMA ISO 1328-2-A21, Cylindrical Gears - ISO System of Flank Tolerance Classification - Part 2: Definitions and Allowable Values of Double Flank Radial Composite Deviations (reaffirmation of ANSI/AGMA ISO 1328-2-21)

AMCA (Air Movement and Control Association)

30 West University Drive, Arlington Heights, IL 60004-1893 | jbrooks@amca.org, www.amca.org

BSR/AMCA 610-202x, Laboratory Methods of Testing Airflow Measurement Stations for Performance Rating (revision of ANSI/AMCA Standard 610-2019)

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S12.6-2016 (R202x), Methods for Measuring the Real-ear Attenuation of Hearing Protectors (reaffirmation of ANSI/ASA S12.6-2016 (R2020))

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S12.9-2016/Part 7 (R202x), Quantities and Procedures for Description and Measurement of Environmental Sound - Part 7: Measurement of Low-frequency Noise and Infrasound Outdoors in the Presence of Wind and Indoors in Occupied Spaces (reaffirmation of ANSI/ASA S12.9-2016/Part 7 (R2020))

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S12.51-2012/ISO 3741-2010 (R202x), Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for reverberation test rooms (a nationally adopted international standard) (reaffirm a national adoption ANSI/ASA S12.51-2012/ISO 3741-2010 (R2020))

ASA (ASC S12) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S12.53-2011/Part 1/ISO 3743-1:2010 (R202x), Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering methods for small, movable sources in reverberant fields - Part 1: Comparison method for a hard-walled test room (a nationally adopted international standard) (reaffirm a national adoption ANSI/ASA S12.53-2011/Part 1/ISO 3743-1:2010 (R2020))

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S2.2-1959 (R202x), Standard Methods for the Calibration of Shock and Vibration Pickups (reaffirmation of ANSI/ASA S2.2-1959 (R2020))

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S2.27-2002 (R202x), Standard Guidelines for the Measurement and Evaluation of Vibration of Ship Propulsion Machinery (reaffirmation of ANSI/ASA S2.27-2002 (R2020))

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S2.31-1979 (R202x), Standard Methods for the Experimental Determination of Mechanical Mobility - Part 1: Basic Definitions and Transducers (reaffirmation of ANSI/ASA S2.31-1979 (R2020))

ASA (ASC S2) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S2.32-1982 (R202x), Standard Methods for the Experimental Determination of Mechanical Mobility - Part 2: Measurements Using Single-Point Translational Excitation (reaffirmation of ANSI/ASA S2.32-1982 (R2020))

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S3.7-2016 (R202x), Standard Method for Measurement and Calibration of Earphones (reaffirmation of ANSI/ASA S3.7-2016 (R2020))

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S3.52-2016 (R202x), Standard Measurements of the Threshold of Hearing and Signal Detectability in a Sound Field. (reaffirmation of ANSI/ASA S3.52-2016 (R2020))

ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org

BSR/ASA S3.55-2015/Part 3/IEC 60318-3:2015 (R202x), Standard Electroacoustics - Simulators of Human Head and Ear - Part 3: Acoustic Coupler for the Calibration of Supra-aural Earphones Used in Audiometry (a Nationally Adopted International Standard) (reaffirm a national adoption ANSI/ASA S3.55-2015/Part 3/IEC 60318-3:2015 (R2020))

CfOC (Center for Offsite Construction, School of Architecture and Design, New York Institute of Technology)

1855 Broadway, New York, NY 10023 | mford05@nyit.edu, https://www.nyit.edu/academics/architecture-and-design/center-for-offsite-construction/

BSR/CfOC/ICC 1220-202x, Standard on Configurations and Connections for Off-Site Construction (new standard)

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org

BSR/EIA 296-F-2015 (R202x), Lead Taping of Components in Axial Lead Configuration for Automatic Handling (reaffirmation of ANSI/EIA 296-F-2015 (R2019))

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org

BSR/EIA 747-C-2020 (R202x), Adhesive backed punched plastic carrier taping of singulated bare die and other surface mount components for automatic handling of devices generally less than 1.0 mm thick (reaffirmation of ANSI/EIA 747-C-2020)

MHI (Material Handling Industry)

8720 Red Oak Boulevard, Suite 201, Charlotte, NC 28217 | pdavison@mhi.org, www.mhi.org

BSR/ACE 15-202X, Cable-less Controls for Electronic Overhead Traveling Cranes (revision of ANSI/MHI ECMA 15 -2018)

MHI (Material Handling Industry)

8720 Red Oak Boulevard, Suite 201, Charlotte, NC 28217 | pdavison@mhi.org, www.mhi.org

BSR/ACE 25-202X, AC Inverters for Use on Electric Overhead, Monorail, and Gantry Traveling Cranes (revision of ANSI/MHI ECMA 25-2019)

NEMA (ASC C37) (National Electrical Manufacturers Association)

1300 17th St N #900,, Arlington, VA 22209 | Paul.Crampton@nema.org, www.nema.org

BSR C37.55 202x, Standard for Switchgear - Medium Voltage Metal-Clad Assemblies - Conformance Test Procedures (revision of ANSI C37.55-2020)

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 511 om-2013 (R202x), Folding endurance of paper (MIT tester) (reaffirmation of ANSI/TAPPI T 511 om -2013 (R2020))

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 549 om-2020 (R202x), Coefficients of static and kinetic friction of uncoated writing and printing paper by use of the horizontal plane method (reaffirmation of ANSI/TAPPI T 549 om-2020)

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 553 om-2020 (R202x), Alkalinity of paper as calcium carbonate (alkaline reserve of paper) (reaffirmation of ANSI/TAPPI T 553 om-2020)

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 558 om-2010 (R202x), Surface wettability and absorbency of sheeted materials using an automated contact angle tester (reaffirmation of ANSI/TAPPI T 558 om-2010 (R2020))

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 807 om-202x, Bursting strength of linerboard (new standard)

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 836 om-2020 (R202x), Bending stiffness, four point method (reaffirmation of ANSI/TAPPI T 836 om -2020)

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

BSR/TAPPI T 1500 gl-202x, Optical measurements terminology (related to appearance evaluation of paper) (revision of ANSI/TAPPI T 1500 gl-2018)

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | michael.niedermayer@ul.org, https://ulse.org/

BSR/UL 1647-202x, Standard for Safety for Motor-Operated Massage and Exercise Machines (revision of ANSI/UL 1647-2020)

ULSE (UL Standards & Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | hilal.elmisilmani@ul.org, https://ulse.org/

BSR/UL 60335-2-53-202x, Standard for Safety for Household and Similar Electrical Appliances - Safety - Part 2-53: Particular Requirements for Sauna Heating Appliances and Infrared Cabins (national adoption with modifications of IEC 60335-2-53)
Interest Categories: ULSE is seeking participants for TC 875 in the following interest categories: Authorities Having Jurisdiction, Commercial/Industrial Users, Consumer, General Interest, Government, Producer, Supply Chain, and Testing and Standards Organizations.

American National Standards (ANS) Announcements

Updated Designation

SDI has updated the designation of ANSI/AISI S310-23 to ANSI/SDI AISI S310-23 North American Standard for the Design of Profiled Steel Diaphragm Panels. This redesignation recognizes that the SDI is the current ANSI-Accredited Standards Developer for this standard.

Questions: Thomas Sputo (tsputo50@gmail.com)

Withdrawal of BSR-8 Public Review Announcement - ASHRAE

April 4, 2025 Standards Action

The following Public Review announcement that appeared in ANSI Standards Action 4/4/2025 is withdrawn.

BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 15.2-2024, Safety Standard for Refrigeration Systems in Residential Applications (addenda to ANSI/ASHRAE Standard 15.2-2022)

Questions: Kai Nguyen,knguyen@ashrae.org

American National Standards (ANS) Process

Please visit ANSI's website (www.ansi.org) 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 linkis www.ansi.org/asd and here are some direct links as well as highlights of information that is available:

Where to find Procedures, Guidance, Interpretations and More…

Please visit ANSI's website (www.ansi.org)

• ANSI Essential Requirements: Due process requirements for American National Standards (always current edition):

www.ansi.org/essentialrequirements

• 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):

www.ansi.org/standardsaction

• Accreditation information – for potential developers of American National Standards (ANS):

www.ansi.org/sdoaccreditation

• ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form):

www.ansi.org/asd

• Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS:

www.ansi.org/asd

• American National Standards Key Steps:

www.ansi.org/anskeysteps

• American National Standards Value:

www.ansi.org/ansvalue

• ANS Web Forms for ANSI-Accredited Standards Developers:

https://www.ansi.org/portal/psawebforms/

• Information about standards Incorporated by Reference (IBR):

https://ibr.ansi.org/

• ANSI - Education and Training:

www.standardslearn.org

Meeting Notices (Standards Developers)

ANSI Accredited Standards Developer

CSA - CSA America Standards Inc.

Meeting Time: June 2, 2025

CSA Group will hold the Hydrogen Transportation Technical Committee meeting by teleconference on June 2, 2025 from 1:00 P.M. to 4:00 P.M. EDT. For more information on the meeting and the agenda, contact Mark Duda at mark.duda@csagroup.org.

Guests planning to attend the meeting are required to notify the project manager listed below in advance of the meeting, and provide a brief explanation of interest. If you wish to present specific comments on an item of business, you are required to notify the project manager in writing no later than May 1, 2025. Notification shall include any material proposed for presentation to the Technical Committee. For information, please contact Project Manager, Mark Duda at mark.duda@csagroup.org.

ANSI Accredited Standards Developer

CSA - CSA America Standards Inc.

Meeting Time: May 29, 2025

CSA Group will hold the Fuel Cell & Hydrogen GenerationTechnical Committee meeting by teleconference on May 29, 2025 from 1:00 P.M. to 4:00 P.M. EDT. For more information on the meeting and the agenda, contact Mark Duda at mark.duda@csagroup.org.

Guests planning to attend the meeting are required to notify the project manager listed below in advance of the meeting, and provide a brief explanation of interest. If you wish to present specific comments on an item of business, you are required to notify the project manager in writing no later than May 1, 2025. Notification shall include any material proposed for presentation to the Technical Committee. For information, please contact Project Manager, Mark Duda at mark.duda@csagroup.org.

American National Standards 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 (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)

Home Innovation (Home Innovation Research Labs)

IES (Illuminating Engineering Society)

ITI (InterNational Committee for Information Technology Standards)

MHI (Material Handling Industry)

NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)

NCPDP (National Council for Prescription Drug Programs)

NEMA (National Electrical Manufacturers Association)

NFRC (National Fenestration Rating Council)

NISO (National Information Standards Organization)

NSF (NSF International)

PHTA (Pool and Hot Tub Alliance)

RESNET (Residential Energy Services Network, Inc.)

SAE (SAE International)

TCNA (Tile Council of North America)

TIA (Telecommunications Industry Association)

TMA (The Monitoring Association)

ULSE (UL Standards & Engagement)

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 “American National Standards Maintained Under Continuous Maintenance.” Questions? psa@ansi.org.

ANSI-Accredited Standards Developers (ASD) Contacts

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment, Call for Members 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 the PSA Department at psa@ansi.org.

AAFS
American Academy of Forensic Sciences
410 North 21st Street
Colorado Springs, CO 80904
www.aafs.org

Teresa Ambrosius
tambrosius@aafs.org

ABYC
American Boat and Yacht Council
613 Third Street, Suite 10
Annapolis, MD 21403
www.abycinc.org

Emily Parks
eparks@abycinc.org

ACCA
Air Conditioning Contractors of America
1520 Belle View Boulevard, #5220
Alexandria, VA 22307
www.acca.org

David Bixby
david.bixby@acca.org

ADA (Organization)
American Dental Association
211 E. Chicago Avenue
Chicago, IL 60611
www.ada.org

Mary Swick
swickm@ada.org

AGA (ASC B109)
American Gas Association
400 N. Capitol St., NW, Suite 450
Washington, DC 20001
www.aga.org

Luis Escobar
lescobar@aga.org

AGA (ASC Z223)
American Gas Association
400 North Capitol Street, NW, Suite 450
Washington, DC 20001
www.aga.org

Luis Escobar
lescobar@aga.org

AGMA
American Gear Manufacturers Association
1001 N. Fairfax Street, Suite 500
Alexandria, VA 22314
www.agma.org

Phillip Olson
olson@agma.org

Todd Praneis
praneis@agma.org

AMCA
Air Movement and Control Association
30 West University Drive
Arlington Heights, IL 60004
www.amca.org

Joseph Brooks
jbrooks@amca.org

ANS
American Nuclear Society
1111 Pasquinelli Drive, Suite 350
Westmont, IL 60559
www.ans.org

Kathryn Murdoch
kmurdoch@ans.org

ASA (ASC S12)
Acoustical Society of America
1305 Walt Whitman Road, Suite 300
Melville, NY 11747
www.acousticalsociety.org

Raegan Ripley
standards@acousticalsociety.org

ASA (ASC S2)
Acoustical Society of America
1305 Walt Whitman Road, Suite 300
Melville, NY 11747
www.acousticalsociety.org

Raegan Ripley
standards@acousticalsociety.org

ASA (ASC S3)
Acoustical Society of America
1305 Walt Whitman Road, Suite 300
Melville, NY 11747
www.acousticalsociety.org

Raegan Ripley
standards@acousticalsociety.org

ASHRAE
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
180 Technology Parkway
Peachtree Corners, GA 30092
www.ashrae.org

Carmen King
cking@ashrae.org

Emily Toto
etoto@ashrae.org

Mark Weber
mweber@ashrae.org

ASME
American Society of Mechanical Engineers
Two Park Avenue, M/S 6-2B
New York, NY 10016
www.asme.org

Terrell Henry
ansibox@asme.org

ASTM
ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428
www.astm.org

Lauren Daly
accreditation@astm.org

CfOC
Center for Offsite Construction, School of Architecture and Design, New York Institute of Technology
1855 Broadway
New York, NY 10023
https://www.nyit.edu/academics/architecture-and-design/center-for-offsite-construction/

Mathew Ford
mford05@nyit.edu

CSA
CSA America Standards Inc.
8501 East Pleasant Valley Road
Cleveland, OH 44131
www.csagroup.org

Thuy Ton
ansi.contact@csagroup.org

ECIA
Electronic Components Industry Association
13873 Park Center Road, Suite 315
Herndon, VA 20171
www.ecianow.org

Laura Donohoe
ldonohoe@ecianow.org

ESTA
Entertainment Services and Technology Association
271 Cadman Plaza, P.O. Box 23200
Brooklyn, NY 11202
www.esta.org

Richard Nix
standards@esta.org

HPS (ASC N13)
Health Physics Society
950 Herndon Parkway, Suite 450
Herndon, VA 20170
www.hps.org

Amy Wride-Graney
awride-graney@burkinc.com

IAPMO (Z)
International Association of Plumbing & Mechanical Officials
4755 East Philadelphia Street
Ontario, CA 91761
https://www.iapmostandards.org

Terry Burger
standards@iapmostandards.org

ICC
International Code Council
4051 Flossmoor Road
Country Club Hills, IL 60478
www.iccsafe.org

Karl Aittaniemi
kaittaniemi@iccsafe.org

IEEE
Institute of Electrical and Electronics Engineers
445 Hoes Lane
Piscataway, NJ 08854
www.ieee.org

Suzanne Merten
s.merten@ieee.org

MHI
Material Handling Industry
8720 Red Oak Boulevard, Suite 201
Charlotte, NC 28217
www.mhi.org

Patrick Davison
pdavison@mhi.org

NASBLA
National Association of State Boating Law Administrators
1020 Monarch Street, Suite 200
Lexington, KY 40513
www.nasbla.org

Mark Chanski
mark.chanski@nasbla.org

NECA
National Electrical Contractors Association
1201 Pennsylvania Avenue, Suite 1200
Washington, DC 20004
www.neca-neis.org

Jeff Noren
Jeff.Noren@NECAnet.org

NEMA (ASC C37)
National Electrical Manufacturers Association
1300 17th St N #900,
Arlington, VA 22209
www.nema.org

Paul Crampton
Paul.Crampton@nema.org

NFPA
National Fire Protection Association
One Batterymarch Park
Quincy, MA 02169
www.nfpa.org

Dawn Michele Bellis
dbellis@nfpa.org

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105
www.nsf.org

Allan Rose
arose@nsf.org

PHTA
Pool and Hot Tub Alliance
1650 King Street, Suite 602
Alexandria, VA 22314
www.PHTA.org

April Nowicki
anowicki@phta.org

SCTE
Society of Cable Telecommunications Engineers
140 Philips Road
Exton, PA 19341
www.scte.org

Natasha Aden
naden@scte.org

TAPPI
Technical Association of the Pulp and Paper Industry
15 Technology Parkway, Suite 115
Peachtree Corners, GA 30092
www.tappi.org

Sidney Onyekwere
standards@tappi.org

ULSE
UL Standards & Engagement
100 Queen Street, Suite 1040
Ottawa, Canada, ON https://ulse.org/

Jacob Stewart
Jacob.Stewart@ul.org

ULSE
UL Standards & Engagement
100 Queen Street, Suite 1040
Ottawa, ON K1P 1
https://ulse.org/

Hilal Misilmani
hilal.elmisilmani@ul.org

ULSE
UL Standards & Engagement
12 Laboratory Drive
Research Triangle Park, NC 27709
https://ulse.org/

Ashley Seward
ashley.seward@ul.org

Doreen Stocker
Doreen.Stocker@ul.org

Griff Edwards
griff.edwards@ul.org

Julio Morales
Julio.Morales@UL.org

Michael Niedermayer
michael.niedermayer@ul.org

ULSE
UL Standards & Engagement
12 Laboratory Drive
Research Triangle Park, NC https://ulse.org/

Akhira Watson
akhira.watson@ul.org

ULSE
UL Standards & Engagement
1603 Orrington Ave
Evanston, IL 60210
https://ulse.org/

Alan McGrath
alan.t.mcgrath@ul.org

ULSE

UL Standards & Engagement
1603 Orrington Ave, Suite 20000
Evanston, IL 60201
https://ulse.org/

Susan Malohn
Susan.P.Malohn@ul.org

ISO & IEC Draft International Standards

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

COMMENTS

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

Those regarding IEC documents should be sent to the USNC/IEC team at ANSI's New York offices (usnc@ansi.org). The final date for offering comments is listed after each draft.

ORDERING INSTRUCTIONS

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

ISO Standards

Agricultural food products (TC 34)

ISO/DIS 10565, Oilseeds - Simultaneous determination of oil and water contents - Method using pulsed nuclear magnetic resonance spectrometry - 6/20/2025, $62.00

Anaesthetic and respiratory equipment (TC 121)

ISO 16571:2024/DAmd 1, - Amendment 1: Systems for evacuation of plume generated by medical devices - Amendment 1 - 6/19/2025, $29.00

Compressors, pneumatic tools and pneumatic machines (TC 118)

ISO/DIS 17104.2, Rotary tools for threaded fasteners - Impulse and impulsing tools - Performance test method - 4/14/2025, $107.00

Dimensional and Geometrical Product Specifications and Verification (TC 213)

ISO/DIS 25178-71, Geometrical product specifications (GPS) - Surface texture: Areal - Part 71: Software measurement standards - 6/26/2025, $62.00

Ergonomics (TC 159)

ISO/DIS 14505-3, Ergonomics of the thermal environment - Evaluation of the thermal environment in vehicles - Part 3: Evaluation of thermal comfort using human participants - 6/21/2025, $67.00

Fasteners (TC 2)

ISO 4042:2022/DAmd 1, - Amendment 1: Fasteners - Electroplated coating systems - Amendment 1 - 6/26/2025, $29.00

Non-destructive testing (TC 135)

ISO/DIS 15548-1, Non-destructive testing - Equipment for eddy current examination - Part 1: Instrument characteristics and verification - 6/26/2025, $98.00

Plastics pipes, fittings and valves for the transport of fluids (TC 138)

ISO/DIS 15494, Plastics piping systems for industrial applications - Polybutene (PB), polyethylene (PE), polyethylene of raised temperature resistance (PE-RT), crosslinked polyethylene (PE-X), polypropylene (PP) - Metric series for specifications for components and the system - 6/20/2025, $165.00

Road vehicles (TC 22)

ISO/DIS 8092-6, Road vehicles - Connections for on-board electrical wiring harnesses - Part 6: In-vehicle Ethernet, general performance requirements and interface definitions - 6/22/2025, $134.00

ISO/DIS 8820-3, Road vehicles - Fuse-links - Part 3: Fuse-links with tabs (blade type) Type C (medium), Type E (high current) and Type F (miniature) - 6/21/2025, $62.00

Rubber and rubber products (TC 45)

ISO/DIS 1436.2, Rubber hoses and hose assemblies - Wire-braid-reinforced hydraulic types for oil-based or water-based fluids - Specification - 7/12/2024, $58.00

ISO/DIS 4650, Rubber - Identification - Infrared spectrometric methods - 6/22/2025, $165.00

ISO/DIS 8067, Flexible cellular polymeric materials - Determination of tear strength - 6/20/2025, $53.00

ISO/DIS 6123-3, Rubber or plastics covered rollers - Specifications - Part 3: Dimensional and geometrical tolerances - 6/22/2025, $46.00

ISO/DIS 7617-2, Plastics-coated fabrics for upholstery - Part 2: Specification for PVC-coated woven fabrics - 6/23/2025, $53.00

ISO/DIS 7617-3, Plastics-coated fabrics for upholstery - Part 3: Specification for polyurethane-coated fabrics - 6/26/2025, $53.00

Traditional Chinese medicine (TC 249)

ISO/DIS 21300, Traditional Chinese medicine - Guidelines and specification for Chinese materia medica - 6/21/2025, $53.00

ISO/DIS 21314, Traditional Chinese medicine - Salvia miltiorrhiza root and rhizome - 6/19/2025, $67.00

IEC Standards

Audio, video and multimedia systems and equipment (TC 100)

100/4290/CDV, IEC 60315-4/AMD1 ED2: Amendment 1 - Methods of measurement on radio receivers for various classes of emission - Part 4: Receivers for frequency-modulated sound broadcasting emissions, 06/27/2025

Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)

46A/1721/CDV, IEC 61196-1-114 ED2: Coaxial communication cables - Part 1-114: Electrical test methods - Test for inductance, 06/27/2025

Electric traction equipment (TC 9)

9/3214/CD, IEC 63495 ED1: Interoperability and safety of dynamic wireless power transfer (WPT) for railways, 06/27/2025

9/3211/FDIS, IEC 63536 ED1: Railway applications - Signalling and control systems for non UGTMS urban rail systems, 05/16/2025

Electric welding (TC 26)

26/769(F)/FDIS, IEC 60974-4 ED4: Arc welding equipment - Part 4: Periodic inspection and testing, 05/02/2025

Electrical accessories (TC 23)

23K/120/FDIS, IEC 63402-1 ED1: Energy Efficiency - Customer Energy Management Systems – Part 1: General Requirements and Architecture, 05/16/2025

Electrical apparatus for explosive atmospheres (TC 31)

31J/383(F)/CDV, IEC 60079-10-2 ED3: Explosive atmospheres - Part 10-2: Classification of areas - Explosive dust atmospheres, 05/30/2025

31M/252/CDV, ISO 80079-41 ED1: Explosive atmospheres - Part 41: Reciprocating internal combustion engines, 06/27/2025

Electrical installations of ships and of mobile and fixed offshore units (TC 18)

18/1972/CD, IEC 61363-1 ED2: Electrical installations of ships and mobile and fixed offshore units - Part 1: Procedures for calculating short-circuit currents in three-phase a.c., 07/25/2025

Electromechanical components and mechanical structures for electronic equipments (TC 48)

48B/3158/CD, IEC 61076-1 ED3: Connectors for electronic equipment - Product requirements - Part 1: Generic specification, 05/30/2025

48B/3159/CD, IEC 61076-3 ED3: Connectors for electronic equipment - Product requirements - Part 3: Rectangular connectors - Sectional specification, 05/30/2025

Electrostatics (TC 101)

101/732/FDIS, IEC 61340-4-6 ED3: Electrostatics - Part 4-6: Standard test methods for specific applications - Wrist straps, 05/16/2025

Environmental standardization for electrical and electronic products and systems (TC 111)

111/822/CD, IEC 63333-3 ED1: Assessment of circular content in products - Part 3: Proportion of recycled materials, 05/30/2025

Equipment for electrical energy measurement and load control (TC 13)

13/1947/CD, IEC 62052-11 ED3: Electricity metering equipment - General requirements, tests and test conditions - Part 11: Metering equipment, 05/30/2025

13/1948/CD, IEC 62053-21 ED3: Electricity metering equipment - Particular requirements - Part 21: Static meters for AC active energy (classes 0,5, 1 and 2), 05/30/2025

13/1949/CD, IEC 62053-22 ED3: Electricity metering equipment - Particular requirements - Part 22: Static meters for AC active energy (classes 0,1S, 0,2S and 0,5S), 05/30/2025

13/1950/CD, IEC 62053-23 ED3: Electricity metering equipment - Particular requirements - Part 23: Static meters for reactive energy (classes 2 and 3), 05/30/2025

13/1951/CD, IEC 62053-24 ED3: Electricity metering equipment - Particular requirements - Part 24: Static meters for fundamental component reactive energy (classes 0,5S, 1S, 1, 2 and 3), 05/30/2025

Fibre optics (TC 86)

86A/2552(F)/FDIS, IEC 60794-1-124 ED1: Optical fibre cables - Part 1-124: Generic specification - Basic optical cable test procedures - Mechanical tests methods - Installation test for microduct cabling, Method E24, 04/25/2025

Fuses (TC 32)

32C/659/NP, PNW 32C-659 ED1: Fire-extinguishing thermal-links, 06/27/2025

Industrial-process measurement and control (TC 65)

65A/1173/CDV, IEC 61508-2-1 ED1: Functional safety of electrical/electronic/programmable electronic safety-related systems Part 2-1: Requirements for complex semiconductors, 06/27/2025

Insulating materials (TC 15)

15/1055/CD, IEC 60674-3-1 ED3: Plastic films for electrical purposes - Part 3: Specifications for individual materials - Sheet 1: Biaxially oriented polypropylene (PP) films for capacitors, 05/30/2025

Lamps and related equipment (TC 34)

34/1313/CD, IEC TR 63645 ED1: Environmental aspects for lighting - Literature review on lighting products and systems, 05/30/2025

Magnetic components and ferrite materials (TC 51)

51/1553/CD, IEC 63182-9 ED1: Magnetic powder cores - Guidelines on dimensions and the limits of surface irregularities - Part 9: Ellipse-cores, 06/27/2025

Nuclear instrumentation (TC 45)

45B/1086/CD, IEC 61582 ED2: Radiation protection instrumentation - Portable, transportable or installed equipment for in vivo measurement of photon emitting radionuclides, 05/30/2025

45/1003/CD, IEC 63620 ED1: Tracking systems for radioactive materials - Specific requirement of electronic tagging system, 05/30/2025

Performance of household electrical appliances (TC 59)

59A/273/FDIS, IEC 60436 ED5: Electric dishwashers for household use - Methods for measuring the performance, 05/16/2025

Power system control and associated communications (TC 57)

57/2769(F)/FDIS, IEC 61850-10/AMD1 ED2: Amendment 1 - Communication networks and systems for power utility automation - Part 10: Conformance testing, 04/25/2025

Rotating machinery (TC 2)

2/2234(F)/FDIS, IEC 60034-15 ED4: Rotating electrical machines - Part 15: Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines, 04/18/2025

Secondary cells and batteries (TC 21)

21/1244/CDV, IEC 60095-8 ED1: Lead-acid starter batteries - Part 8: 12V Batteries used in automobiles for auxiliary or backup purposes, 06/27/2025

Semiconductor devices (TC 47)

47D/992/CD, IEC 63378-6-1 ED1: Thermal standardization on semiconductor packages - Part 6-1: Thermal resistance and capacitance model for transient temperature prediction at junction and measurement points - Model creation method using a datasheet of semiconductor device, 05/30/2025

Solar photovoltaic energy systems (TC 82)

82/2395/NP, PNW TS 82-2395 ED1: Junction Boxes for Photovoltaic Modules for DC System Vvoltage up to DC 3 000 V - Safety Requirements and Tests, 05/30/2025

Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)

121/194/CDV, IEC 62683-1 ED2: Low-voltage switchgear and controlgear - Product data and properties for information exchange - Part 1: Catalogue data, 06/27/2025

(TC)

SyCSmartCities/374/CD, IEC SRD 63347-2 ED1: Smart city use case collection and analysis - Management of Public Health Emergencies in Smart Cities - Part 2: Use Case Analysis, 05/30/2025

Terminology (TC 1)

1/2641/CDV, IEC 60050-311 ED1: International Electrotechnical Vocabulary (IEV) - Part 311: Electrical and electronic measurements - General terms relating to measurements, 06/27/2025

Ultrasonics (TC 87)

87/894(F)/FDIS, IEC 61847 ED2: Ultrasonics - Surgical systems - Measurement and declaration of the basic output characteristics, 05/02/2025

Newly Published ISO & IEC Standards

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

ISO Standards

Agricultural food products (TC 34)

ISO 10519:2015/Amd 1:2025, - Amendment 1: Rapeseed - Determination of chlorophyll content - Spectrometric method - Amendment 1: Preparation of the calibration curve to determine the k factor, $23.00

ISO 11781:2025, Molecular biomarker analysis - Requirements and guidance for single-laboratory validation of qualitative real-time polymerase chain reaction (PCR) methods, $172.00

Aircraft and space vehicles (TC 20)

ISO 2964:2025, Aerospace - Tubing outside diameters and thicknesses - Metric dimensions, $56.00

Applications of statistical methods (TC 69)

ISO 11843-7:2025, Capability of detection - Part 7: Methodology based on stochastic properties of instrumental noise, $127.00

Equipment for fire protection and fire fighting (TC 21)

ISO 7240-27:2025, Fire detection and alarm systems - Part 27: Point type fire detectors using a smoke sensor in combination with a carbon monoxide sensor and, optionally, one or more heat sensors, $259.00

Furniture (TC 136)

ISO 4211-1:2025, Furniture - Tests for surface finishes - Part 1: Assessment of resistance to cold liquids, $84.00

Graphical symbols (TC 145)

ISO 7010:2019/Amd 9:2025, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 9, $23.00

Paints and varnishes (TC 35)

ISO 7012-1:2025, Paints and varnishes - Determination of preservatives in water-dilutable coating materials - Part 1: Determination of in-can free formaldehyde, $172.00

ISO 7012-2:2025, Paints and varnishes - Determination of preservatives in water-dilutable coating materials - Part 2: Determination of in-can total formaldehyde, $84.00

ISO 7012-3:2025, Paints and varnishes - Determination of preservatives in water-dilutable coating materials - Part 3: Determination of in-can isothiazolinones with LC-UV and LC-MS, $172.00

Petroleum products and lubricants (TC 28)

ISO 13357-1:2025, Petroleum products - Determination of the filterability of lubricating oils - Part 1: Procedure for oils in the presence of water, $127.00

ISO 13357-2:2025, Petroleum products - Determination of the filterability of lubricating oils - Part 2: Procedure for dry oils, $127.00

Plastics (TC 61)

ISO 16636:2025, Plastics - Disintegration field test of plastics under water environmental conditions, $127.00

Plastics pipes, fittings and valves for the transport of fluids (TC 138)

ISO 4076:2025, Polyphenylsulfone (PPSU) - Effect of time and temperature on expected strength, $84.00

Pulleys and belts (including veebelts) (TC 41)

ISO 505:2025, Conveyor belts - Method for the determination of the tear propagation resistance of textile conveyor belts, $56.00

Refrigeration (TC 86)

ISO 18483:2025, Performance rating of centrifugal refrigerant compressor, $84.00

Road vehicles (TC 22)

ISO 10924-1:2025, Road vehicles - Circuit breakers - Part 1: Definitions and general test requirements, $172.00

ISO 10924-2:2025, Road vehicles - Circuit breakers - Part 2: Guidance for users, $172.00

ISO 10924-3:2025, Road vehicles - Circuit breakers - Part 3: Miniature circuit breakers with tabs (Blade type), Form CB11, $84.00

ISO 10924-4:2025, Road vehicles - Circuit breakers - Part 4: Medium circuit breakers with tabs (Blade type), Form CB15, $127.00

ISO 10924-5:2025, Road vehicles - Circuit breakers - Part 5: Circuit breakers with bolt with rated voltage of 450 V, $84.00

Steel (TC 17)

ISO 3575:2025, Continuous hot-dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of commercial and drawing qualities, $127.00

ISO 4997:2025, Cold-reduced carbon steel sheet of structural quality, $84.00

Sterilization of health care products (TC 198)

ISO 11137-1:2025, Sterilization of health care products - Radiation - Part 1: Requirements for the development, validation and routine control of a sterilization process for medical devices, $230.00

Tourism and related services (TC 228)

ISO 25639-1:2025, Exhibitions and events - Part 1: Vocabulary, $127.00

Transport information and control systems (TC 204)

ISO 18750:2025, Intelligent transport systems - Local dynamic map, $259.00

ISO/PAS 19486:2025, Intelligent transport systems - Acceleration control for pedal error (ACPE) - Performance requirements and test procedures, $127.00

Welding and allied processes (TC 44)

ISO 17635:2025, Non-destructive testing of welds - General rules for metallic materials, $127.00

ISO Technical Specifications

Agricultural food products (TC 34)

ISO/TS 21569-8:2025, Horizontal methods for molecular biomarker analysis - Methods of analysis for the detection of genetically modified organisms and derived products - Part 8: DNA extraction from alfalfa seeds and real-time PCR based detection methods for genetically modified alfalfa events J101, J163 and KK179, $84.00

ISO/TS 21569-9:2025, Horizontal methods for molecular biomarker analysis - Methods of analysis for the detection of genetically modified organisms and derived products - Part 9: Construct-specific real-time PCR based screening method for the detection of the P35S-nptII DNA-sequence, $84.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 19762:2025, Information technology - Automatic identification and data capture (AIDC) techniques - Vocabulary, $287.00

ISO/IEC 23090-6:2021/Amd 2:2025, - Amendment 2: Information technology - Coded representation of immersive media - Part 6: Immersive media metrics - Amendment 2: Additional latencies and other improvements, $23.00

IEC Standards

Electric traction equipment (TC 9)

IEC 62290-1 Ed. 3.0 b:2025, Railway applications - Urban guided transport management and command/control systems - Part 1: System principles and fundamental concepts, $322.00

S+ IEC 62290-1 Ed. 3.0 en:2025 (Redline version), Railway applications - Urban guided transport management and command/control systems - Part 1: System principles and fundamental concepts, $547.00

Performance of household electrical appliances (TC 59)

IEC 60350-1 Amd.1 Ed. 3.0 b:2025, Amendment 1 - Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring performance, $148.00

IEC 60350-1 Ed. 3.1 en:2025, Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring performance, $1050.00

International Organization for Standardization (ISO)

Call for International (ISO) Secretariat

ISO/TC 8/SC 25 – Maritime GHG reduction

Reply Deadline: May 2, 2025

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 8/SC 25 – *Maritime GHG reduction*. ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 8/SC 25 to the U.S. Coast Guard (USCG). The USCG has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

ISO/TC 8/SC 25 operates under the following scope:

Standardization of ship GHG assessment and documentation procedures; bunkering and/or charging operations associated, and on-dock power generation.

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 8/SC 25. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

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

If no U.S. organization steps forward to assume the ISO/TC 8/SC 25 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity **by Friday, May 2, 2025**, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

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

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 154 – Processes, data elements and documents in commerce, industry and administration

Response Deadline: April 18, 2025

ANSI has been informed that Open Applications Group, Inc. (OAGI), the ANSI-accredited U.S. TAG Administrator for ISO/TC 154, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 154 operates under the following scope:

International standardization and registration of business, and administration processes and supporting data used for information interchange between and within individual organizations and support for standardization activities in the field of industrial data.
Development and maintenance of application specific meta standards for:
· *process specification (in the absence of development by other technical committees);*
· *data specification with content;*
· *forms-layout (paper / electronic).*
Development and maintenance of standards for
· *process identification (in the absence of development by other technical committees);*
· *data identification.*
Maintenance of the EDIFACT-Syntax.

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

Registration of Organization Names in the United States

The Procedures for Registration of Organization Names in the United States of America (document ISSB 989) require that alphanumeric organization names be subject to a 90-day Public Review period prior to registration. For further information, please contact the Registration Coordinator at (212) 642-4975.
When organization names are submitted to ANSI for registration, they will be listed here alphanumerically. Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

Public Review

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

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

Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, trade associations, U.S domiciled standards development organizations and conformity assessment bodies, consumers, or U.S. government agencies 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 to the WTO Secretariat in Geneva, Switzerland proposed technical regulations that may significantly affect trade. In turn, the Secretariat circulates the notifications along with the full texts. 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 Enquiry Point for the WTO TBT Agreement is located at the National Institute of Standards and Technology (NIST) in the Standards Coordination Office (SCO). The Enquiry Point relies on the WTO's ePing SPS&TBT platform to distribute the notified proposed foreign technical regulations (notifications) and their full texts available to U.S. stakeholders. Interested U.S. parties can register with ePing to receive e-mail alerts when notifications are added from countries and industry sectors of interest to them. The USA WTO TBT Enquiry 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 prior to submitting comments. For non-notified foreign technical barriers to trade for non-agricultural products, stakeholders are encouraged to reach out as early as possible to the Office of Trade Agreements Negotiations and Compliance (TANC) in the International Trade Administration (ITA) at the Department of Commerce (DOC), which specializes in working with U.S. stakeholders to remove unfair foreign government-imposed trade barriers. The U.S. Department of Agriculture's Foreign Agricultural Service actively represents the interests of U.S. agriculture in the WTO committees on Agriculture, Sanitary and Phytosanitary (SPS) measures and Technical Barriers to Trade (TBT). FAS alerts exporters to expected changes in foreign regulations concerning food and beverage and nutrition labeling requirements, food packaging requirements, and various other agriculture and food related trade matters. Working with other Federal agencies and the private sector, FAS coordinates the development and finalization of comments on measures proposed by foreign governments to influence their development and minimize the impact on U.S. agriculture exports. FAS also contributes to the negotiation and enforcement of free trade agreements and provides information about tracking regulatory changes by WTO Members. The Office of the United States Trade Representative (USTR) WTO & Multilateral Affairs (WAMA) office has responsibility for trade discussions and negotiations, as well as policy coordination, on issues related technical barriers to trade and standards-related activities.

Online Resources:
WTO's ePing SPS&TBT platform: https://epingalert.org/
Register for ePing: https://epingalert.org/en/Account/Registration
WTO committee on Agriculture, Sanitary and Phytosanitary (SPS) measures:
https://www.wto.org/english/tratop_e/sps_e/sps_e.htm
WTO Committee on Technical Barriers to Trade (TBT): https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm
USA TBT Enquiry Point: https://www.nist.gov/standardsgov/usa-wto-tbt-enquiry-point
Comment guidance:
https://www.nist.gov/standardsgov/guidance-us-stakeholders-commenting-notifications-made-wto-members-tbt-committee
NIST: https://www.nist.gov/
TANC: https://www.trade.gov/office-trade-agreements-negotiation-and-compliance-tanc
Examples of TBTs: https://tcc.export.gov/report_a_barrier/trade_barrier_examples/index.asp.
Report Trade Barriers: https://tcc.export.gov/Report_a_Barrier/index.asp.
USDA FAS: https://www.fas.usda.gov/about-fas
FAS contribution to free trade agreements: https://www.fas.usda.gov/topics/trade-policy/trade-agreements
Tracking regulatory changes: https://www.fas.usda.gov/tracking-regulatory-changes-wto-members
USTR WAMA: https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/technical-barriers-trade
Contact the USA TBT Enquiry Point at (301) 975-2918; E usatbtep@nist.gov or notifyus@nist.gov.

BSR/UL 48 Standard for Safety for Electric Signs

3. Hinged panel pinch hazards

PROPOSAL

5.21.2 The hinged panel is to be fully opened. A standard no. 2 cedar wood~~en~~ pencil is to be held perpendicular to the side across from the hinge with the center of the pencil flush with the surface. The panel is then to be released and allowed to close freely on the pencil. The test is then to be repeated with a new pencil held against one of the other sides.

Note: The same pencil can be used for both operations if agreeable to all parties.

BSR/UL 1647, Standard for Safety for Motor-Operated Massage and Exercise Machines

1. 4200A

PROPOSAL

5.3.7 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more button batteries or coin cell batteries shall comply with the Standard for Safety for Products Incorporating Button Batteries or Coin Cell Batteries, UL 4200A, if the appliance or any accessory:

a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height; and

b) The appliance or any accessory is intended for consumer use.

UL 2196, Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables

1. New Edition of UL 2196, Standard for Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables

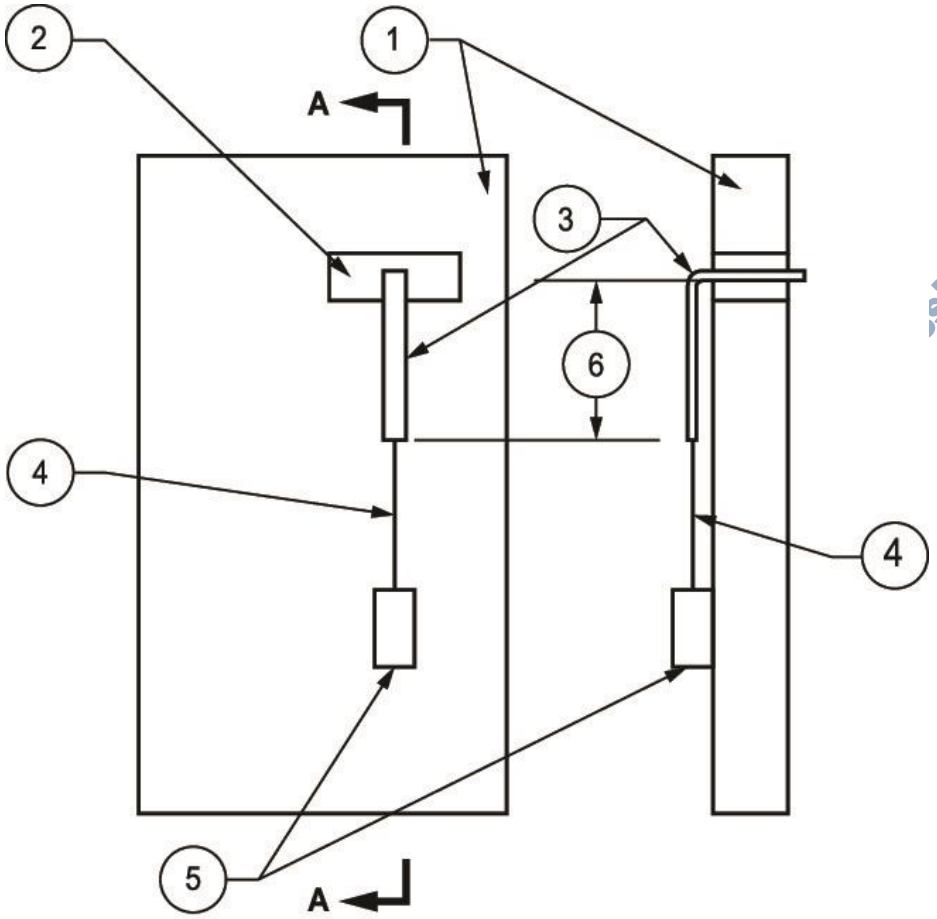
PROPOSAL

6.1.3.2 Samples are to be installed, one horizontally and one vertically for fire testing. Samples representative of each cable construction family shall be tested, and the same rules used for power/control cables for multiple conductors/fibers as well as cables in a raceway shall be used. ~~The sample length in the fire zone is permitted to be adjusted using continuous multiple passes within the furnace to match the expected or maximum cable length specified by the manufacturer.~~The minimum continuous length within the furnace must be 3048 mm (10 ft) with the remainder of the necessary footage to be outside the fire zone to comply with the communication standard or protocol being tested. ~~Additional length of cable outside the furnace is permitted to be used to match the length required by the communication test protocol, where applicable.~~

8.4 The length of the raceway exposed in the furnace shall be ~~2400~~ 2438 ±150 mm (96 ±6 in). The cable shall extend beyond the lower end of the raceway sufficiently to provide enough exposed conductor to affix the weight without allowing the weight to contact the floor of the furnace during or after the test. See Figure 8.1.

Figure 8.1

Tensile Strength Test



SECTION 'A - A'

su2859

1 – Supporting Structure
2 – Firestop System
3 – Raceway (as applicable)
4 – Test Specimen
5 – Mass
6 – 24~~00~~ ±150 mm (96 ±6 in)

11.1(d) ~~When tested in accordance with 9.1.2, data~~Data/communications transmission capability per manufacturer's performance specifications, when applicable;

C1.8 The length of each cable shall be established utilizing the length markings printed on the outer jacket of the cable or via length measurement such as ~~a Metallic Time Domain Reflectometer (MTDR),~~ Distance-To-Fault (DTF), or other common methods used in the industry. The cable length shall be recorded.

C2.2 The CUT length shall be 30.5 m (100 ft) with a minimum of 3048 mm (10 ft) on the wall for exposure to during the tests.

C2.4 The VNA signal generator power level shall be set to 0dBm or to a level that does not distort the signal.

Exception: When only measuring insertion loss and return loss this is not applicable.

C4.1 The Insertion Loss and Return Loss measurements shall be performed using test equipment such as: a 2-Port Vector Network Analyzer (VNA);)[a].

[a] Anritsu LMR Master Model S412E or equivalent shall be used.

~~a) Tracking Signal Generator;~~

~~b) Return Loss Bridge (3-port or 4-port w/ terminating load); and~~

~~c) Necessary impedance matching and attenuation devices.~~