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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.

ASABE (American Society of Agricultural and Biological Engineers)

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National Adoption

BSR/ASABE AD4254-16-202x MONYEAR, Agricultural machinery - Safety - Part 16: Portable agricultural grain augers (national adoption with modifications of ISO 4254-16:2018)

Stakeholders: - Machine manufacturers (small, medium and large enterprises);

- Health and safety bodies (regulators, accident-prevention organizations, market surveillance, etc.)
- Machine users/employers (small, medium and large enterprises);
- Machine users/employees (e.g., trade unions, organizations for people with special needs);
- Service providers, e.g., for maintenance (small, medium and large enterprises);
- Consumers (in the case of machinery intended for use by consumers)

Project Need: Nationally harmonize design and safety of portable grain augers with the world.

Interest Categories: Compliance, Design, General interest, Safety, Producer, User

This document covers conventional and swing-away portable agricultural augers designed primarily for conveying agricultural materials on farms. This document does not deal with the design or safety aspects of: (1) drag augers; (2) bin sweeps; and (3) other augers that do not have wheels suitable for towing. This document, intended to be used together with ISO 4254-1, specifies the safety requirements and their verification for the design and construction of portable agricultural grain augers.

IPC (IPC - Association Connecting Electronics Industries)

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New Standard

BSR/IPC 9716-202x, Requirements for Automated Optical Inspection (AOI) Process Control for Printed Board Assemblies (new standard)

Stakeholders: Electronics Manufacturing Industry

Project Need: Automated inspections are critical and mandatory process points within electronics manufacturing flows. There currently are no industry standards for AOI process control. Industry generally relies on either internal expertise, equipment supplier expertise or both. As not all companies have extensive inspection resources, in many cases inspection processes and equipment are not sufficiently identifying defects, resulting in quality escapes.

Interest Categories: General Interest User Supplier

This standard provides requirements for automated inspection systems to define, set up, establish, and apply process control for manufacturing printed board assemblies, including general and specific process and equipment conditions. Requirements will include those for operating and inspection parameters, vision systems, lighting conditions, calibration, detectability, resolution, threshold limits and process windows, program setups, measurement system analysis (MSA), maintenance and verification protocols. Any accept/reject criteria will be based on existing IPC standards (e.g., IPC-7527, IPC-A-610). The purpose of this standard is to set industry-defined requirements for AOI systems to reduce false calls, improve throughput and shorten cycle times to ensure quality and reliability of printed board assemblies. This standard will also support electronics manufacturers to enable advanced manufacturing real-time data analytics and control capabilities.

NEMA (National Electrical Manufacturers Association)

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Reaffirmation

BSR/NEMA HN 1-2019 (R202x), Standard Manufacturer Disclosure Statement for Medical Device Security (reaffirmation of ANSI/NEMA HN 1-2019)

Stakeholders: Manufacturers, Healthcare Facilities

Project Need: This will update ANSI/NEMA HN 1-2019 standard

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

Information provided on the MDS2 form is intended to assist professionals responsible for executing security risk assessments in their management of medical device security capabilities. The information on the MDS2 form may be inappropriate for other purposes.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 1-202X, Determination of Signal to Noise Ratio (SNR) in Diagnostic Magnetic Resonance Imaging (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Image SNR is a parameter that relates to clinical usefulness of magnetic resonance images and also is a sensitive measure of hardware performance. Experience has shown that variations in system calibration, gain, coil tuning, radio-frequency shielding, or other similar parameters are usually demonstrated by a corresponding change in image SNR.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

This document defines methods for measuring the signal-to-noise ratio of magnetic resonance images obtained under a specific set of conditions, and using single-channel volume receiver coils. This document does not address the use of special purpose coils (see MS 6) or coils that employ multiple receiver channels for operation (see MS 9).

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 2-202x, Determination of Two-Dimensional Geometric Distortion in Diagnostic Magnetic Resonance Images (new standard)

Stakeholders: Manufacturers, Accessory Equipment Manufacturers, Users

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This standards publication describes a method for determining the maximum percent difference between measured distances in an image and actual corresponding phantom dimensions.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 3-202x, Determination of Image Uniformity in Diagnostic Magnetic Resonance Images (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Accessory Equipment Manufacturers

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This document defines a method for measuring image-uniformity performance of diagnostic magnetic resonance imaging systems using single-channel volume coils and performing proton imaging. This document does not address the use of surface coils, chemical shift imaging, or spectroscopy.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 4-202x, Acoustic Noise Measurement Procedure for Diagnostic Magnetic Resonance Images (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Radiologist Technicians

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This standard specifies all the information necessary to determine, declare, and verify airborne emission sound pressure level characteristics of MR equipment under standardized conditions in the MR examination room. It specifies minimum requirements for measurement methods and operating conditions that shall be used for the test. This standard measures the maximum exposure the patient may experience and the representative average MR equipment output at the position for an MR worker standing beside the patient table.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 5-202x, Determination of Slice Thickness in Diagnostic Magnetic Resonance Imaging (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Radiologist Technicians

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This standards publication provides a method for determining the slice thickness of proton images. Both the typical and the typically thinnest slices in routine clinical use for a particular system are determined at one location within the specification volume and only one of the three orthogonal orientations (transverse, sagittal, or coronal). Imaging types and conditions not addressed by this standard include spectroscopy, chemical shift imaging, and warped slices.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 6-202x, Determination of Signal-to-Noise Ratio and Image Uniformity for Single-Channel Non-Volume Coils in Diagnostic MR Imaging (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Radiologist Technicians

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This Standards publication defines test methods for measuring the signal-to-noise ratio and image uniformity of MR images produced using special-purpose single-channel non-volume coils or a single channel of an array coil ("surface coils"). These methods are applicable to both receive-only and transmit-receive RF coils. This document does not address the use of general head and body coils, special-purpose single-channel volume coils, or analysis of data from coils that require multiple receiver channels for operation.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 8-202x, Characterization of the Specific Absorption Rate (SAR) for Magnetic Resonance Imaging Systems (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Radiologist Technicians

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This NEMA Standards Publication describes two measurement procedures for whole-body SAR measurements, the calorimetric method and the pulse-energy method. Extrapolation of these data to patient temperature rise is beyond the scope of this document. This document does not apply to gradient (low-frequency time-varying magnetic fields) safety where nerve and cardiac excitation are the primary safety issues.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 9-202x, Characterization of Phased Array Coils for Diagnostic Magnetic Resonance Images (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Radiologist Technicians

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This Standards publication defines test methods for measuring the signal-to-noise ratio and image uniformity of MR images produced using receive-only phased array coils. Other coil configurations have been addressed in related standards.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 12-202x, Qualifications and Mapping of Geometric Distortion for Special Applications (new standard)

Stakeholders: Manufacturers, Regulatory, Testing Laboratories, Users

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

The standard defines test methods for measuring the absolute spatial variation of geometric accuracy within MR images. This standard presents the absolute geometric accuracy as a map, graph, or table throughout the imaging region rather than as simple figures of merit. This standard deals exclusively with absolute error measurements because it is assumed the end user will need geometric distortion error measurements in absolute versus relative terms.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA MS 14-202x, Characterization of RF Coil Heating in Magnetic Resonance Imaging Systems (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users

Project Need: Measurement performance parameters governing image quality of magnetic resonance (MR) imaging systems.

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This NEMA Standards publication describes measurement procedures for determining the maximum surface temperature of RF coils (integrated transmit, integrated receive, detachable receive, detachable transmit/receive, specialty coils), as specified in IEC 60601-1, due to absorbed RF power under worst-case normal use conditions when in a volume transmit coil.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA NU-2 202X, Performance Measurements of Positron Emission Tomographs (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Provides a uniform and consistent method for measuring and reporting performance parameters of PETs. Included are time of flight and non--time of flight coincidence systems, discrete and continuous detector designs, single and multiple slice devices and multiplanar and volume reconstruction models.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Provides a uniform and consistent method for measuring and reporting performance parameters of PETs. Included are time of flight and non--time of flight coincidence systems, discrete and continuous detector designs, single and multiple slice devices and multiplanar and volume reconstruction models.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA NU-1 1 202X, Performance Measurements of Scintillation Cameras (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: The purpose of NEMA NU 1 is to provide uniform criteria for the measurement and reporting of Gamma camera performance parameters by which a manufacturer may specify his device and, when doing so, reference "NEMA Standards Publication NU 1-2017, Performance Measurements of Gamma Cameras". NEMA NU 1 does not establish minimum performance levels. Specific measurement equipment, as set forth herein, is required in order to accomplish the purpose of this standard: the uniform and accurate specification of performance characteristics. Without this equipment, the measurements performed would be limited, inaccurate, non-quantitative, or too time-consuming.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

The purpose of NEMA NU 1 is to provide uniform criteria for the measurement and reporting of Gamma camera performance parameters by which a manufacturer may specify his device and, when doing so, reference "NEMA Standards Publication NU 1-2017, Performance Measurements of Gamma Cameras". NEMA NU 1 does not establish minimum performance levels. Specific measurement equipment, as set forth herein, is required in order to accomplish the purpose of this standard: the uniform and accurate specification of performance characteristics. Without this equipment, the measurements performed would be limited, inaccurate, non-quantitative, or too time-consuming.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA RT-1 202X, Gating Interface (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Provides a detailed description of the gating interface between Radiation Therapy Treatment Delivery Devices (TDD), commonly called linear accelerators or other particle therapy accelerators and Patient Position Monitoring Systems (PPMS).

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Provides a detailed description of the gating interface between Radiation Therapy Treatment Delivery Devices (TDD), commonly called linear accelerators or other particle therapy accelerators and Patient Position Monitoring Systems (PPMS).

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA RT-1 202X, Gating Interface (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Provides a detailed description of the gating interface between Radiation Therapy Treatment Delivery Devices (TDD), commonly called linear accelerators or other particle therapy accelerators and Patient Position Monitoring Systems (PPMS).

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Provides a detailed description of the gating interface between Radiation Therapy Treatment Delivery Devices (TDD), commonly called linear accelerators or other particle therapy accelerators and Patient Position Monitoring Systems (PPMS).

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA 1-202x, Good Refurbishment Practices for Medical Electrical Equipment (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Radiologist Technicians

Project Need: Provide requirements that lead to a practice of good refurbishment for medical imaging equipment

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

This standard describes and defines the process of refurbishment of used medical imaging equipment and applies to the restoring of used medical imaging equipment to a condition of safety and effectiveness comparable to that of new equipment. This restoration includes actions such as repair, rework, software/hardware updates, and the replacement of worn parts with original parts.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA 2-202X, Requirements for Servicing of Medical Imaging Equipment (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Facilities, Users, Medical Equipment Service Providers

Project Need: Defines minimum QMS requirements for servicing of medical imaging equipment to a safe and effective condition for intended use

Interest Categories: Producer, User, General Interest, Government,

The requirements of this Standard are intended to be applicable to any medical imaging equipment servicing organization, regardless of size, or the specific equipment maintenance services it provides. This quality management system standard does not address operations other than medical imaging equipment servicing.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA EX29-202x, Supplemental Requirements for User Information and System Function Related to Dose in CT (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Identifies uniform and Standardized manufacturer's information provided to users of a CT scanner. This information includes perfusion scanning, use of Automatic Exposure Control, organization of dose-related information, a requirement for listing the reference protocols shipped on a CT system.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Identifies uniform and Standardized manufacturer's information provided to users of a CT scanner. This information includes perfusion scanning, use of Automatic Exposure Control, organization of dose-related information, a requirement for listing the reference protocols shipped on a CT system.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA UMD P1-202x, Remanufacturing of Ultrasound Medical Devices (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Outlines key considerations for servicers and remanufacturers of ultrasound imaging equipment. This white paper highlights which ultrasound device modifications are most likely to trigger remanufacturing, as well as key informative resources that aid in informed decision making about these activities.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Outlines key considerations for servicers and remanufacturers of ultrasound imaging equipment. This white paper highlights which ultrasound device modifications are most likely to trigger remanufacturing, as well as key informative resources that aid in informed decision making about these activities.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR 30-202x, Quality Control Tools for Digital Projection Radiography (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: To be used by medical imaging device manufacturers in the design and manufacture of projection radiography x-ray equipment

Interest Categories: Producer, User, General Interest, Government, Testing Laboratory

The standard applies to x-ray equipment intended to be used for digital projection radiography and defines a set of minimum requirements designed to more easily facilitate quality control at the facility level. This standard sets requirements for computed radiography (CR) and digital radiography (DR) equipment intended to be used for projection radiography. Equipment intended to be used for bone or tissue densitometry, radiation therapy, computed tomography, fluoroscopy, mammography, or dental applications are excluded.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-22-202x, Quality Control Manual Template for Manufacturers of Displays and Workstations Labeled for Final Interpretation in Full-Field Digital Mammography (FFDM) (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Defines the minimum set of quality control tests to be applied to a manufacturer's product labeled for final interpretation of images acquired using an FFDM image-acquisition system.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Defines the minimum set of quality control tests to be applied to a manufacturer's product labeled for final interpretation of images acquired using an FFDM image-acquisition system.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-23-202x, Quality Control Manual Template for Manufacturers of Hardcopy Output Devices Labeled for Final Interpretation in Full-Field Digital Mammography (FFDM) (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Features templates that provide a consistent presentation format and a minimum set of quality control tests that should be included as part of the quality assurance plan of a hardcopy output device (e.g., printer) labeled for final interpretation in an FFDM system.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Features templates that provide a consistent presentation format and a minimum set of quality control tests that should be included as part of the quality assurance plan of a hardcopy output device (e.g., printer) labeled for final interpretation in an FFDM system.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-25-202x, Computed Tomography Dose Check (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Specifies an equipment feature for CT scanners to produce dose-related notification and alert messages to inform operators prior to scanning if the estimated dose would exceed the preset levels.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Specifies an equipment feature for CT scanners to produce dose-related notification and alert messages to inform operators prior to scanning if the estimated dose would exceed the preset levels. estimated dose would exceed the preset levels.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-26-202x, Access Controls for Computed Tomography Identification, Interlocks, and Logs (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Features templates that provide a consistent presentation format and a minimum set of quality control tests that should be included as part of the quality assurance plan of a hardcopy output device (e.g., printer) labeled for final interpretation in an FFDM system.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Applies to the particular functioning of a CT system (as covered by the scope of IEC 60601-2-44) as it relates to who has access/permission to use the system for clinical or other uses. Includes being able to assign specific permissions to selected uses that are above those needed for daily routine scanning, such as the authorization to save protocols and adds provisions to secure the user interface based on a manual lock. Contains the functionality for use in a facility's quality assurance program such as capturing operator and patient information as well as information related to saved changes in protocols.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-27-202x, X-ray Equipment for Interventional Procedures User Quality Control Mode (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Applies to x-ray equipment intended to perform interventional procedures and defines a set of minimum set of requirements designed to more easily facilitate quality control at the facility level.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Applies to x-ray equipment intended to perform interventional procedures and defines a set of minimum set of requirements designed to more easily facilitate quality control at the facility level.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-29-202x, Standard Attributes on CT Equipment Related to Dose Optimization and Management (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Identifies four key features of CT scanners which contribute to or help perform optimization and or management of doses of ionizing radiation while still enabling the system to deliver the diagnostic image quality needed by the physician.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Standard Attributes on CT Equipment Related to Dose Optimization and Management.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-30-202x, Quality Control Tools for Digital Projection Radiography (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Defines a set of minimum equipment requirements that facilitate the quality control of digital projection radiography by healthcare providers.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Defines a set of minimum equipment requirements that facilitate the quality control of digital projection radiography by healthcare providers.

NEMA (National Electrical Manufacturers Association)

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New Standard

BSR/NEMA/MITA XR-31-202x, Standard Attributes on X-ray Equipment for Interventional Procedures (new standard)

Stakeholders: Manufacturers, Regulatory, Healthcare Providers/Facilities, Radiologists, User (Patients), Insurance

Project Need: Offers healthcare providers a reference to identify key features which contribute to enhanced patient care and to help manage patient radiation dose delivery, while still enabling the system to provide sufficient image quality needed by the physician.

Interest Categories: Product, User, General Interest, Government, Testing Laboratory

Offers healthcare providers a reference to identify key features which contribute to enhanced patient care and to help manage patient radiation dose delivery, while still enabling the system to provide sufficient image quality needed by the physician.

SAAMI (Sporting Arms and Ammunition Manufacturers Institute)

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Revision

BSR/SAAMI Z299.2-202X, Voluntary Industry Performance Standards for Pressure and Velocity of Shotshell Ammunition for the Use of Commercial Manufacturers (revision of ANSI/SAAMI Z299.2-2019)

Stakeholders: Commercial Manufacturers, Testing Laboratories, Consumers, Government Agencies

Project Need: Provides standards for commercial manufacturers of firearms and sporting ammunition.

Interest Categories: Expert, General Interest, Government, Producer, Testing Laboratory, User

In the interests of safety and interchangeability, this Standard provides pressure and velocity performance and dimensional characteristics for shotshell ammunition. Included are procedures and equipment for determining these criteria.

TIA (Telecommunications Industry Association)

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National Adoption

BSR/TIA 455-225-A-202x, Adoption of IEC 61745:2017 - End-face image analysis procedure for the calibration of optical fibre geometry test sets (identical national adoption of IEC 61745:2017 and revision of ANSI/TIA 455-225-2015)

Stakeholders: Installers, designers of optical fiber cabling systems, optical fiber test equipment manufacturers, optical fiber manufacturers, IEC TC86.

Project Need: Adopt identical ISO or IEC Standard and revise current standard

Interest Categories: User, Producer and General Interest

Revise ANSI/TIA 455-225 and adopt IEC 61745:2017, End-face image analysis procedure for the calibration of optical fibre geometry test sets.

TIA (Telecommunications Industry Association)

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National Adoption

BSR/TIA 455-231-A-202x, Adoption of IEC 61315:2019 - Calibration of fibre-optic power meters (identical national adoption of IEC 61315:2019 and revision of ANSI/TIA 455-231-2015)

Stakeholders: End-users, installers, designers of optical fiber cabling systems, optical fiber test equipment manufacturers, optical fiber manufacturers, IEC TC86.

Project Need: Adopt identical ISO or IEC Standard and revise current standard

Interest Categories: User, Producer and General Interest

Revise ANSI/TIA 455-231 and adopt IEC 61315:2019, Calibration of fibre-optic power meters.

TIA (Telecommunications Industry Association)

Teesha Jenkins <tjenkins@tiaonline.org> | 1320 North Courthouse Road, Suite 200 | Arlington, VA 22201-2598 www.tiaonline.org

Revision

BSR/TIA 604-10-D-202x, Fiber Optic Connector Interchangeability Standard Type LC (revision and redesignation of ANSI/TIA 604-10C-2021)

Stakeholders: Installers, designers of optical fiber cabling systems, QSFP-DD MSA, OSFP MSA, IEC SC86B USNC, ISO/IEC JTC1 SC25/WG3 USNC, INCITS Fiber Channel T11.2, IEEE 802.3

Project Need: Update standard

Interest Categories: User, Producer and General Interest

Revise ANSI/TIA 604-10-C to add dual duplex LC belly-to-belly pitch and latch dimension specifications as informative annex for active device receptacle.

TVC (ASC Z80) (The Vision Council)

Michele Stolberg <ascz80@thevisioncouncil.org> | 225 Reinekers Lane, Suite 700 | Alexandria, VA 22314 | www.z80asc.com

New Standard

BSR Z80.40-202x, Instruments – Clinical Contrast Sensitivity Tests (new standard)

Stakeholders: Ophthalmic device manufacturers, ophthalmic and optometric communities, FDA, academic and industrial vision scientists, workers in occupations with minimal visual performance requirements

Project Need: No standard or other official document currently exists to provide industry-wide guidance and minimum requirements for the manufacture and validation of tests for the accurate and reliable assessment of contrast sensitivity. As a result, existing marketed contrast sensitivity tests do not adhere to common requirements for quality control, or even to common definitions of contrast.

Interest Categories: Nationwide organizations of manufacturers and ophthalmic laboratories, professional organizations of ophthalmologists, optometrists, and opticians, federal agencies that are purchasers of ophthalmic materials, and individual members, companies, and experts.

Create a new standard for the contrast sensitivity test, using the existing Z80.21 visual acuity chart standard as a starting point. The new standard will apply to displays of optotypes for all clinical visual contrast sensitivity measurement systems that assess the visibility of variable-contrast optotypes and that are designed for general use, including optotypes displayed on opaque media, transilluminated media, digital electronic screens, or projection systems.

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: April 14, 2024

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

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

Addenda

BSR/ASHRAE Addendum 62.2o-202x, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2022)

Proposed Addendum o replaces hydraulic diameter with equivalent diameter in the prescriptive duct sizing section of the Standard. The purpose is to more accurately estimate the static pressure loss for rectangular (and other non-circular) ducts.

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

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

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME B20.1-202x, Safety Standard for Conveyors and Related Equipment (revision of ANSI/ASME B20.1-2021)

This Standard applies to the design, construction, installation, maintenance, inspection, and operation of conveyors and conveying systems in relation to hazards.

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

Send comments (copy psa@ansi.org) to: Riad Mohamed <MohamedR@asme.org>

Comment Deadline: April 14, 2024

NSF (NSF International)

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

Revision

BSR/NSF 18-202x (i24r1), Manual Food and Beverage Dispensing Equipment (revision of ANSI/NSF 18-2023)

This standard contains requirements for equipment and devices that manually dispense food or beverages, in bulk or in portions. The materials, design, and construction requirements of this standard may also be applied to an item that is manufactured as a component of food and beverage dispensing equipment.

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

Send comments (copy psa@ansi.org) to: Allan Rose <arose@nsf.org>

NSF (NSF International)

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

Revision

BSR/NSF 173-202x (i105r1), Dietary Supplements (revision of ANSI/NSF 173-2022)

This standard contains requirements for dietary supplements that contain one or more of the following dietary ingredients: a vitamin, a mineral, an herb or other botanical, an amino acid, a dietary substance for use by humans to supplement the diet by increasing the total dietary intake, or a concentrate, metabolite, constituent, extract, or combinations of these ingredients.

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

Send comments (copy psa@ansi.org) to: Rachel Brooker <rbrooker@nsf.org>

NSF (NSF International)

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

Revision

BSR/NSF 184-202x (i12r1), Residential Dishwashers (revision of ANSI/NSF 184-2019)

Equipment covered by this standard includes all residential dishwashers.

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

Send comments (copy psa@ansi.org) to: Allan Rose <arose@nsf.org>

NSF (NSF International)

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

Revision

BSR/NSF/3-A 14159-1-202x (i9r1), Hygiene Requirements for the Design of Meat and Poultry Processing Equipment (revision of ANSI/NSF/3-A 14159-1-2019)

This NSF/ANSI/3-A standard applies to equipment intended for use in the slaughter, processing, and packaging of meat and poultry products, excluding handheld tools and mechanical belt conveyors.

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

Send comments (copy psa@ansi.org) to: Allan Rose <arose@nsf.org>

Comment Deadline: April 14, 2024

NSF (NSF International)

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

Revision

BSR/NSF/3-A 14159-2-202x (i9r1), Hygiene Requirements for the Design of Hand Held Tools Used in Meat and Poultry Processing (revision of ANSI/NSF/3-A 14159-2-2019)

This NSF/ANSI/3-A standard applies to handheld tools intended for use in the slaughter, processing, and packaging of meat and poultry products.

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

Send comments (copy psa@ansi.org) to: Allan Rose <arose@nsf.org>

NSF (NSF International)

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

Revision

BSR/NSF/3-A 14159-3-202x (i9r1), Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing (revision of ANSI/NSF/3-A 14159-3-2019)

This NSF/ANSI/3-A standard applies to exposed product mechanical belt conveyors, either singularly or as a component of equipment, intended for use in the slaughter, processing, and packaging of meat and poultry products.

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

Send comments (copy psa@ansi.org) to: Allan Rose <arose@nsf.org>

NSF (NSF International)

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

Revision

BSR/NSF/CAN 61-202x (i181r1), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 60-2023)

This standard is intended to cover specific materials or products that come into contact with drinking water, drinking water treatment chemicals, or both. The focus of the standard is evaluation of contaminants or impurities imparted indirectly to drinking water.

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

Send comments (copy psa@ansi.org) to: Amy Jump <ajump@nsf.org>

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | haley.callahan@ul.org, <https://ulse.org/>

New Standard

BSR/UL 3300-202x, Standard for Safety for Service, Communication, Information, Education and Entertainment Robots - SCIEE Robots (new standard)

The following is being recirculated for your review: (1) The Proposed First Edition of the Standard for Safety for Service, Communication, Information, Education and Entertainment Robots – SCIEE Robots.

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

Send comments (copy psa@ansi.org) to: <https://csds.ul.com/ProposalAvailable>

Comment Deadline: April 14, 2024

ULSE (UL Standards & Engagement)

47173 Benicia Street, Fremont, CA 94538 | Marcia.M.Kawate@ul.org, <https://ulse.org/>

Revision

BSR/UL 79-202x, Standard for Safety for Power-Operated Pumps for Petroleum Dispensing Products (revision of ANSI/UL 79-2023)

The following topic is being recirculated: (1) Proposed new joint Canada-US standard, UL/ULC 79, Standard for Power-Operated Pumps for Petroleum Dispensing Products.

[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)

47173 Benicia Street, Fremont, CA 94538 | Marcia.M.Kawate@ul.org, <https://ulse.org/>

Revision

BSR/UL 79A-202x, Standard for Safety for Power-Operated Pumps for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent (E0-E85) (revision of ANSI/UL 79A-2020)

The following topic is being recirculated: (1) Proposed new joint Canada-US standard, UL/ULC 79A, Standard for Power-Operated Pumps for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent (E0-E85).

[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)

47173 Benicia Street, Fremont, CA 94538 | Marcia.M.Kawate@ul.org, <https://ulse.org/>

Revision

BSR/UL 79B-202x, Standard for Safety for Power-Operated Pumps for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil (revision of ANSI/UL 79B-2020)

The following topic is being recirculated: (1) Proposed new joint Canada-US standard, UL/ULC 79B, Standard for Power-Operated Pumps for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil

[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)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | sabrina.khreibtov@ul.org, <https://ulse.org/>

Revision

BSR/UL 147-202X, Standard for Safety for Hand-Held Torches for Fuel Gases (revision of ANSI/UL 147-2021)

(1) Topic – MAPP is no longer in production; additional changes.

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

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

Comment Deadline: April 14, 2024

ULSE (UL Standards & Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | sabrina.khreibtov@ul.org, <https://ulse.org/>

Revision

BSR/UL 147A-202X, Standard for Safety for Nonrefillable (Disposable) Type Fuel Gas Cylinder Assemblies (revision of ANSI/UL 147A-2019)

(1) Topic – MAPP is no longer in production.

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

Send comments (copy psa@ansi.org) to: <https://csds.ul.com/Home/ProposalsDefault.aspx> 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 | shannon.henesy@ul.org, <https://ulse.org/>

Revision

BSR/UL 962-202x, Standard for Household and Commercial Furnishings (revision of ANSI/UL 962-2022)

This proposal covers: (3) Addition of construction, entrapment test, and instruction requirements for storage bed units; (5) Revisions to Requirements for Tamper-Resistant Receptacles; (8) Revisions to Flammability Requirements for Non-Electrical Parts; (12) Addition of UL 62368-1 to Annex A.

[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)

1603 Orrington Ave., Suite 2000, Evanston, IL 60201 | anna.roessing-zewe@ul.org, <https://ulse.org/>

Revision

BSR/UL 1479-202x, Standard for Fire Tests of Penetration Firestops (revision of ANSI/UL 1479-2023)

1.1 These requirements cover through-penetration firestops of various materials and construction that are intended for use in openings in fire-resistive wall, floor or floor-ceiling assemblies, and membrane-type penetration firestops of various materials and construction that are intended for use in openings in fire-resistive wall assemblies. 1.2 The method of testing penetration firestops as specified by these requirements consists of exposure of test samples to a fire of standard time and temperature and to an application of a hose stream. Ratings are then established on the basis of: (a) The length of time the firestop resists fire before the first development of through openings or flaming on the unexposed surface; (b) Acceptable limitation of thermal transmission; and (c) Acceptable performance under the application of the hose stream. 1.3 The method of testing also includes optional air leakage tests to determine the rate of air leakage through penetration firestop systems resulting from a specified air-pressure difference applied across the surface of the systems. 1.4 The method of testing also includes optional water leakage tests to determine the ability of penetration firestop systems to resist the passage of water under a three foot pressure head. This method does not evaluate the ability of uncured firestop systems to resist such exposure.

[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: April 14, 2024

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Grayson.Flake@ul.org, <https://ulse.org/>

Revision

BSR/UL 2034-202x, Standard for Single and Multiple Station Carbon Monoxide Alarms (revision of ANSI/UL 2034-2023)

These requirements cover electrically operated single- and multiple-station carbon monoxide (CO) alarms intended for protection in ordinary indoor locations and unconditioned areas, per applicable governing laws, codes, and standards. This includes, but is not limited to, recreational vehicles, mobile homes, commercial vehicles, and recreational boats with enclosed accommodation spaces and cockpit areas.

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

Send comments (copy psa@ansi.org) to: csds.ul.com

ULSE (UL Standards & Engagement)

1603 Orrington Ave., Suite 2000, Evanston, IL 60201 | anna.roessing-zewe@ul.org, <https://ulse.org/>

Revision

BSR/UL 2079-202x, Standard for Tests for Fire Resistance of Building Joint Systems (revision of ANSI/UL 2079-2020)

1.1 These tests are applicable to joint systems of various materials and construction that are intended for use in linear openings between adjacent fire-resistive structures. 1.2 The fire endurance ratings for joint systems are intended to register performance during the period of fire exposure and are not intended to be interpreted as having determined the acceptability of the joint systems for use before or after fire exposure. The intent of these methods is to develop data to assist others in determining the suitability of the joint systems where fire resistance is required. 1.3 These requirements are intended to evaluate the length of time that the types of joint systems specified in 1.1 will contain a fire during a predetermined test exposure. The test evaluates the joint system's resistance to heat and, in some instances, to a hose stream, while carrying an applied load if the assembly is load bearing. The method of testing also includes optional air leakage tests to determine the rate of air leakage through joint systems resulting from a specified air pressure difference applied across the surface of the joint systems.

[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: April 29, 2024

ASA (ASC S3) (Acoustical Society of America)

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

Revision

BSR S3.6-202x, Specification for Audiometers (revision of ANSI/ASA S3.6-2018)

The audiometers covered in this specification are devices designed for use in determining the hearing threshold level of an individual in comparison with a chosen standard reference threshold level. This standard provides specifications and tolerances for pure tone, speech, and masking signals and describes the minimum test capabilities of different types of audiometers. Methods and requirements for calibration of audiometers are provided.

Single copy price: \$169.00

Obtain an electronic copy from: standards@acousticalsociety.org

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

Comment Deadline: April 29, 2024

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME B31.1-202x, Power Piping (revision of ANSI/ASME B31.1-2022)

ASME B31.1 prescribes minimum requirements for the design, materials, fabrication, erection, test, examination, inspection, operation, and maintenance of piping systems typically found in electric power generating stations, industrial and institutional plants, geothermal heating systems, and central and district heating and cooling systems. It also covers boiler-external piping for power boilers and high-temperature, high-pressure water boilers in which steam or vapor is generated at a pressure of more than 15 psig [100 kPa (gage)]; and high-temperature water is generated at pressures exceeding 160 psig [1,103 kPa (gage)] and/or temperatures exceeding 250 degrees F (120 degrees C).

Single copy price: Free

Obtain an electronic copy from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy psa@ansi.org) to: Umberto D'Urso <dursou@asme.org>

AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jmolin@aws.org, www.aws.org

Revision

BSR/AWS D1.1/D1.1M-202x, Structural Welding Code - Steel (revision of ANSI/AWS D1.1/D1.1M-2020)

This code covers the welding requirements for any type of welded structure made from the commonly used carbon and low-alloy constructional steels. Clauses 1 through 11 constitute a body of rules for the regulation of welding in steel construction. There are eight normative and eleven informative annexes in this code. A Commentary of the code is included with the document.

Single copy price: 265.50 (Non-Member); \$354.00 (Member)

Obtain an electronic copy from: jmolin@aws.org

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

IAPMO (WES) (International Association of Plumbing & Mechanical Officials)

4755 East Philadelphia Street, Ontario, CA 91761 | hugo.aguilar@iapmo.org, <http://www.iapmo.org>

Revision

BSR/IAPMO/WESTAND-202x, Water Efficiency and Sanitation Standard (revision of ANSI/IAPMO WEstand-2020)

The modification seeks to update venting requirements to prevent conflicts with existing standards.

Single copy price: Free

Obtain an electronic copy from: codes-dept@iapmo.org

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

ISA (International Society of Automation)

3252 S. Miami Blvd, Suite 102, Durham, NC 27703 | lfranke@isa.org, www.isa.org

New Standard

BSR/ISA 75.27.01-202x, Cryogenic and Low Temperature Seat Leakage Testing of Control Valves (new standard)

This standard will provide a method of cryogenic and low temperature seat leak testing of sliding stem control valves needed within the cryogenic industries.

Single copy price: \$99.00

Obtain an electronic copy from: lfranke@isa.org

Send comments (copy psa@ansi.org) to: Lynne Franke <lfranke@isa.org>

Comment Deadline: April 29, 2024

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

New Standard

BSR/NCPDP Medical Rebate Data Standard Version 02.03-202x, NCPDP Medical Rebate Data Submission Standard Version 02.03 (new standard)

The intention of the medical rebate standard is to provide a uniform data format for health plans' rebate submissions to multiple manufacturers throughout the industry. Implementation of the medical rebate standard also eliminates the need for manufacturers to create internal mapping processes to standardize unique data formats from each health plan or third party administrator.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: mweiker@ncdpd.org

Send comments (copy psa@ansi.org) to: Margaret Weiker <mweiker@ncdpd.org>

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

New Standard

BSR/NCPDP Subrogation Standard Version 11-202x, NCPDP Subrogation Standard Version 11 (new standard)

The NCPDP Subrogation Standard supports compliance with requirements for recovery of federal, state and other plan overpayments. It reduces manual processes currently required by PBM's and Plans. It also provides a uniform approach to efficiently process an increasing volume of post-payment subrogation claims and eliminates the numerous custom formats used in the industry today and achieves payment accuracy and supports cost containment efforts.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: mweiker@ncdpd.org

Send comments (copy psa@ansi.org) to: Margaret Weiker <mweiker@ncdpd.org>

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

Revision

BSR/NCPDP Benefit Integration Standard v19-202x, NCPDP Benefit Integration Standard v19 (revision and redesignation of ANSI/NCPDP Benefit Integration Standard v18-2023)

The Benefit Integration Standard Implementation Guide supports the communication of accumulator data in a standard format via transactions that are used to facilitate the delivery and receipt of this information. These transactions provide administrative efficiencies and allow for an industry standard to be used to share accumulator data (such as deductible and out-of-pocket) between Benefit Partners to administer integrated benefits for a member.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: mweiker@ncdpd.org

Send comments (copy psa@ansi.org) to: Margaret Weiker <mweiker@ncdpd.org>

Comment Deadline: April 29, 2024

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

Revision

BSR/NCPDP FB v61-202x, NCPDP Formulary and Benefit Standard v61 (revision and redesignation of ANSI/NCPDP FB v60-2023)

The Formulary and Benefit Standard provides a standard means for pharmacy benefit processors (including health plans and Pharmacy Benefit Managers) to communicate formulary and benefit information to prescribers via technology vendor systems.

Single copy price: \$200.00 (non-members)

Obtain an electronic copy from: mweiker@ncdpd.org

Send comments (copy psa@ansi.org) to: Margaret Weiker <mweiker@ncdpd.org>

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

Revision

BSR/NCPDP Product Identifier v1.9-202x, NCPDP Product Identifier v1.9 (revision and redesignation of ANSI/NCPDP Product Identifier v1.8-2023)

The goal of this standard is to ensure that any change to critical product identifiers is managed in a way that does not adversely affect patient safety, financial processes involving drug products, and the healthcare applications that currently use these identifiers. NCPDP discussed the unintended consequences that could result from changes to the structure of product identifiers and initiated a project to develop a standard that could be used to protect the intended use, format and structure of product identifiers.

Single copy price: \$200.00 (non-members)

Obtain an electronic copy from: mweiker@ncdpd.org

Send comments (copy psa@ansi.org) to: Margaret Weiker <mweiker@ncdpd.org>

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

Revision

BSR/NCPDP SC v2024071-202x, NCPDP SCRIPT Standard v2024071 (revision and redesignation of ANSI/NCPDP SC v2024011-2023)

The standard provides general guidelines for developers of pharmacy or physician management systems who wish to provide prescription transmission functionality to their clients. The standard addresses the electronic transmission of new prescriptions, prescription refill requests, prescription fill status notifications, and cancellation notifications.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: mweiker@ncdpd.org

Send comments (copy psa@ansi.org) to: Margaret Weiker <mweiker@ncdpd.org>

Comment Deadline: April 29, 2024

NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncdpd.org, www.ncdpd.org

Revision

BSR/NCPDP Specialized Standard v2024071-202x, NCPDP Specialized Standard v2024071 (revision and redesignation of ANSI/NCPDP Specialized Standard v2024011-2023)

The NCPDP Specialized Standard will house transactions that are not e-prescribing but are part of the NCPDP XML environment. The standard provides general guidelines for developers of systems who wish to provide business functionality of these transactions to their clients. The guide describes a set of transactions and the implementation of these transactions.

Single copy price: \$200.00 (non-member)

Obtain an electronic copy from: mweiker@ncdpd.org

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

NEMA (ASC C137) (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Rosslyn, VA 22209 | Michael.Erbesfeld@nema.org, www.nema.org

New Standard

BSR/C137.10-202X, Standard for Lighting Systems - Sensor Data Models (new standard)

This standard defines the data model for sensors (focused on but not limited to outdoor) to present to Network Lighting Controllers (NLC). The sensor applications and item types defined in this document are intended to leverage elements of existing data models such as Open Mobile Alliance, Digital Illumination Interface Alliance (DiiA), and TALQ. This standard does not apply to the internal communications of NLC integrated devices or by what protocol the data is transported from the sensor to NLC or from NLC to CMS.

Single copy price: \$100.00

Obtain an electronic copy from: michael.erbesfeld@nema.org

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

NEMA (ASC C8) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Arlington, VA 22209 | Khaled.Masri@nema.org, www.nema.org

Reaffirmation

BSR/ICEA S-58-679-2014 (R202x), Standard for Control, Instrumentation and Thermocouple Extension Conductor Identification (reaffirmation of ANSI/ICEA S-58-679-2014 (R2019))

This standard contains recommendations for conductor and circuit identification of control, instrumentation and thermocouple extension cables when such identification is used.

Single copy price: \$100.00

Obtain an electronic copy from: communication@nema.org

Send comments (copy psa@ansi.org) to: Khaled Masri <Khaled.Masri@nema.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

New Standard

BSR/TIA 455-81-C-202x, FOTP-81 Compound Flow (Drip) Test for Filled Fiber Optic Cable (new standard)

This document is a revision of TIA 455-81-B and the creation as a new standard. Entire document is open for comment.

Single copy price: \$69.00

Obtain an electronic copy from: standards-process@tiaonline.org

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

Comment Deadline: April 29, 2024

ULSE (UL Standards & Engagement)

1603 Orrington Avenue, Suite 2000, Evanston, IL 60201 | mitchell.gold@ul.org, <https://ulse.org/>

Revision

BSR/UL 486G-202x, Standard for Sealed Twist-On Connecting Devices (revision of ANSI/UL 486G-2018 (R2022))

The proposed second edition of the Standard for Sealed Twist-On Connecting Devices, UL 486G, including the following revision: (1) alternate information means.

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 the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/ProposalAvailable>

Comment Deadline: May 14, 2024

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 C37.011-202x, Guide for the Application of Transient Recovery Voltage for AC High-Voltage Circuit Breakers with Rated Maximum Voltage above 1000 V (new standard)

The procedures and calculations necessary to apply the standard transient recovery voltage (TRV) ratings for ac high-voltage circuit breakers rated above 1000 V are covered in this guide. The breaking capability limits of these circuit breakers are determined to a great degree by the TRV. The TRV ratings are compared with typical system TRV duties. Examples of TRV calculation are given with suggested options if the TRV duty exceeds the TRV ratings of the circuit breaker.

Single copy price: \$1.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39800992>

Order from: www.techstreet.com/ieee/searches

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

New Standard

BSR/IEEE C37.11-202x, Standard Requirements for Electrical Control for AC High-Voltage (1000 V) Circuit Breakers (new standard)

Standard requirements for all types of electrical control circuits for ac high-voltage circuit breakers rated above 1000 V are given. Any type of power-operated mechanism and both ac and dc control power are applicable for this standard. Only basic control elements of the circuit breaker, including reclosing where required, are included in this standard. Devices or circuits for protective relaying, special interlocking, and so forth are not included.

Single copy price: \$5.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39802121>

Order from: www.techstreet.com/ieee/searches

Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Comment Deadline: May 14, 2024

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 C37.012-202x, Guide for the Application of Capacitive Current Switching for AC High-Voltage Circuit Breakers Above 1000 V (new standard)

Guidance for the application of ac high-voltage circuit breakers switching capacitive currents is provided. The general theory of capacitive current switching and the notions of restriking, reignition, and nonsustained disruptive discharge (NSDD) are addressed in the application guide. Voltage factors used for single-phase testing as a substitute for three-phase testing are explained. The application of circuit breakers for different network conditions and different capacitive loads (capacitor banks, cables, transmission lines, and filter banks) is discussed

Single copy price: \$1.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39802218>

Order from: www.techstreet.com/ieee/searches

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

New Standard

BSR/IEEE C37.20.3-202x, Standard for Metal-Enclosed Interrupter Switchgear Rated above 1 kV AC up to and Including 48.3 kV AC (new standard)

Metal-enclosed interrupter (MEI) switchgear assemblies containing, but not limited to, such devices as interrupter switches; selector switches; power fuses; circuit breakers; control, instrumentation and metering devices; and protective equipment are included in this standard. It includes, but is not specifically limited to, equipment for the control and protection of apparatus used for distribution of electrical power

Single copy price: \$1.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39802169>

Order from: www.techstreet.com/ieee/searches

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

New Standard

BSR/IEEE C37.30.1-202x, Standard Requirements for AC High-Voltage Air Switches Rated Above 1000 V (new standard)

Required ratings, construction requirements, design test requirements, applications, and suggested practices for all high-voltage enclosed indoor and outdoor and non-enclosed indoor and outdoor switches rated above 1000 V are specified. This includes ratings and requirements for such switches as disconnecting, selector, horn-gap, grounding, etc., for manual and power operation, except for interrupter switches, distribution-enclosed single-pole air switches, and distribution cutouts fitted with disconnecting blades.

Single copy price: \$1.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39802266>

Order from: www.techstreet.com/ieee/searches

Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Comment Deadline: May 14, 2024

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 C37.30.6-202x, Guide for Electric Motor Operators Applied to High-Voltage Air Switches Rated Above 1000 V (new standard)

Construction, application, and testing considerations for electric motor operators and accessories for use with high-voltage switches and interrupter switches rated above 1000 V, as covered in IEEE Std. C37.30.1 and Std C37.30.3 are provided.

Single copy price: \$5.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39801189>

Order from: www.techstreet.com/ieee/searches

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

New Standard

BSR/IEEE C37.122.2-202x, Guide for the Application of Gas Insulated Substations 1 kV to 52 kV (new standard)

Guidance for technical requirements for the design, fabrication, testing, and installation of indoor gas-insulated substations (GIS) 1 kV up to 52 kV is provided in this standard. Parameters to be supplied by the purchaser are suggested and technical requirements for the design, fabrication, testing, and installations to be furnished by the manufacturer are established.

Single copy price: \$7.00

Obtain an electronic copy from: <https://www.techstreet.com/ieee/searches/39801005>

Order from: www.techstreet.com/ieee/searches

Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

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

700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

National Adoption

INCITS/ISO/IEC 42001:2023 [202x], Information Technology - Artificial Intelligence - Management System (identical national adoption of ISO/IEC 42001:2023)

Specifies the requirements and provides guidance for establishing, implementing, maintaining, and continually improving an AI (artificial intelligence) management system within the context of an organization. This document is intended for use by an organization providing or using products or services that utilize AI systems. This document is intended to help the organization develop, provide, or use AI systems responsibly in pursuing its objectives and meet applicable requirements, obligations related to interested parties and expectations from them. This document is applicable to any organization, regardless of size, type and nature, that provides or uses products or services that utilize AI systems.

Single copy price: \$237.00

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

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

Send comments (copy psa@ansi.org) to: Barbara Bennett <comments@standards.incits.org>

Comment Deadline: May 14, 2024

ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Nicolette.A.Weeks@ul.org, <https://ulse.org/>

New Standard

BSR/UL 1395-202X, Standard for Transients Test Method (new standard)

ULSE proposes the First Edition of the Standard for Transients Test Method, UL 1395.

Single copy price: Free

Order from: <https://csds.ul.com/ProposalAvailable>

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

Withdrawal of an ANS by ANSI-Accredited Standards Developer

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

HL7 (Health Level Seven)

455 E. Eisenhower Parkway, Suite 300 #025, Ann Arbor, MI 48108 | lynn@hl7.org, www.hl7.org

ANSI/HL7 V3 PCAS, R1-2018, HL7 Version 3 Standard: Care Provision; Assessment Scales, Release 1 (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Lynn Laakso <lynn@hl7.org>

HL7 (Health Level Seven)

455 E. Eisenhower Parkway, Suite 300 #025, Ann Arbor, MI 48108 | lynn@hl7.org, www.hl7.org

ANSI/HL7 V3 PC CAREPLAN, R1-2013 (R2018), HL7 Version 3 Standard: Care Provision; Care Record Topic, Release 1 (reaffirmation of ANSI/HL7 V3 PC CAREPLAN, R1-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Lynn Laakso <lynn@hl7.org>

HL7 (Health Level Seven)

455 E. Eisenhower Parkway, Suite 300 #025, Ann Arbor, MI 48108 | lynn@hl7.org, www.hl7.org

ANSI/HL7 V3 PC CAREREC, R1-2013 (R2018), HL7 Version 3 Standard: Care Provision; Queries Care Record Topic, Release 1 (reaffirmation of ANSI/HL7 V3 PC CAREREC, R1-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Lynn Laakso <lynn@hl7.org>

HL7 (Health Level Seven)

455 E. Eisenhower Parkway, Suite 300 #025, Ann Arbor, MI 48108 | lynn@hl7.org, www.hl7.org

ANSI/HL7 V3 PC CARETRANS, R1-2013 (R2018), HL7 Version 3 Standard: Care Provision; Care Transfer Topic, Release 1 (reaffirmation of ANSI/HL7 V3 PC CARETRANS, R1-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Lynn Laakso <lynn@hl7.org>

HL7 (Health Level Seven)

455 E. Eisenhower Parkway, Suite 300 #025, Ann Arbor, MI 48108 | lynn@hl7.org, www.hl7.org

ANSI/HL7 V3 PCDIM, R1-2013 (R2018), HL7 Version 3 Standard: Care Provision Domain Information Model, Release 1 (reaffirmation of ANSI/HL7 V3 PCDIM, R1-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Lynn Laakso <lynn@hl7.org>

Withdrawal of an ANS by ANSI-Accredited Standards Developer

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AABC-D-1-2016, Trunking Control Channel Messages - Addendum 1 (addenda to ANSI/TIA 102.AABC-D-2015)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AACA-A-1-2020, Project 25 Digital Radio Over-The-Air-Rekeying (OTAR) Messages and Procedures - Addendum 1 (addenda to ANSI/TIA 102.AACA-A-2014)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AABC-D-2-2017, Trunking Control Channel Messages Addendum 2 - Vehicle Sensed Emergency (addenda to ANSI/TIA 102.AABC-D-1-2016)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AABC-D-3-2018, Trunking Control Channel Messages - Addendum 3 - Accessory Sensed Emergency (addenda to ANSI/TIA 102.AABC-D-1-2016)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AACA-A-2014, Project 25 Digital Radio Over-The-Air-Rekeying (OTAR) Messages and Procedures (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.CCAB-A-2014, Project 25, Two Slot TDMA, Transceiver Performance Recommendations (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAAD-B-2015, Conventional Procedures (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

Withdrawal of an ANS by ANSI-Accredited Standards Developer

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AAAB-B-2019, 102.AAAB-B Security Services Overview (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 5045-2017, Numeric Identifier for Conventional Analog Operation (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAEE-C-2015, Radio Management Protocols (revision and redesignation of ANSI/TIA 102.BAEE-B-2010)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAEA-C-2015, Data Overview and Specification (revision and redesignation of ANSI/TIA 102.BAEA-B-2012)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.CCAA-B-2016, Project 25, Phase 2 Two-Slot Time Division Multiple Access, Transceiver Measurement Methods (revision and redesignation of ANSI/TIA 102.CCAA-A-2014)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.CAAA-E-2016, Project 25 Digital C4FM/CQPSK Transceiver Measurement Methods (revision and redesignation of ANSI/TIA 102.CAAA-D-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAAA-B-2017, FDMA - Common Air Interface (revision and redesignation of ANSI/TIA 102.BAAA-A-2003 (R2013))

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

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TIA (Telecommunications Industry Association)

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ANSI/TIA 102.BAAC-D-2017, Common Air Interface Reserved Values (revision and redesignation of ANSI/TIA 102.BAAC-C-2011)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AABA-C-2019, Project 25 - Trunking Overview (revision and redesignation of ANSI/TIA 102.AABA-B-2011)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAJC-B-2019, Tier 2 Location Services Specification (revision and redesignation of ANSI/TIA 102.BAJC-A-2015)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.AABC-E-2019, Trunking Control Channel Messages (revision and redesignation of ANSI/TIA 102.AABC-D-2015)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAEG-A-2019, Mobile Data Peripheral Interface (revision and redesignation of ANSI/TIA 102.BAEG-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAEJ-A-2019, Conventional Management Service Specification for Packet Data (revision and redesignation of ANSI/TIA 102.BAEJ-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAEF-A-2019, Packet Data Host Network Interface (revision and redesignation of ANSI/TIA 102.BAEF-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

Withdrawal of an ANS by ANSI-Accredited Standards Developer

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAED-A-2019, Packet Data Logical Link Control Procedures (revision and redesignation of ANSI/TIA 102.BAED-2013)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAJB-B-2019, Tier 1 Location Services Specification (revision and redesignation of ANSI/TIA 102.BAJB-A-2014)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 102.BAEB-C-2019, IP Data Bearer Service Specification (revision and redesignation of ANSI/TIA 102.BAEB-B-2014)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 | standards@tiaonline.org, www.tiaonline.org

ANSI/TIA 603-E-2016, Land Mobile FM or PM - Communications Equipment - Measurement and Performance Standards (revision and redesignation of ANSI/TIA 603-D-2010)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Marianna Kramarikova <standards@tiaonline.org>

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

ANSI/TIA 4950-B-2020, Requirements for Battery-Powered, Portable Land Mobile Radio Applications in Class I, II, III, Division I, Hazardous (Classified) Locations (revision and redesignation of ANSI/TIA 4950-A-2014)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Teesha Jenkins <tjenkins@tiaonline.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 | rshanley@ashrae.org, www.ashrae.org

ANSI/ASHRAE Addendum i to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 2/29/2024 | *Addenda*

ASME (American Society of Mechanical Engineers)

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

ANSI/ASME B1.20.7-1991 (R2024), Hose Coupling Screw Threads (Inch) (reaffirmation of ANSI/ASME B1.20.7-1991 (R2018)) Final Action Date: 3/5/2024 | *Reaffirmation*

ASQ (ASC Z1) (American Society for Quality)

600 N Plankinton Avenue, Milwaukee, WI 53201 | espaulding@asq.org, www.asq.org

ANSI/ASQ Z1.4-2003 (R2024), Sampling procedures and tables for inspection by attributes (reaffirmation and redesignation of ANSI/ASQ Z1.4-2003 (R2013)) Final Action Date: 3/5/2024 | *Reaffirmation*

ANSI/ASQ Z1.9-2003 (R2024), Sampling procedures and tables for inspection by variables for percent nonconforming (reaffirmation and redesignation of ANSI/ASQ Z1.9-2003 (R2013)) Final Action Date: 3/5/2024 | *Reaffirmation*

ASTM (ASTM International)

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

ANSI/ASTM F3684-2024, Guide for Tennis Court Fencing and Other Perimeter Enclosures (new standard) Final Action Date: 2/20/2024 | *New Standard*

ANSI/ASTM E2849-2018 (R2024), Practice for Professional Certification Performance Testing (reaffirmation of ANSI/ASTM E2849-2018) Final Action Date: 2/20/2024 | *Reaffirmation*

ANSI/ASTM F1371-2013 (R2024), Specification for Vegetable Peeling Machines, Electric (reaffirmation of ANSI/ASTM F1371-2013 (R2019)) Final Action Date: 2/20/2024 | *Reaffirmation*

ANSI/ASTM F2855-2019 (R2024), Specification for Chlorinated Poly(Vinyl Chloride)/Aluminum/Chlorinated Poly(Vinyl Chloride) (CPVC-AL-CPVC) Composite Pressure Tubing (reaffirmation of ANSI/ASTM F2855-2019) Final Action Date: 2/20/2024 | *Reaffirmation*

ANSI/ASTM F2988-2018 (R2024), Specification for Commercial Coffee Brewers (reaffirmation of ANSI/ASTM F2988-2018) Final Action Date: 2/20/2024 | *Reaffirmation*

ANSI/ASTM D3261-2024, Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing (revision of ANSI/ASTM D3261-2016) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM D4803-2024, Test Method for Predicting Heat Buildup in PVC Building Products (revision of ANSI/ASTM D4803-2018) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM E1388-2024, Practice for Static Headspace Sampling of Vapors from Fire Debris Samples (revision of ANSI/ASTM E1388-2017) Final Action Date: 3/1/2024 | *Revision*

ASTM (ASTM International)

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

ANSI/ASTM F714-2024, Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter (revision of ANSI/ASTM F714-2022) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F860-2024, Specification for Hot Water Sanitizing Commercial Dishwashing Machines, Multiple Tank, Rackless Conveyor Type (revision of ANSI/ASTM F860-2007 (R2019)) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F876-2024, Specification for Crosslinked Polyethylene (PEX) Tubing (revision of ANSI/ASTM F876-2023A) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F877-2024, Specification for Crosslinked Polyethylene (PEX) Hot- and Cold-Water Distribution Systems (revision of ANSI/ASTM F877-2023) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F894-2024, Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe (revision of ANSI/ASTM F894-2019) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F1281-2024, Specification for Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene (PEX-AL-PEX) Pressure Pipe (revision of ANSI/ASTM F1281-2023A) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F1360-2024, Specification for Ovens, Microwave, Electric (revision of ANSI/ASTM F1360-2017 (R2023)) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F1733-2024, Specification for Butt Heat Fusion Polyamide (PA) Plastic Fitting for Polyamide (PA) Plastic Pipe and Tubing (revision of ANSI/ASTM F1733-2020) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F2092-2024, Specification for Convection Oven Gas or Electric (revision of ANSI/ASTM F2092-2014 (R2022)) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F2623-2024, Specification for Polyethylene of Raised Temperature (PE-RT) Systems for Non-Potable Water Applications (revision of ANSI/ASTM F2623-2023) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F2769-2024, Specification for Polyethylene of Raised Temperature (PE-RT) Plastic Hot and Cold-Water Tubing and Distribution Systems (revision of ANSI/ASTM F2769-2023A) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F3253-2024, Specification for Crosslinked Polyethylene (PEX) Tubing with Oxygen Barrier for Hot- and Cold-Water Hydronic Distribution Systems (revision of ANSI/ASTM F3253-2023) Final Action Date: 2/20/2024 | *Revision*

ANSI/ASTM F3346-2024, Specification for Polyethylene of Raised Temperature/Aluminum/Polyethylene of Raised Temperature (PERT/AL/PE-RT) Composite Pressure Pipe (revision of ANSI/ASTM F3346-2019) Final Action Date: 2/20/2024 | *Revision*

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 | terry.burger@asse-plumbing.org, <https://www.>

ANSI/IAPMO Z124.5-2013 (R2024), Plastic Toilet Seats (reaffirmation of ANSI/IAPMO Z124.5-2013 (R2019)) Final Action Date: 3/8/2024 | *Reaffirmation*

ANSI/IAPMO Z124.7-2013 (R2024), Prefabricated Plastic Spa Shells (reaffirmation of ANSI/IAPMO Z124.7-2013 (R2019)) Final Action Date: 3/8/2024 | *Reaffirmation*

ANSI/IAPMO Z124.8-2013 (R2024), Plastic Liners for Bathtubs and Shower Receptors (reaffirmation of ANSI/IAPMO Z124.8-2013 (R2019)) Final Action Date: 3/8/2024 | *Reaffirmation*

ANSI/IAPMO Z1000-2019 (R2024), Prefabricated Septic Tanks (reaffirmation of ANSI/IAPMO Z1000-2019) Final Action Date: 3/8/2024 | *Reaffirmation*

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 | terry.burger@asse-plumbing.org, <https://www.iapmo.org>

ANSI/IAPMO Z1088-2019 (R2024), Pre-Pressurized Water Expansion Tanks (reaffirmation of ANSI/IAPMO Z1088-2019)
Final Action Date: 3/8/2024 | *Reaffirmation*

ISA (International Society of Automation)

3252 S. Miami Blvd, Suite 102, Durham, NC 27703 | crobinson@isa.org, www.isa.org

ANSI/ISA 18.1-2024, Annunciator Sequences and Specifications (new standard) Final Action Date: 3/7/2024 | *New Standard*

NEMA (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 1752, Arlington, VA 22209 | brian.marchionini@nema.org, www.nema.org

ANSI/NEMA SG-IPRM-2024, Smart Grid Interoperability Process Reference Manual (revision of ANSI/NEMA SG-IPRM 1-2016) Final Action Date: 3/7/2024 | *Revision*

NSF (NSF International)

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

ANSI/NSF 49-2024 (i186r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022) Final Action Date: 3/1/2024 | *Revision*

ANSI/NSF 49-2024 (i187r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022) Final Action Date: 3/8/2024 | *Revision*

ANSI/NSF 50-2024 (i202r5), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2021) Final Action Date: 3/1/2024 | *Revision*

ANSI/NSF 350-2024 (i63r8), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2022) Final Action Date: 3/5/2024 | *Revision*

ANSI/NSF 419-2024 (i12r1), Public Drinking Water Equipment Performance - Filtration (revision of ANSI/NSF 419-2018) Final Action Date: 3/6/2024 | *Revision*

ANSI/NSF/CAN 50-2024 (i172r4), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF 50-2023) Final Action Date: 3/5/2024 | *Revision*

SCTE (Society of Cable Telecommunications Engineers)

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

ANSI/SCTE 24-22-2018 (R2023), iLBCv2.0 Speech Codec Specification for Voice over IP Applications in Cable Telephony (reaffirmation of ANSI/SCTE 24-22-2018) Final Action Date: 3/5/2024 | *Reaffirmation*

ANSI/SCTE 24-23-2017 (R2023), BV32 Speech Codec Specification for Voice over IP Applications in Cable Telephony (reaffirmation of ANSI/SCTE 24-23-2017) Final Action Date: 3/5/2024 | *Reaffirmation*

ULSE (UL Standards & Engagement)

1603 Orrington Ave, Suite 2000, Evanston, IL 60201 | Jeffrey.prusko@ul.org, <https://ulse.org/>

ANSI/UL 330-2024, Standard for Safety for Hose and Hose Assemblies for Dispensing Flammable and Combustible Liquids (revision of ANSI/UL 330-2021) Final Action Date: 3/6/2024 | *Revision*

ANSI/UL 1278-2024, Standard for Safety for Movable and Wall- or Ceiling-Hung Electric Room Heaters (revision of ANSI/UL 1278-2022) Final Action Date: 3/8/2024 | *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.

ISA (International Society of Automation)

3252 S. Miami Blvd, Suite 102, Durham, NC 27703 | lfranke@isa.org, www.isa.org

BSR/ISA 75.27.01-202x, Cryogenic and Low Temperature Seat Leakage Testing of Control Valves (new standard)

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

700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

INCITS/ISO/IEC 42001:2023 [202x], Information Technology - Artificial Intelligence - Management System (identical national adoption of ISO/IEC 42001:2023)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA HN 1-2019 (R202x), Standard Manufacturer Disclosure Statement for Medical Device Security (reaffirmation of ANSI/NEMA HN 1-2019)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 1-202X, Determination of Signal to Noise Ratio (SNR) in Diagnostic Magnetic Resonance Imaging (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 2-202x, Determination of Two-Dimensional Geometric Distortion in Diagnostic Magnetic Resonance Images (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 3-202x, Determination of Image Uniformity in Diagnostic Magnetic Resonance Images (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 4-202x, Acoustic Noise Measurement Procedure for Diagnostic Magnetic Resonance Images (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 5-202x, Determination of Slice Thickness in Diagnostic Magnetic Resonance Imaging (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 6-202x, Determination of Signal-to-Noise Ratio and Image Uniformity for Single-Channel Non-Volume Coils in Diagnostic MR Imaging (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 8-202x, Characterization of the Specific Absorption Rate (SAR) for Magnetic Resonance Imaging Systems (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 9-202x, Characterization of Phased Array Coils for Diagnostic Magnetic Resonance Images (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 12-202x, Qualifications and Mapping of Geometric Distortion for Special Applications (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA MS 14-202x, Characterization of RF Coil Heating in Magnetic Resonance Imaging Systems (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA NU-2 202X, Performance Measurements of Positron Emission Tomographs (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA NU-1 1 202X, Performance Measurements of Scintillation Cameras (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA RT-1 202X, Gating Interface (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA RT-1 202X, Gating Interface (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA 1-202x, Good Refurbishment Practices for Medical Electrical Equipment (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA 2-202X, Requirements for Servicing of Medical Imaging Equipment (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA EX29-202x, Supplemental Requirements for User Information and System Function Related to Dose in CT (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA UMD P1-202x, Remanufacturing of Ultrasound Medical Devices (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR 30-202x, Quality Control Tools for Digital Projection Radiography (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-22-202x, Quality Control Manual Template for Manufacturers of Displays and Workstations Labeled for Final Interpretation in Full-Field Digital Mammography (FFDM) (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-23-202x, Quality Control Manual Template for Manufacturers of Hardcopy Output Devices Labeled for Final Interpretation in Full-Field Digital Mammography (FFDM) (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-25-202x, Computed Tomography Dose Check (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-26-202x, Access Controls for Computed Tomography Identification, Interlocks, and Logs (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-27-202x, X-ray Equipment for Interventional Procedures User Quality Control Mode (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-29-202x, Standard Attributes on CT Equipment Related to Dose Optimization and Management (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-30-202x, Quality Control Tools for Digital Projection Radiography (new standard)

NEMA (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Arlington, VA 22209 | brian.doherty@nema.org, www.nema.org

BSR/NEMA/MITA XR-31-202x, Standard Attributes on X-ray Equipment for Interventional Procedures (new standard)

NSF (NSF International)

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

BSR/NSF 18-202x (i24r1), Manual Food and Beverage Dispensing Equipment (revision of ANSI/NSF 18-2023)

NSF (NSF International)

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

BSR/NSF 173-202x (i105r1), Dietary Supplements (revision of ANSI/NSF 173-2022)

NSF (NSF International)

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

BSR/NSF 184-202x (i12r1), Residential Dishwashers (revision of ANSI/NSF 184-2019)

NSF (NSF International)

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

BSR/NSF/3-A 14159-1-202x (i9r1), Hygiene Requirements for the Design of Meat and Poultry Processing Equipment (revision of ANSI/NSF/3-A 14159-1-2019)

NSF (NSF International)

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

BSR/NSF/3-A 14159-2-202x (i9r1), Hygiene Requirements for the Design of Hand Held Tools Used in Meat and Poultry Processing (revision of ANSI/NSF/3-A 14159-2-2019)

NSF (NSF International)

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

BSR/NSF/3-A 14159-3-202x (i9r1), Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing (revision of ANSI/NSF/3-A 14159-3-2019)

NSF (NSF International)

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

BSR/NSF/CAN 61-202x (i181r1), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 60-2023)

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

BSR/TIA 455-81-C-202x, FOTP-81 Compound Flow (Drip) Test for Filled Fiber Optic Cable (new standard)

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

BSR/TIA 455-225-A-202x, Adoption of IEC 61745:2017 - End-face image analysis procedure for the calibration of optical fibre geometry test sets (identical national adoption of IEC 61745:2017 and revision of ANSI/TIA 455-225-2015)

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

BSR/TIA 455-231-A-202x, Adoption of IEC 61315:2019 - Calibration of fibre-optic power meters (identical national adoption of IEC 61315:2019 and revision of ANSI/TIA 455-231-2015)

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | tjenkins@tiaonline.org, www.tiaonline.org

BSR/TIA 604-10-D-202x, Fiber Optic Connector Intermateability Standard Type LC (revision and redesignation of ANSI/TIA 604-10C-2021)

ULSE (UL Standards & Engagement)

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

BSR/UL 979-202x, Standard for Water Treatment Appliances (new standard)

American National Standards (ANS) Announcements

Continued Stabilized Maintenance

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

Notice of ITI (INCITS) Standards to Continue as American National Standards (ANS) under Stabilized Maintenance. This announcement is made in accordance with 4.7.3 Stabilized maintenance of American National Standards of the ANSI Essential Requirements (www.ansi.org/essentialrequirements).

On February 28, 2024, the INCITS Executive Board completed their approval for the 10-year stabilized maintenance action for the standards listed below via ballot LB9209. It has been determined with this approval that these standards, that were stabilized in 2014, shall continue to be maintained under the stabilized maintenance option.

INCITS/ISO 10179:1996 [S2024] Information Technology - Processing Languages - Document Style Semantics and Specification Language (DSSSL)

INCITS/ISO/IEC 10179:1996/AM 1:2003[S2024] Information technology - Processing languages - Document Style Semantics and Specification Language (DSSSL) AMENDMENT 1: Extensions to DSSSL

INCITS/ISO 8879:1986[S2024] Information Processing - Text and Office Systems - Standard Generalized Markup Language (SGML)

INCITS 332-1999[S2024] Information Technology - Fibre Channel Arbitrated Loop (FC-AL-2)

INCITS 386-2004[S2024] Information Technology - Fibre Channel Host Bus Adapter Application Programming Interface (FC-HBA)

INCITS 399-2004[S2024] Information Technology - Fibre Channel Switch Application Programming Interface (FC-SWAPI)

INCITS 364-2003[S2024] Information technology - Fibre Channel - 10 Gigabit (10GFC)

INCITS/ISO/IEC 11160-1:1996[S2024] Information Technology - Office Equipment - Minimum Information to be Included in Specification Sheets - Printers - Part 1: Class 1 and Class 2 Printers

INCITS 37-2009[S2024] Information Technology - Programming Language APT: Processor Input Language and System-Neutral CLFILE

Rescind ANS Approval

IAPMO (WES) - International Association of Plumbing & Mechanical Officials

IAPMO/WESTAND 1-2023 ANS approval rescinded at IAPMO's request

The approval of IAPMO/WESTAND 1-2023, Water Efficiency and Sanitation Standard (revision of ANSI/IAPMO WESstand -2020) as an ANS was rescinded at IAPMO's request. A limited revision is announced for public comment in this issue of Standards Action (3/15/24). Please direct inquiries to: Alma Ramos, codes-dept@iapmo.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 link is 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.standardstolearn.org

Meeting Notices (Standards Developers)

ANSI Accredited Standards Developer

ASSP (Safety) - American Society of Safety Professionals

ASSP Z359 and ASSP Z16

Meeting: April 16-18, 2024

The American Society of Safety Professionals (ASSP) is the secretariat for the ASSP Z359 Committee for Fall Protection and Fall Arrest. The next Z359 meeting will take place in person on April 16-18, 2024. Those interested in participating can contact ASSP for additional information at LBauerschmidt@assp.org.

Meeting: April 24-25, 2024

The American Society of Safety Professionals (ASSP) is the secretariat for the ASSP Z16 Committee for Safety and Health Metrics and Performance Measures. The next Z16 meeting will take place in person on April 24-25, 2024. Those interested in participating can contact ASSP for additional information at LBauerschmidt@assp.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)
PRCA (Professional Ropes Course Association)
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.

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ISO & IEC Draft International Standards



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

COMMENTS

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

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

ORDERING INSTRUCTIONS

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

ISO Standards

Environmental management (TC 207)

ISO 14064-1:2018/DAmD 1, - Amendment 1: Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals - Amendment 1 - 5/26/2024, \$40.00

Forensic sciences (TC 272)

ISO/DIS 21043-1, Forensic sciences - Part 1: Terms and definitions - 5/27/2024, \$58.00

ISO/DIS 21043-3, Forensic Sciences - Part 3: Analysis - 5/26/2024, \$62.00

ISO/DIS 21043-4, Forensic Sciences - Part 4: Interpretation - 5/26/2024, \$67.00

ISO/DIS 21043-5, Forensic Sciences - Part 5: Reporting - 5/26/2024, \$53.00

Geosynthetics (TC 221)

ISO/DIS 13433, Geosynthetics - Determination of dynamic perforation (cone drop test) - 5/23/2024, \$46.00

Hydrogen energy technologies (TC 197)

ISO/DIS 22734-1, Hydrogen generators using water electrolysis - Part 1: General requirements, test protocols and safety requirements - 5/25/2024, \$125.00

Implants for surgery (TC 150)

ISO/DIS 16436-1, Implants for surgery - Wear of total shoulder-joint prostheses - Part 1: Force and displacement parameters for wear-testing machines and corresponding environmental conditions for test of anatomic total shoulder-joint prostheses - 5/26/2024, \$93.00

Industrial automation systems and integration (TC 184)

ISO/DIS 10303-242, Industrial automation systems and integration - Product data representation and exchange - Part 242: Application protocol: Managed model-based 3D engineering - 5/27/2024, \$155.00

Non-destructive testing (TC 135)

ISO/DIS 16831, Non-destructive testing - Ultrasonic testing - Characterization and verification of ultrasonic equipment for the determination of thickness - 5/26/2024, \$67.00

Nuclear energy (TC 85)

ISO/DIS 18510-1, Measurement of radioactivity in the environment - Bioindicators - Part 1: General guide for the sampling, conditioning and pre-treatment - 5/23/2024, \$71.00

Optics and optical instruments (TC 172)

ISO/DIS 21254-1, Lasers and laser-related equipment - Test methods for laser-induced damage threshold - Part 1: Definitions and general principles - 5/30/2024, \$98.00

Paints and varnishes (TC 35)

ISO/DIS 11908, Binders for paints and varnishes - Amino resins - General methods of test - 5/24/2024, \$40.00

Photography (TC 42)

ISO/DIS 18916, Imaging materials - Photographic activity test for enclosure materials - Processed silver-gelatin and dye-gelatin prints - 5/24/2024, \$77.00

Solid mineral fuels (TC 27)

ISO/DIS 501, Hard coal - Determination of the crucible swelling number - 5/26/2024, \$46.00

ISO/DIS 502, Coal - Assessment of caking power - Gray-King coke test - 5/27/2024, \$62.00

ISO/DIS 1017, Brown coals and lignites - Determination of acetone-soluble material (resinous substance) in the benzene-soluble extract - 5/25/2024, \$33.00

ISO/DIS 10329, Coal - Determination of plastic properties - Constant-torque Gieseler plastometer method - 5/27/2024, \$58.00

(TC 321)

ISO/DIS 32122, Transaction assurance in e-commerce - Guidelines for offering online dispute resolution services - 5/24/2024, \$62.00

Tractors and machinery for agriculture and forestry (TC 23)

ISO/DIS 11680, Machinery for forestry - Safety requirements and testing for portable pole mounted powered pruners - 5/26/2024, \$102.00

ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 27018, Information technology - Security techniques - Code of practice for protection of personally identifiable information (PII) in public clouds acting as PII processors - 5/24/2024, \$98.00

ISO/IEC DIS 29158, Automatic identification and data capture techniques - Bar code symbol quality test specification - Direct Part Mark (DPM) - 5/30/2024, \$88.00

ISO/IEC DIS 21617-1, Information technology - JPEG Trust - Part 1: Core Foundation - 5/23/2024, \$125.00

IEC Standards

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

100/4108/CDV, IEC 61937-16 ED1: Digital Audio - Interface for non-linear PCM encoded audio bitstreams applying IEC 60958 - Part 16: Non-linear PCM bitstreams according to the AVSA format, 05/31/2024

100/4118/CD, IEC TR 63558 ED1: Automatic speech recognition: Classification by acoustic and linguistic indicators in the real environment, 05/31/2024

100/4119/CD, IEC TR 63565 ED1: Visual comfort of display terminals, 05/31/2024

Automatic controls for household use (TC 72)

72/1400/CDV, IEC 60730-2-14 ED3: Automatic electrical controls - Part 2-14: Particular requirements for electric actuators, 05/31/2024

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

46A/1666/CDV, IEC 61196-1-111 ED3: Coaxial communication cables - Part 1-111: Electrical test methods - Stability of phase test methods, 05/31/2024

46A/1667/CDV, IEC 61196-1-113 ED3: Coaxial communication cables - Part 1-113: Electrical test methods - Test for attenuation constant, 05/31/2024

46/986/CDV, IEC 62037-1 ED3: Passive RF and microwave devices, intermodulation level measurement - Part 1: General requirements and measuring methods, 05/31/2024

46/987/CDV, IEC 62037-3 ED3: Passive RF and microwave devices, intermodulation level measurement - Part 3: Measurement of passive intermodulation in coaxial connectors, 05/31/2024

Electric cables (TC 20)

20/2167/CD, IEC 60245-1 ED5: Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 1: General requirements, 05/31/2024

20/2168/CD, IEC 60245-3 ED3: Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 3: Heat resistant silicone insulated cables, 05/31/2024

20/2169/CD, IEC 60245-4 ED4: Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 4: Cords and flexible cables, 05/31/2024

20/2170/CD, IEC 60245-6 ED3: Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 6: Arc welding electrode cables, 05/31/2024

20/2171/CD, IEC 60245-7 ED2: Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 7: Heat resistant ethylene-vinyl acetate rubber insulated cables, 05/31/2024

20/2172/CD, IEC 60245-8 ED2: Rubber insulated cables - Rated voltages up to and including 450/750 V - Part 8: Cords for applications requiring high flexibility, 05/31/2024

20/2166/FDIS, IEC 60502-2/AMD1 ED3: Amendment 1 - Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV) - Part 2: Cables for rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 36 kV), 04/19/2024

Electric road vehicles and electric industrial trucks (TC 69)

69/943/NP, PNW 69-943 ED1: Electric vehicle conductive charging system - Part 23-1: DC Charging with an automatic connection system, 05/03/2024

Electric traction equipment (TC 9)

9/3049/CDV, IEC 63341-1 ED1: Railway applications - Hydrogen and fuel cell systems for rolling stock - Part 1: Fuel cell power system, 05/31/2024

9/3050/CDV, IEC 63341-2 ED1: Railway applications - Hydrogen and fuel cell systems for rolling stock - Part 2: Hydrogen fuel system, 05/31/2024

Electrical apparatus for explosive atmospheres (TC 31)

31G/392/DISH, IEC 60079-11/ISH1 ED7: Interpretation Sheet 1 - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i", 04/19/2024

31G/393/DISH, IEC 60079-11/ISH2 ED7: Interpretation Sheet 2 - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i", 04/19/2024

31G/394/DISH, IEC 60079-11/ISH7 ED6: Interpretation Sheet 7 - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i", 04/19/2024

Electrical equipment in medical practice (TC 62)

62C/907/CDV, IEC 63322 ED1: Security of Medical Electrical Equipment Containing High-Activity Sealed Radioactive Sources, 05/31/2024

62D/2125/FDIS, ISO 80369-2 ED1: Small-bore connectors for liquids and gases in healthcare applications - Part 2: Connectors for breathing systems and driving gases, 04/19/2024

62D/2123/CD, ISO 80601-2-67 ED3: Medical electrical equipment - Part 2-67: Particular requirements for basic safety and essential performance of oxygen-conserving equipment, 05/03/2024

62D/2122/CD, ISO 80601-2-69 ED3: Medical electrical equipment - Part 2-69: Particular requirements for the basic safety and essential performance of oxygen concentrator equipment, 05/03/2024

62D/2124/CD, ISO 80601-2-70 ED3: Medical electrical equipment - Part 2-70: Particular requirements for the basic safety and essential performance of sleep apnoea breathing therapy equipment, 05/03/2024

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

18/1886/CD, IEC 60092-305 ED4: Electrical installations in ships - Part 305: Equipment - Accumulator (storage) batteries, 05/31/2024

Fibre optics (TC 86)

86A/2438(F)/FDIS, IEC 60794-1-201 ED1: Optical fibre cables - Part 1-201: Generic specification - Basic optical cable test procedures - Environmental test methods - Temperature cycling, Method F1, 03/29/2024

86B/4875(F)/FDIS, IEC 61300-2-27 ED2: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-27: Tests - Dust - Laminar flow, 03/29/2024

Flat Panel Display Devices (TC 110)

110/1630/CD, IEC TR 62908-1-3 ED2: Touch and interactive displays - Part 1-3: General introduction of pen touch technology, 05/03/2024

Fuel Cell Technologies (TC 105)

105/1034(F)/FDIS, IEC 62282-8-201 ED2: Fuel cell technologies - Part 8-201: Energy storage systems using fuel cell modules in reverse mode - Test procedures for the performance of power-to-power systems, 03/29/2024

105/1031/CDV, IEC 63341-3 ED1: Railway applications - Fuel cell systems for rolling stock - Part 3: Performance test methods for fuel cell power system, 05/31/2024

Fuses (TC 32)

32B/743A/FDIS, IEC 60269-2/AMD2 ED5: Amendment 2 - Low-voltage fuses - Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to K, 04/19/2024

32C/635/CDV, IEC 60691/AMD1 ED5: Amendment 1 - Thermal links - Requirements and application guide, 05/31/2024

Industrial-process measurement and control (TC 65)

65E/1075(F)/FDIS, IEC 61406-2 ED1: Identification Link - Part 2: Types/models, lots/batches, items and characteristics, 04/05/2024

65B/1251/CDV, IEC 62828-1 ED2: Reference conditions and procedures for testing industrial and process measurement transmitters - Part 1: General procedures for all types of transmitters, 05/31/2024

65B/1252/CDV, IEC 62828-2 ED2: Reference conditions and procedures for testing industrial and process measurement transmitters - Part 2: Specific procedures for pressure transmitters, 05/31/2024

65E/1077/NP, PNW 65E-1077 ED1: Industrial automation equipment and systems - Part 2: Algorithm Verification Methods, 05/31/2024

Nanotechnology standardization for electrical and electronic products and systems (TC 113)

113/819/NP, PNW TS 113-819 ED1: Nanomanufacturing - Key control characteristics - Part 6-xx: Graphene related materials - Measurement of Schottky barrier heights of 2D material-based field-effect transistors,, 05/31/2024

Nuclear instrumentation (TC 45)

45B/1055/CD, IEC 62533 ED2: Radiation protection instrumentation - Highly sensitive hand-held instruments for photon detection of radioactive material, 05/31/2024

45A/1524/FDIS, IEC/IEEE 62582-3 ED2: Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 3: Elongation at break, 04/19/2024

Performance of household electrical appliances (TC 59)

59F/489/CD, IEC TS 62885-1 ED4: Surface cleaning appliances - Part 1: General requirements on test material and test equipment, 05/31/2024

Printed Electronics (TC 119)

119/485/FDIS, IEC 62899-203 ED2 Printed electronics - Part 203: Materials - Semiconductor ink, 04/19/2024

119/482/CDV, IEC 62899-402-1 ED2: Printed electronics - Part 402-1: Printability - Measurement of qualities - Line pattern widths, 05/31/2024

Safety of hand-held motor-operated electric tools (TC 116)

116/736/CDV, IEC 62841-4-3/AMD1 ED1: Amendment 1 - Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-3: Particular requirements for pedestrian controlled walk-behind lawnmowers, 05/31/2024

Safety of machinery - Electrotechnical aspects (TC 44)

44/1027/CD, IEC 62061/AMD2 ED2: Amendment 2 - Safety of machinery - Functional safety of safety-related control systems, 05/31/2024

Semiconductor devices (TC 47)

47F/466/FDIS, IEC 62047-48 ED1: Semiconductor devices - Micro-electromechanical devices - Part 48: Test method for determining solution concentration by optical absorption using MEMS fluidic device, 04/19/2024

Solar photovoltaic energy systems (TC 82)

82/2239/FDIS, IEC 62788-1-1 ED1: Measurement procedures for materials used in photovoltaic modules - Part 1-1: Encapsulants - Polymeric materials used for encapsulation, 04/19/2024

82/2237/NP, PNW TS 82-2237 ED1: Photovoltaic pumping systems - Part 1: Performance, safety, and durability assessment for small-scale off-grid solar water pumps, 05/31/2024

Superconductivity (TC 90)

90/515(F)/FDIS, IEC 61788-23 ED3: Superconductivity - Part 23: Residual resistance ratio measurement - Residual resistance ratio of cavity-grade Nb superconductors, 03/22/2024

Surface mounting technology (TC 91)

91/1935(F)/FDIS, IEC 61189-2-808 ED1: Test methods for electrical materials, printed board and other interconnection structures and assemblies - Part 2-808: Thermal resistance of an assembly by thermal transient method, 03/29/2024

91/1941/CD, IEC 61189-3-302 ED1: Test methods for electrical materials, printed board and other interconnection structures and assemblies - Part 3-302: Detection of plating defects in unpopulated circuit boards by computed tomography (CT), 05/31/2024

(CISPR)

CIS/B/839/CD, CISPR 11 - Amendment 1 to Ed. 7: Industrial, scientific and medical equipment - Radio-frequency disturbance characteristics - Limits and methods of measurement - Requirements for air-gap wireless power transfer (WPT) - Fragment 1: General, measurement setups and operating modes + Fragment 2: Radiated limits below 150 kHz, 05/31/2024

Ultrasonics (TC 87)

87/851/FDIS, IEC 63412-1 ED1: Ultrasonics - Shear-wave elastography - Part 1: Specifications for the user interface, 04/19/2024

Winding wires (TC 55)

55/2012/CDV, IEC 60317-27-1/AMD1 ED1: Amendment 1 - Specifications for particular types of winding wires - Part 27-1: Paper tape covered round copper wire, 05/31/2024

ISO/IEC JTC 1, Information Technology

(JTC1)

JTC1-SC41/417/FDIS, ISO/IEC 30141 ED2: Internet of Things (IoT) - Reference architecture, 05/03/2024

JTC1-SC41/416/DTR, ISO/IEC TR 30194 ED1: Internet of Things (IoT) and digital twin - Best practices for use case projects, 05/03/2024



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 22662:2024](#), Milk and milk products - Determination of lactose content by high-performance liquid chromatography (reference method), \$81.00

Aircraft and space vehicles (TC 20)

[ISO 17520:2024](#), Space environment (natural and artificial) - Cosmic ray and solar energetic particle penetration inward the magnetosphere - Method of determination of the effective vertical cut-off rigidity, \$124.00

Anaesthetic and respiratory equipment (TC 121)

[ISO 18562-1:2024](#), Biocompatibility evaluation of breathing gas pathways in healthcare applications - Part 1: Evaluation and testing within a risk management process, \$194.00

[ISO 18562-2:2024](#), Biocompatibility evaluation of breathing gas pathways in healthcare applications - Part 2: Tests for emissions of particulate matter, \$124.00

[ISO 18562-3:2024](#), Biocompatibility evaluation of breathing gas pathways in healthcare applications - Part 3: Tests for emissions of volatile organic substances, \$124.00

[ISO 18562-4:2024](#), Biocompatibility evaluation of breathing gas pathways in healthcare applications - Part 4: Tests for leachables in condensate, \$124.00

Facilities management (TC 267)

[ISO 41017:2024](#), Facility management - Guidance on emergency preparedness and management of an epidemic, \$166.00

Ferrous metal pipes and metallic fittings (TC 5)

[ISO 16132:2024](#), Ductile iron pipes and fittings - Seal coats for cement mortar linings, \$124.00

Industrial automation systems and integration (TC 184)

[ISO 8000-114:2024](#), Data quality - Part 114: Master data: Application of ISO/IEC 21778 and ISO 8000-115 to portable data, \$81.00

Nuclear energy (TC 85)

[ISO 4917-4:2024](#), Design of nuclear power plants against seismic events - Part 4: Components, \$223.00

Railway applications (TC 269)

[ISO 24221:2024](#), Railway applications - Braking system - General requirements, \$166.00

Rubber and rubber products (TC 45)

[ISO 3384-1:2024](#), Rubber, vulcanized or thermoplastic - Determination of stress relaxation in compression - Part 1: Testing at constant temperature, \$124.00

Safety devices for protection against excessive pressure (TC 185)

[ISO 4126-10:2024](#), Safety devices for protection against excessive pressure - Part 10: Sizing of safety valves and bursting discs for gas/liquid two-phase flow, \$250.00

Small tools (TC 29)

[ISO 21538:2024](#), Blanks for superabrasive cutting-off wheels - Mounting and fixing bores - Building construction and civil engineering, \$81.00

Technical drawings, product definition and related documentation (TC 10)

[ISO 4172:2024](#), Technical product documentation (TPD) - Construction documentation - Drawings for the assembly of prefabricated structures, \$124.00

Technical systems and aids for disabled or handicapped persons (TC 173)

[ISO 6273:2024](#), Assistive products - Accessibility guidelines and requirements to survey the needs of persons with sensory disabilities for assistive products and services, \$166.00

Textiles (TC 38)

[ISO 105-B04:2024](#), Textiles - Tests for colour fastness - Part B04: Colour fastness to artificial weathering: Xenon arc fading lamp test, \$124.00

Tractors and machinery for agriculture and forestry (TC 23)

[ISO 7448:2024](#), Machinery for forestry - Machine-fed woody biomass reduction chippers, grinders, and shredders - Vocabulary, \$194.00

[ISO 28139:2019/Amd 1:2024](#), - Amendment 1: Equipment for crop protection - Knapsack combustion engine-driven airblast sprayers - Safety and environmental requirements and test methods - Amendment 1, \$23.00

[ISO 21622-3:2024](#), Irrigation techniques - Remote monitoring and control for irrigation - Part 3: Interoperability, \$278.00

Welding and allied processes (TC 44)

[ISO 15610:2024](#), Specification and qualification of welding procedures for metallic materials - Qualification based on tested welding consumables, \$54.00

ISO Technical Reports

Paints and varnishes (TC 35)

[ISO/TR 20659-1:2024](#), Rheological test methods - Fundamentals and interlaboratory comparisons - Part 1: Determination of the yield point, \$124.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 4922-2:2024](#), Information security - Secure multiparty computation - Part 2: Mechanisms based on secret sharing, \$194.00

[ISO/IEC 30137-1:2024](#), Information technology - Use of biometrics in video surveillance systems - Part 1: System design and specification, \$223.00

[ISO/IEC TS 24462:2024](#), Information security, cybersecurity and privacy protection - Ontology building blocks for security and risk assessment, \$223.00

IEC Standards

Electrical accessories (TC 23)

[IEC 61084-2-1 Amd.1 Ed. 2.0 b:2024](#), Amendment 1 - Cable trunking systems and cable ducting systems for electrical installations - Part 2-1: Particular requirements - Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings, \$26.00

[IEC 61084-2-1 Ed. 2.1 b:2024](#), Cable trunking systems and cable ducting systems for electrical installations - Part 2-1: Particular requirements - Cable trunking systems and cable ducting systems intended for mounting on walls and ceilings, \$386.00

[IEC 61084-2-2 Amd.1 Ed. 2.0 b:2024](#), Amendment 1 - Cable trunking systems and cable ducting systems for electrical installations - Part 2-2: Particular requirements - Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor, \$13.00

[IEC 61084-2-2 Ed. 2.1 b:2024](#), Cable trunking systems and cable ducting systems for electrical installations - Part 2-2: Particular requirements - Cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor, \$567.00

[IEC 61084-2-4 Amd.1 Ed. 2.0 b:2024](#), Amendment 1 - Cable trunking systems and cable ducting systems for electrical installations - Part 2-4: Particular requirements - Service poles and service posts, \$26.00

[IEC 61084-2-4 Ed. 2.1 b:2024](#), Cable trunking systems and cable ducting systems for electrical installations - Part 2-4: Particular requirements - Service poles and service posts, \$567.00

Industrial-process measurement and control (TC 65)

[IEC 61784-5-22 Ed. 1.0 b:2024](#), Industrial networks - Profiles - Part 5-22: Installation of fieldbuses - Installation profiles for CPF 22, \$148.00

Tools for live working (TC 78)

[IEC 62819 Ed. 1.0 b Cor.1:2024](#), Corrigendum 1 - Live working - Eye, face and head protectors against the effects of electric arc - Performance requirements and test methods, \$0.00

IEC Technical Reports

Electromagnetic compatibility (TC 77)

[IEC/TR 61000-1-9 Ed. 1.0 en:2024](#), Electromagnetic compatibility (EMC) - Part 1-9: General - Evaluation of uncertainty for the measurement of harmonic current emissions, \$193.00

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 133 – Clothing sizing systems - Size designation, size measurement methods and digital fittings

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 133 – *Clothing sizing systems - size designation, size measurement methods and digital fittings* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by South Africa (SABS).

ISO/TC 133 operates under the following scope:

Standardization of a system of size designations resulting from the establishment of one or more sizing systems for clothes based on size designation, body size measurement methods for clothing and for digital garment fitting.

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).

Call for U.S. TAG Administrator

ISO/TC 228 – Tourism and related services

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 228 – *Tourism and related services* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by Spain (UNE).

ISO/TC 228 operates under the following scope:

Standardization of the terminology and specifications of the services offered by tourism service providers, including related activities, touristic destinations and the requirements of facilities and equipment used by them, to provide tourism buyers, providers and consumers with criteria for making informed decisions.

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).

Call for U.S. TAG Administrator

ISO/TC 26 – Copper and copper alloys

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 26 – *Copper and copper alloys* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by China (SAC).

ISO/TC 26 operates under the following scope:

Standardization in the field of unwrought, wrought and cast products made from copper and copper alloys, including material specifications, dimensions and tolerances, and methods of testing peculiar for copper and copper alloys.

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).

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 275 – Sludge recovery, recycling, treatment and disposal

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 275 – *Sludge recovery, recycling, treatment and disposal* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by France (AFNOR).

ISO/TC 275 operates under the following scope:

Standardization of the methods for characterizing, categorizing, preparing, treating, recycling and managing sludge and products from urban wastewater collection systems, night soil, storm water handling, water supply treatment plants, wastewater treatment plants for urban and similar industrial waters. It includes all sludge that may have similar environmental and/or health impacts.

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).

Call for U.S. TAG Administrator

ISO/TC 71 – Concrete, reinforced concrete and pre-stressed concrete and Subcommittees

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 71 – *Concrete, reinforced concrete and pre-stressed concrete*, or any of the active Subcommittees, and therefore ANSI is not a member of these committees. The Secretariats for the committees are held by:

ISO/TC 71 – *Concrete, reinforced concrete and pre-stressed concrete*: Japan (JISC)

ISO/TC 71/SC 1 – *Test methods for concrete*: Israel (SII)

ISO/TC 71/SC 3 – *Concrete production and execution of concrete structures*: Norway (SN)

ISO/TC 71/SC 4 – *Performance requirements for structural concrete*: Russian Federation (GOST R)

ISO/TC 71/SC 5 – *Simplified design standard for concrete structures*: Korea (KATS)

ISO/TC 71/SC 6 – *Non-traditional reinforcing materials for concrete structures*: Japan (JISC)

ISO/TC 71/SC 7 – *Maintenance and repair of concrete structures*: Korea (KATS)

ISO/TC 71/SC 8 – *Environmental management for concrete and concrete structures*: Japan (JISC)

ISO/TC 71 operates under the following scope:

Standardization of the technology of concrete, of the design and construction of concrete, reinforced concrete and pre-stressed concrete structures, so as to ensure progressive development both in quality and in price reduction; and of definitions and terms, as well as testing procedures, to facilitate international exchange of research work.

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/ASHRAE Addendum o
to ANSI/ASHRAE Standard 62.2-2022**

Public Review Draft

**Proposed Addendum o to
Standard 62.2-2022, Ventilation and
Acceptable Indoor Air Quality in
Residential Buildings**

**First Public Review (February 2024)
(Draft shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHARE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092

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

FOREWORD

Proposed Addendum o replaces hydraulic diameter with equivalent diameter in the prescriptive duct sizing section of the Standard. The purpose is to more accurately estimate the static pressure loss for rectangular (and other non-circular) ducts.

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

Addendum o to 62.2-2022

Revise Section 5.4 as shown below.

5.4 Airflow Measurement. The airflow required by this section is the quantity of indoor air exhausted by the ventilation system as installed and shall be measured according to the ventilation equipment manufacturer instructions, or by using a flow hood, flow grid, or other airflow measuring device at the mechanical ventilation system's terminals/grilles or in the connected ventilation ducts.

Exception to 5.4: Manufacturer design criteria or the prescriptive requirements of Table 5-3 shall be permitted in place of a measurement. When using Table 5-3, the airflow rating according to Section 7.1 shall meet or exceed a static pressure of 0.25 in. of water (62.5 Pa). Use of Table 5-3 is limited to duct systems not exceeding 25 ft (8 m) in length, duct systems with no more than three (3) elbows, and duct systems with exterior termination fittings having an hydraulic equivalent diameter greater than or equal to the minimum duct diameter and not less than the hydraulic equivalent diameter of the fan outlet.

Table 5-3 Prescriptive Duct Sizing

Fan Airflow Rating, CFM at minimum static pressure of 0.25 in. of water (L/s at minimum 62.5 Pa)	≤50 (25)	≤80 (40)	≤100 (50)	≤125 (60)	≤150 (70)	≤175 (85)	≤200 (95)	≤250 (120)	≤350 (165)	≤400 (190)	≤450 (210)	≤700 (330)	≤800 (380)
Duct Type	Minimum <u>Equivalent Duct Diameter</u> , in. (mm) ^{a,b,f,g,h}												
Rigid duct	4 ^e (100)	5 (125)	5 (125)	6 (150)	6 (150)	7 (180)	7 (180)	8 (205)	9 (230)	10 (255)	10 (255)	12 (305)	12 ^d (305)
Flex duct ^c	4 (100)	5 (125)	6 (150)	6 (150)	7 (150)	7 (180)	8 (205)	8 (205)	9 (230)	10 (255)	NP	NP	NP

a. ~~For circular ducts, the equivalent diameter, D_e , is equal to the duct diameter. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.~~

For rectangular ducts with cross-sectional dimensions a and b,

$$D_e = \sqrt{4(ab)/\pi}$$

BSR/ASHRAE Addendum o to ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*

First Public Review Draft

For flat oval ducts,

$$D_e = \frac{1.55 \left[\left(\frac{\pi a^2}{4} \right) + a(A - a) \right]^{0.625}}{[\pi a + 2(A - a)]^{0.250}}$$

where A and a are the length of the major and minor axes, respectively, of the flat oval duct.

- b. NP = application of the prescriptive table is not permitted for this scenario.
- c. Use of this table for verification of flex duct systems requires flex duct to be fully extended and any flex duct elbows to have a minimum bend radius to duct diameter ratio of 1.0.
- d. For this scenario, use of elbows is not permitted.
- e. For this scenario, 4 in. (100 mm) oval duct shall be permitted, provided the minor axis of the oval is greater than or equal to 3 in. (75 mm).
- f. 3.25" x 10" rectangular duct shall be permitted as a substitute for circular duct diameters up to 6".
- g. 3.25" x 14" rectangular duct shall be permitted as a substitute for circular duct diameters up to 7".
- h. 4.5" x 18" rectangular duct shall be permitted as a substitute for circular duct diameters up to 10".

Add new reference to Informative Appendix D as shown below.

ASHRAE Handbook—2021 Fundamentals. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Atlanta, GA 30092
Table 5-3

**Public Review Draft
March 2024**

**Proposed Revisions
for
ASME B20.1-20XX
Revision to
ASME B20.1-2021
Safety Standard for Conveyors and Related
Equipment**

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

Approved Revisions to B20.1-20XX

TN 19-2795

Proposed Revision to B20.1 Sections 5.3(a) Lubrication:

Conveyors shall not be manually lubricated while in operation if it exposes personnel to hazards unless it is impractical to shut them down for lubrication. Only trained and qualified personnel who are aware of the hazards of the conveyor in motion shall be allowed to lubricate a conveyor that is operating.

***Rationale:** Some conveyors are designed with remote activated lubrication systems designed to ensure through lubrication while keeping people away from the point of operation. As written, this type of system is not promoted and must first be deemed impractical. Suggest adding wording to indicate the presence of a worker near the point of operation and therefore possibly exposed to a hazard.*

TN 19-2811

NEW Proposed Revision to B20.1 Sections 5.11.2(c)(2) and (3) E-Stop Devices:

5.11.2(c)(2) E-Stop Devices

5.11.2(c)(2) Emergency stop devices that are located away from a conveyor or conveyor system, such that their function is not obvious, shall identify the equipment that is controlled by the emergency stop device.

5.11.2(c)(~~2-3~~) The emergency stop device shall act directly on the control of the conveyor concerned and not depend on the stopping of any other equipment. The emergency stop devices shall be installed so that they cannot be overridden from other locations.

***Rationale:** Since the E-stop is mounted on a wall or column it is not intuitive what its purpose is.*

TN 19-2812

Proposed Revision to B20.1 Para. 5.2(d) Maintenance (Repair):

5.2 Maintenance (Repair)

(a) Maintenance....

(d) When a conveyor is stopped for maintenance or service, the starting devices, prime movers, or powered accessories shall be locked or tagged out in accordance with a formalized procedure designed to protect all persons or groups involved with the conveyor against an unexpected restart. Maintenance Personnel ~~should~~ shall be alerted to ~~the~~ hazardous ~~of~~ stored energy (including, but not limited to, hydraulic, pneumatic, suspended weight, thermal), which may exist after the power source is locked out. Refer to ANSI/ASSP Z244.1-~~1982~~ and OSHA Standard 29 CFR 1910.147.

***Rationale:** Section 5.2 (d) is written under the premise that electrical energy (starters, motors, & powered accessories) is to be “locked or tagged out” to prevent against unexpected conveyor restart. It goes further to state that Personnel “shall” be alerted to the hazard of stored energy, which may exist after the power source is locked out.*

Current Lock Out / Tag Out procedures require that all sources of energy be properly identified on a LOTO placard and properly controlled prior to performing maintenance or service on the conveyor.

TN 20-2748

Proposed Revision to B20.1, Para. 5.17 Dust Hazards:

5.17 Dust Hazards

Bulk material handling conveyor systems have the potential to create hazardous dust conditions. While this Standard does not address combustible, explosive or respirable dust hazards, they need to be considered in the overall system design and operation. Follow OSHA and MSHA standards that address these hazards.

***Rationale:** In keeping with the B20 Committee's directive (see October 22, 2020 minutes, pages 6-7), the Project Team has agreed on the above disclaimer language and submits it for first consideration ballot.*

TN 21-11

Proposed Revision to B20.1, New Para. 5.17 Dust Hazards:

5.17 Dust Hazards

Bulk material handling conveyor systems have the potential to create hazardous dust conditions. While this Standard does not address combustible, explosive or respirable dust hazards, they ~~need to shall~~ be considered in the overall system design and operation. ~~Follow OSHA and MSHA standards that address these hazards.~~ Follow applicable national, state, and local standards and codes to mitigate hazardous dust conditions.

Rationale:

1. The preferred ASME wording guide uses "shall".
2. The proposed wording alerts the reader that there are more legal codes and standards than OSHA and MSHA standards that should be considered.

TN 23-796

Proposed Revision to B20.1, Paras. 4, 6.8.3, 6.13 Gendered Pronouns:

4 DEFINITIONS

qualified person: a person who, by possession of a recognized degree or certificate of professional standing or by extensive knowledge, training, and experience, has successfully demonstrated ~~his/her~~ the ability to solve problems relating to the subject matter and work.

6.8.3 Operation and Maintenance

(a) When a mobile conveyor exposed to high wind conditions creates a hazard to personnel, normal operation shall cease, and, if necessary, the conveyor shall be moved to a parking position and secured.

(b) When an operator is required on a mobile conveyor, a platform or cab shall be constructed for ~~his~~ the operator's protection.

The conveyor shall be designed so that, when the operator is on the platform engaged in the normal performance ~~of~~ his duties, ~~he~~ the operator will be protected from injury.

(c) Where operation is such that there is....

6.13 Safety Considerations for Shuttle Conveyors, Belt Trippers, and Transfer Cars

(h) When a person is required to move with the shuttle, tripper, or transfer car, a workstation shall be provided for ~~his/her~~ [that person's](#) protection.

Rationale: *ASME codes and standards should not use gendered pronouns (i.e., he, she, he/she, his, her, his/her, him, him/her, himself, and herself) for generic references to people. Neither should plural they or them replace a singular pronoun that refers to a singular antecedent. A new paragraph in the style guide, SG1-10, documents techniques for eliminating gendered pronouns.*

When writing new standards or new sections of existing standards, avoid using pronouns. Carefully crafted, precisely worded sentences will not require pronouns. When revising existing standards, review for gendered pronouns and revise to gender-neutral language.

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

NSF/ANSI Standard
for Food Equipment –

Manual Food and Beverage Dispensing Equipment

•

5.1.4 Food zones for which CIP is intended shall be designed and manufactured so that cleaning and sanitizing solutions may be circulated or passed throughout the fixed system. The design shall ensure that cleaning and sanitizing solutions contact all food contact surfaces. The system shall be self-draining or capable of being completely evacuated. Equipment and appurtenances designed for CIP shall have a section of the cleaned area accessible for inspection or shall provide for other acceptable inspection methods. The manufacturer shall provide written instructions for the cleaning and sanitizing of all food zone surfaces for which CIP is intended **including those in remote product supply systems**. The type and concentration of sanitizing agent recommended in the instructions by the manufacturer shall comply with 40 C.F.R. § 180.940.

NOTE — CIP procedures are not required for oil distribution systems that only circulate fresh, edible oil throughout the fixed system.

5.27 Temperature-indicating devices for hot and cold food storage

5.27.1 Storage compartments intended for the hot or cold storage of time / temperature control for safety food or beverages shall have a securely mounted temperature-indicating device that clearly displays the air temperature in the compartment. Temperature-indicating devices shall be accurate to ± 2 °F (± 1 °C) and shall be graduated in increments no greater than 2 °F (1 °C) in the intended range of compartment temperatures. The device shall be removable and easy to read. The sensing element of the device shall be easily cleanable and located to reflect the coolest temperature of a heated compartment or the warmest temperature of a refrigerated compartment. A temperature-indicating device is not required in storage compartments intended for frozen or semi-frozen food only or designed to conform to the requirements of Section [6.4](#).

5.27.2 Product reservoirs intended to hold time / temperature control for safety food or beverage before dispensing shall have a securely mounted temperature-indicating device that clearly displays the temperature of the product. Sensors may be positioned to indirectly measure the product temperature if the temperature-indicating system is designed to display the actual product temperature. Temperature-indicating devices shall be accurate to ± 2 °F (± 1 °C) and shall be graduated in increments no greater than 2 °F (1 °C) in the intended range of compartment temperatures. The device shall be removable and easy to read. The sensing element of the device shall be easily cleanable and located to reflect the representative temperature of the product. A temperature-indicating device is not required in product reservoirs intended only for frozen or semi-frozen food or designed to conform to the requirements of Section [6.4](#).

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5.27.3 Remote product supply systems (if provided) shall have a securely mounted temperature indicating device that clearly displays the temperature of the product. Sensors may be positioned to indirectly measure the product temperature if the temperature indicating system is designed to display the actual product temperature. Temperature indicating devices shall be accurate to ± 2 °F (± 1 °C) and shall be graduated in increments no greater than 2 °F (1 °C) in the intended range of product temperatures. The device shall be removable and easy to read. The sensing element of the device shall be easily cleanable and located to reflect the warmest representative temperature of the product.

6 Performance

6.1 Cleaning and sanitization procedures

6.1.1 Performance requirement

Cleaning and sanitization procedures recommended by the manufacturer shall effectively clean and sanitize food contact surfaces.

NOTE — This requirement applies to manual cleaning and sanitizing procedures and to CIP and sanitizing procedures recommended by the manufacturer.

6.1.2 Test method

Microbiological methods for stock culture preparation, and enumeration / analysis *Escherichia coli* shall be performed as specified in Annex [N-1](#).

6.1.2.1 The equipment shall be filled with the *E. coli* suspension.

If a remote product supply system is being tested, the product supply lines shall be configured to the manufacturer's recommended installation restrictions (see Section 7.5) indicated in the manual prior to testing

6.1.2.2 The equipment shall be operated so that food contact surfaces are exposed to the *E. coli* suspension. If a remote product supply system is being tested, the remote line set shall be filled with *E. coli* suspension so all food contact surfaces are exposed (i.e., no air in remote line set). The equipment shall then be cleaned in place according to the manufacturer's instructions and refilled with sterile buffered dilution water (SBDW). The SBDW shall be dispensed and five 100-mL samples shall be collected at intervals from the start of the dispensing until the unit is empty. When adequate sample volumes cannot be realized, more SBDW shall be added accordingly. The equipment shall then be operated so that food contact surfaces intended for CIP are exposed to the SBDW. Sufficient SBDW shall then be dispensed. The challenge organisms present in each sample shall be collected and enumerated using the Standard Total Coliform Membrane Filter Procedure in accordance with *Standard Methods*.

6.1.3 Acceptance criteria

For each sample, the total counts on the initial inoculum density (N_i) of at least 1,000,000 (1×10^6) and the total counts on the colony-forming units (cfus) recovered (N_f) shall demonstrate a reduction equal to or greater than 99.9999% (6 log). The log reduction, R , is calculated from the following equation:

$$R = \log_{10} (N_i / N_f)$$

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where

N_i = initial inoculum density (cfu/mL)
 N_f = the number of cfu recovered in each sample (cfu/mL)

If $N_f < 1$, the samples shall be considered acceptable.

6.2 Temperature requirements – Cold time / temperature control for safety food and beverages

6.2.1 Performance requirement

Product reservoirs ~~Dispensing equipment~~ intended for the cold holding of time / temperature control for safety food and beverages prior to their being dispensed shall be capable of maintaining product at a temperature of 41 °F (5 °C) or below.

6.2.2 Test method

6.2.2.1 Apparatus and materials

- temperature-controlled testing chamber or room; and
- intended food or beverage product; and
- remote temperature sensing devices with accuracies of ± 1 °F (± 0.6 °C).

6.2.2.2 Procedure

The ability of manual food and beverage dispensing equipment to maintain its contents at 41 °F (5 °C) or below shall be evaluated by monitoring the temperature of the intended food or beverage product in the product reservoir, and in the product holding area of the dispensing head, and in the remote product supply systems (if provided) over a 4-h period in an 86 ± 3 °F (30 ± 2 °C) ambient environment.

Prior to the test, the equipment shall be allowed to establish thermal equilibrium according to the manufacturer's instructions or shall be allowed to cycle on and off at least two full times at room temperature (70 ± 5 °F [21 ± 2.8 °C]). The product reservoir shall then be filled with the intended food or beverage product at 35 ± 1 °F (1.7 ± 0.6 °C). The system shall then be purged of entrapped air by dispensing a small amount of the product.

Remote temperature sensors with accuracies of ± 1 °F (± 0.6 °C) shall be used to monitor the product temperature. A sensor shall be placed 1 ± 0.1 in (25 ± 3 mm) below the product level in the middle of the product reservoir and in the product holding area of the dispensing head. If a dispenser has a remote product supply system, a sensor shall be placed in the product tubing, 5 ± 0.25 in (127 ± 6.35 mm) from each end and in the middle of the remote product supply line(s).

The equipment shall be placed in a test chamber with an ambient air temperature of 86 ± 3 °F (30 ± 2 °C); or the ambient room air temperature shall be raised to 86 ± 3 °F (30 ± 2 °C). The chamber or room shall not have a vertical temperature gradient exceeding 1.5 °F/ft (2.5 °C/m). Before initiating the 4-h timed test period, the temperature of the food or beverage product shall be confirmed to be 41 °F (5 °C) or below.

The product temperature in the product reservoir, and in the product holding area of the dispensing head, and in the remote product supply systems (if provided) shall be monitored. Temperatures shall be measured

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and recorded every 5 min for 4 h.

Units that are designed with a temperature-indicating system that indirectly measures product temperature, as permitted in Section [5.27.2](#) or [5.27.3](#), shall be permitted to reach a steady state temperature for the purpose of comparing the temperature reading of the temperature-indicating device to the temperature sensed by the test sensor located in the product reservoir. This comparison can be made at any point in time during the test and does not need to be made through the entire test duration.

6.2.3 Acceptance criteria

The temperature at each thermocouple location shall not exceed 41 °F (5 °C) during the 4-h test period.

Units that are designed with a temperature-indicating system that indirectly measures product temperature, as permitted in Section [5.27.2](#) or [5.27.3](#), shall be capable of displaying a temperature within ± 2 °F (± 1 °C) of the temperature sensed by the test sensor located in the product reservoir.

6.3 Temperature requirements – Hot time / temperature control for safety food and beverages

6.3.1 Performance requirement

~~Product reservoirs~~ **Dispensing equipment** intended for the hot holding of time / temperature control for safety food and beverages prior to their being dispensed shall be capable of maintaining product at a temperature of 140 °F (60 °C) or greater.

6.3.2 Test method

6.3.2.1 Apparatus and materials

- temperature-controlled testing chamber or room; and
- intended food or beverage product; and
- remote temperature sensing devices with accuracies of ± 1 °F (± 0.6 °C).

6.3.2.2 Procedure

The ability of manual food and beverage dispensing equipment to maintain its contents at 140 °F (60 °C) or greater shall be evaluated by monitoring the temperature of the intended food or beverage product in the **product reservoir**, **and in the product holding area of the dispensing head**, **and in the remote product supply systems (if provided)** over a 4-h period in a 73 ± 3 °F (23 ± 2 °C) ambient environment.

Prior to the test, the equipment shall be allowed to establish thermal equilibrium according to the manufacturer's instructions or shall be allowed to cycle on and off at least two full times at room temperature (70 ± 5 °F [21 ± 2.8 °C]). The product reservoir shall then be filled with the intended food or beverage product. The system shall then be purged of entrapped air by dispensing a small amount of the product. The product shall be maintained at 140 °F (60 °C) or greater.

Remote temperature sensors with accuracies of ± 1 °F (± 0.6 °C) shall be used to monitor the product temperature. A sensor shall be placed 1 ± 0.1 in (25 ± 3 mm) below the product level in the middle of the product reservoir and in the product holding area of the dispensing head. **If a dispenser has a remote product supply system, a sensor shall be placed in the product tubing, 5 ± 0.25 in (127 ± 6.35 mm) from each end and in the middle of the remote product supply line(s).**

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The equipment shall be placed a test chamber or room with an ambient air temperature of 73 ± 3 °F (23 ± 2 °C). The chamber or room shall not have a vertical temperature gradient exceeding 1.5 °F/ft (2.5 °C/m). Before initiating the 4-h timed test period, the temperature of the food or beverage product shall be confirmed to be greater than 140 °F (60 °C).

The product temperature in the product reservoir, and in the product holding area of the dispensing head, and in the remote product supply systems (if provided) shall be monitored. Temperatures shall be measured and recorded every 5 min for 4 h.

Units that are designed with a temperature-indicating system that indirectly measures product temperature, as permitted in Section 5.27.2 or 5.27.3, shall be permitted to reach a steady state temperature for the purpose of comparing the temperature reading of the temperature-indicating device to the temperature sensed by the test sensor located in the product reservoir. This comparison can be made at any point in time during the test and does not need to be made through the entire test duration.

6.3.3 Acceptance criteria

The temperature at each thermocouple location shall not be less than 140 °F (60 °C) during the 4-h test period.

Units that are designed with a temperature-indicating system that indirectly measures product temperature, as permitted in Section 5.27.2 or 5.27.3, shall be capable of displaying a temperature within ± 2 °F (± 1 °C) of the temperature sensed by the test sensor located in the product reservoir.

7.5 Remote product supply systems intended for CIP

If a remote product supply system is used that is intended for CIP, the manual shall indicate the following information regarding the manufacturers recommended installation restrictions for the remote product supply lines:

- maximum overall length of the product supply line;
- maximum number of line bends;
- minimum bend radius;
- minimum bend angle;
- maximum number of vertical deflections;
- maximum peak-to-peak vertical deflection height;
- maximum overall end-to-end vertical elevation change;
- remote product line diameter; and
- CIP pump specification – manufacturer model number.

Instructions shall provide provisions for remote line set installation such that they remain in their intended configuration and prevent sagging.

***Rationale:** NSF/ANSI 6 currently contains criteria for temperature control and CIP of remote product lines. NSF/ANSI 18 covers many dispensers that also use remote product lines but the products being dispensed were not TCS beverages. If an NSF/ANSI 18 dispenser were designed with remote product lines that would be intended to include TCS beverages, criteria from NSF/ANSI 6 could be added to NSF/ANSI 18 to address the temperature control and CIP criteria necessary for an NSF/ANSI 18 dispenser with remote product lines intended to dispense TCS foods/beverages.*

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NSF/ANSI Standard
for Health Sciences –

Dietary Supplements

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5 Product requirements

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5.3 Contaminants

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5.3.6 Industrial contaminants

5.3.6.1 Contaminants in fish oil

For ingredients and products containing ~~natural~~ fish oils and concentrated EPA/DHA-rich oils derived from fish, manufacturers shall have controls in place to screen for polychlorinated biphenyls (PCBs), polychlorinated dibenzo-para-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and dioxin-like PCBs in the oil ingredient.

The content of dioxins and furans expressed as the sum of PCDDs and PCDFs shall not exceed 2 pg WHO-TEQ per gram of oil and dioxin-like PCBs shall not exceed 3 pg WHO-TEQ per gram of oil.²¹ The dioxin-like PCBs shall include the International Union of Pure and Applied Chemistry (IUPAC) congeners 77, 81, 105, 114, 118, 123, 126, 156, 157, 167, 169 and 189.

~~In the event that the per gram limits for dioxins and furans or dioxin-like PCBs are exceeded, a daily dose-based limit shall be applied. The daily dose of the sum of the dioxins / furans and the dioxin-like PCBs shall not exceed 20 pg.~~¹⁵

~~NOTE — The acceptable daily dose of 20 pg/d is based on the Health Canada Fish Oil Monograph¹⁵ limit of 2 pg/kg bw per day. Due to the targeted marketing of fish oils to children, a body weight of a child (10 kg) was used to derive the daily dose of 20 pg/d for dioxin / furan (PCDD and PCDF).~~

Total PCBs shall not exceed 0.09 mg/kg of oil (w/w). Total PCBs shall, ~~at a minimum,~~ include all 209 IUPAC congeners ~~28, 52, 101, 118, 138, 153, and 180.~~

¹⁵ ~~Health Canada. Address Locator 0900C2, Ottawa, Ontario K1A 0K9, Canada. <<https://www.canada.ca/en/healthcanada.html>>~~

²¹ World Health Organization. 20 Avenue Appia, 1211 Geneva 27, Switzerland. <www.who.int>

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Rationale: NSF is updating the Normative Reference Statement located as the first paragraph of every Standard. This et al ballot reflects the revised statement consistent throughout.

NSF/ANSI Standard for Residential Equipment –

Residential Dishwashers

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2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision and parties are encouraged to investigate the possibility of applying the most recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

~~The following documents contain provisions that, through reference, constitute provisions of this Standard. At the time this Standard was balloted, the editions listed below were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated.~~

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Rationale: NSF is updating the Normative Reference Statement located as the first paragraph of every Standard. This et al ballot reflects the revised statement consistent throughout.

NSF/ANSI/3-A Standard
for Food Processing Equipment –

Hygiene Requirements for the Design of Meat and Poultry Processing Equipment

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2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision and parties are encouraged to investigate the possibility of applying the most recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

~~The following documents contain provisions that, through reference, constitute provisions of this NSF/ANSI/3-A Standard. At the time of publication, the editions indicated were valid. All referenced documents are subject to revision, and parties are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.~~

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NSF/ANSI/3-A Standard
for Food Processing Equipment –

Hygiene Requirements for the Design of Handheld Tools Used in Meat and Poultry Processing

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NSF/ANSI/3-A Standard
for Food Processing Equipment –

Hygiene Requirements for the Design of Mechanical Belt Conveyors Used in Meat and Poultry Processing

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2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision and parties are encouraged to investigate the possibility of applying the most recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

~~The following documents contain provisions that, through reference, constitute provisions of this NSF/ANSI/3-A Standard. At the time of publication, the editions indicated were valid. All referenced documents are subject to revision, and parties are encouraged to investigate the possibility of applying the most recent editions of the documents listed below.~~

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

NSF/ANSI/CAN Standard
for Drinking Water Additives –

Drinking Water System Components – Health Effects

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2 Definitions

Terms used in this standard that have a specific technical meaning are defined here.

2.X identified compound with standard: A compound identification made based on the daily analysis (initial or continuing calibration) of an authentic standard of an analyte. Retention time and mass spectrum are used for qualitative determination of the analyte. A calibration curve is used for quantitative determination of the analyte.

2.X identified compound without standard: A compound identification based on mass spectral matches between the analyte and mass spectral libraries (commercial or private), or on spectral interpretation by a qualified chemist, or both. The quantitative determination is made through direct correlation between the analyte response and the nearest internal standard response.

2.X matrix spike: An aliquot of a sample matrix fortified with a known quantity of analyte.

2.X method detection limit (MDL): As defined in 40 C.F.R. Part 136, ^{Error! Bookmark not defined.} Appendix B, the minimum concentration of a substance that can be measured and reported with 99% confidence that the substance concentration is greater than zero. The MDL is determined from analysis of a minimum of seven aliquots of standard (known quantity of analyte in reagent matrix) at concentrations that are in the range of the estimated detection limit.

2.X method validation: Verification of an analytical procedure performed by determining the method detection limit (see Section [N-1.7.2.4](#)).

2.X multiple-installation products: Products present in the drinking water system at regularly repeating intervals.

2.X multiple user service line products: Products used between the water main and multiple

2.X reporting limit (RL): The lowest concentration of analyte that can be reliably reported.

2.X residential products: Products used in buildings.

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2.X service line products: Products used from the water main to building plumbing systems.

2.X unknown: An analyte for which an identification cannot be determined. Information on chemical class, functional group(s), and chemical structure may be determined by spectral interpretation.

2.X water main (distribution) products: Products used in locations other than buildings or service lines.

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N-1.7.2 Definitions

See Section [2](#).

N-1.7.2.1 — identified compound with standard: A compound identification made based on the daily analysis (initial or continuing calibration) of an authentic standard of an analyte. Retention time and mass spectrum are used for qualitative determination of the analyte. A calibration curve is used for quantitative determination of the analyte.

N-1.7.2.2 — identified compound without standard: A compound identification based on mass spectral matches between the analyte and mass spectral libraries (commercial or private), or on spectral interpretation by a qualified chemist, or both. The quantitative determination is made through direct correlation between the analyte response and the nearest internal standard response.

N-1.7.2.3 — matrix spike: An aliquot of a sample matrix fortified with a known quantity of analyte.

N-1.7.2.4 — method detection limit (MDL): As defined in 40 C.F.R. Part 136, ^{Error! Bookmark not defined.} Appendix B, the minimum concentration of a substance that can be measured and reported with 99% confidence that the substance concentration is greater than zero. The MDL is determined from analysis of a minimum of seven aliquots of standard (known quantity of analyte in reagent matrix) at concentrations that are in the range of the estimated detection limit.

N-1.7.2.5 — method validation: Verification of an analytical procedure performed by determining the method detection limit (see Section [N-1.7.2.4](#)).

N-1.7.2.6 — reporting limit (RL): The lowest concentration of analyte that can be reliably reported.

N-1.7.2.7 — unknown: An analyte for which an identification cannot be determined. Information on chemical class, functional group(s), and chemical structure may be determined by spectral interpretation.

N-1.7.3 Metals analysis

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N-1.8.2 Definitions

See Section [2](#).

N-1.8.2.1 — residential products: Products used in buildings.

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Issue 181, Revision 1 (February 2024)

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~~N-1.8.2.2 — service line products: Products used from the water main to building plumbing systems.~~

~~N-1.8.2.3 — multiple user service line products: Products used between the water main and multiple family residences or commercial buildings.~~

~~N-1.8.2.4 — water main (distribution) products: Products used in locations other than buildings or service lines.~~

~~N-1.8.2.5 — multiple installation products: Products present in the drinking water system at regularly repeating intervals.~~

N-1.8.3 Normalization factor (NF)

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Rationale: All definitions moved to one general definitions section (section 2) per recommendation by the DWA Task Group on 61 Reorganization.

BSR/UL 3300, Standard for Safety for Service, Communication, Information, Education and Entertainment Robots – SCIEE Robots

3 Terms, definitions and abbreviated terms

3.3.8

safety function

function whose failure can result in an immediate increase of risk(s). ~~function of the control system whose failure could result in unsafe operation of the robot.~~

EXAMPLE Limiting robot speed Safety-limited speed (3.3.9.14) and collision avoidance (3.3.1.9) are examples of safety-related control-functions.

[SOURCE: ISO 12100, modified]

3.3.9

safety-limited speed

safety function that limits the speed of the robot or any of its parts ~~to maintain safe operation.~~

5.2.3.1 Outdoor locations or indoor wet locations

Robots intended for outdoor locations and/or indoor wet locations shall:

5.3.1 Drop test

A robot that is intended to be carried ~~is to~~ shall be subject to the drop test in Clause 7.3.4.

6.2 Robot stop control

Robots shall be provided with the means by which to cause a stop ~~a control that will stop robot motion.~~ The initiation means control can be triggered internally or externally. ~~an electromechanical switch, with user accessible actuator(s) on the robot, an electronic switch, or a programmable electronic control.~~

~~The electrical power disconnect shall be on either the robot or robot battery charger as described in CAN/CSA C22.2 No. 62368-1/UL 62368-1.~~

NOTE: Safety-related stop functions are covered in Clause 8.

NOTE 1 A switch tethered to the robot by non-detachable means is considered to be an actuator on the robot.

NOTE 2 A wireless remote switch is not considered to be an actuator on the robot.

6.3.2 Range of motion

Means shall be provided to limit the range of motion of robot manipulator(s) and/or end-effector(s). The means provided shall not themselves cause a risk of pain, injury, or entrapment to persons. If mechanical stops are used, they shall be subjected to the test in Clause 7.5.2. ~~If safety-related control function(s) are used, see Clause 8.~~

7.2.4 Robot stability test

- ~~–Transition to a ramp having a 5° slope (indoor robots) or 15° slope (outdoor robots) down from the horizontal and also considering the robot turning 90° to 180° degrees;~~
- ~~–Transition to a ramp having a 5° slope (indoor robots) or 15° slope (outdoor robots) up from the horizontal and also considering the robot turning 90° to 180° degrees;~~
- ~~–For outdoor robots and/or robots used in wet locations that are rated to operate in temperatures less than 0 °C, transition to a wet glass ramp having a 5° slope (indoor robots) or 15° slope (outdoor robots) 45° slope down from the horizontal; and~~

7.2.4.1 Elevation change test

–Smaller depressions with widths as follows:

7.2.5 Obstacle test

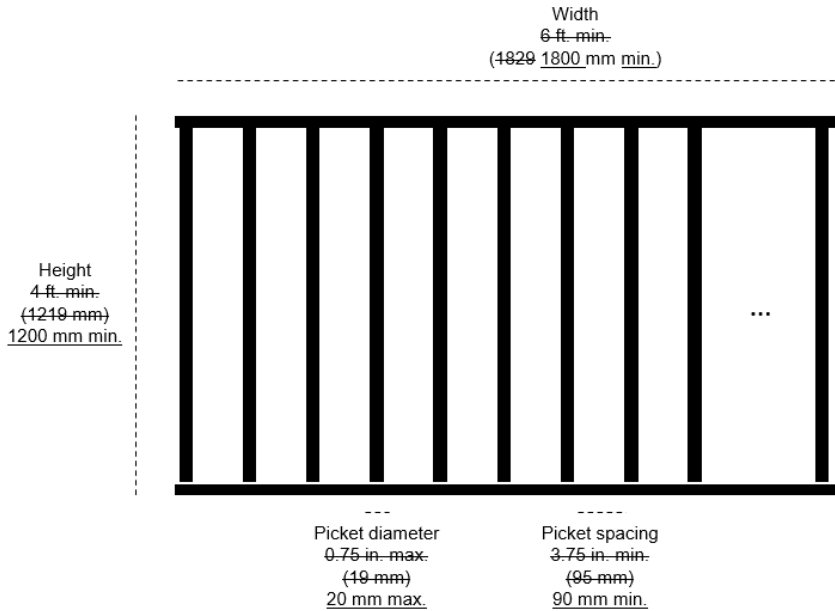


Figure 3 – Semi-solid wall dimensions

7.2.6.1 General

In lieu of testing the entire robot system, individual subassemblies performing safety-related control functions, including (but not limited to) sensors, control systems, batteries, and motors shall be subject to the tests.

8.1.1 General

The manufacturer shall conduct a risk assessment to identify hazards, estimate risk, reduce risk by implementing protective measures including safety-related control functions, and determine acceptability of residual risk depending on the robot specification. The principles described in ISO 12100 and ISO/TR 14121-2 may be used as guidance for the risk assessment.

8.1.4 Risk estimation

For hazards identified in Clause 8.1.3, risk estimation shall be carried out on a case-by-case basis. If numeric values are used, an appropriate validation of the methodology shall be provided.

8.1.5 Risk reduction through implementation of protective measures

Safe design, protective measures including safety-related control functions, and other safeguards that reduce risk shall be identified.

Safe design and protective measures shall be evaluated and tested in accordance with the requirements of this Standard. Safety-related control functions shall be evaluated in accordance with Clauses 8.2 - 8.16.

9 Electric Power Sources

Power supplies and battery chargers shall comply with CAN/CSA-C22.2 No. 62368-1/UL 62368-1 or CAN/CSA-C22.2 No. 60335-2-29/UL 60335-2-29. When battery charging is integral to the robot, or the battery charger has any protective features, CAN/CSA-C22.2 No. 62368-1/UL 62368-1, Equipment containing batteries and their protection circuits, ~~Annex M~~ shall be applied.

Annex C (normative)

C.5 Non-Robotic Function

C.5.1 Requirements for cComponents

C.5.3 Abuse tests

C.6.3 Manipulators

C.7 Testing

C.7.1 Safeguards provided for robot shape and size

C.11 Batteries

UL 2595 may be used as an alternative to the standards listed in Clause 11. ~~Alternatively, batteries complying with UL 2595 are to be used instead of batteries specified in CAN/CSA-C22.2 No. 62368-1/UL 62368-1, Annex M.~~

Annex E (informative)

The robot ~~should~~ shall be tested on a hard, flat surface of sufficient size and length for the robot to reach its maximum speed. The force gauge to be used ~~should~~ shall have a 25.4 mm diameter, hemispherical end oriented along the axis of robotic motion. The gauge ~~should~~ shall be attached to a fixture that is secured to the floor and allows the force gauge to be moved vertically from the floor to the vertical length of the robot.

The robot ~~should~~ shall be operated with any functions that could interfere with the test disabled, at its maximum speed and directed at the fixture so a measurement can be made.

Three different locations/heights ~~should~~ shall be selected for the force gauge, with discretion given to locations where there are smaller or protruding sections of the robot such as arms or edges. At each location/height, three measurements ~~should~~ shall be made and averaged. The maximum capable force can be determined to be the highest of the three averages from the different locations/heights.

BSR/UL 79, Standard for Safety for Power-Operated Pumps for Petroleum Dispensing Products**1. Proposed new joint Canada-US standard, UL/ULC 79, Standard for Power-Operated Pumps for Petroleum Dispensing Products****PROPOSAL**

28.2.4 When a requirement in this standard refers to the horsepower rating of a motor, and the motor is not rated in horsepower, the appropriate table of the National Electrical Code, NFPA 70 that gives the relationships between horsepower and full-load currents for motors shall be used. In the application of requirements based on horsepower to a motor not related in horsepower, use shall be made of the appropriate tables [Table 28.1, Full-load current in amperes, direct current motors; Table 28.2, Full-load current in amperes, single phase alternating current motors; Table 28.3, Full-load current two-phase alternating-current motors (4-wire); and Table 28.4, Full-load current three-phase alternating-current motors] that gives the relationships between horsepower and full-load currents for motors. For a universal motor, the table applying to a single-phase, alternating-current motors, Table 28.2, shall be used when the motor is marked for use on alternating current only; otherwise, the table applying to direct-current motors, Table 28.1, shall be used.

Table 28.1
Full-load current in amperes, direct current motors

HP	Armature voltage rating^a					
	90 V	120 V	180 V	240 V	500 V	550 V
<u>1/4</u>	<u>4.0</u>	<u>3.1</u>	<u>2.0</u>	<u>1.6</u>		
<u>1/3</u>	<u>5.2</u>	<u>4.1</u>	<u>2.6</u>	<u>2.0</u>		
<u>1/2</u>	<u>6.8</u>	<u>5.4</u>	<u>3.4</u>	<u>2.7</u>		
<u>3/4</u>	<u>9.6</u>	<u>7.6</u>	<u>4.8</u>	<u>3.8</u>		
<u>1</u>	<u>12.2</u>	<u>9.5</u>	<u>6.1</u>	<u>4.7</u>		
<u>1-1/2</u>		<u>13.2</u>	<u>8.3</u>	<u>6.6</u>		
<u>2</u>		<u>17</u>	<u>10.8</u>	<u>8.5</u>		
<u>3</u>		<u>25</u>	<u>16</u>	<u>12.2</u>		
<u>5</u>		<u>40</u>	<u>27</u>	<u>20</u>		
<u>7-1/2</u>		<u>58</u>		<u>29</u>	<u>13.6</u>	<u>12.2</u>
<u>10</u>		<u>76</u>		<u>38</u>	<u>18</u>	<u>16</u>
<u>15</u>				<u>55</u>	<u>27</u>	<u>24</u>
<u>20</u>				<u>72</u>	<u>34</u>	<u>31</u>
<u>25</u>				<u>89</u>	<u>43</u>	<u>38</u>
<u>30</u>				<u>106</u>	<u>51</u>	<u>46</u>
<u>40</u>				<u>140</u>	<u>67</u>	<u>61</u>

<u>HP</u>	<u>Armature voltage rating^a</u>					
	<u>90 V</u>	<u>120 V</u>	<u>180 V</u>	<u>240 V</u>	<u>500 V</u>	<u>550 V</u>
<u>50</u>				<u>173</u>	<u>83</u>	<u>75</u>
<u>60</u>				<u>206</u>	<u>99</u>	<u>90</u>
<u>75</u>				<u>255</u>	<u>123</u>	<u>111</u>
<u>100</u>				<u>341</u>	<u>164</u>	<u>148</u>
<u>125</u>				<u>425</u>	<u>205</u>	<u>185</u>
<u>150</u>				<u>506</u>	<u>246</u>	<u>222</u>
<u>200</u>				<u>675</u>	<u>330</u>	<u>294</u>

^a These are average direct-current quantities.

NOTE – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.2
Full-load currents in amperes single-phase alternating-current motors

<u>HP</u>	<u>115 V</u>	<u>200 V</u>	<u>208 V</u>	<u>230 V</u>
<u>1/6</u>	<u>4.4</u>	<u>2.5</u>	<u>2.4</u>	<u>2.2</u>
<u>1/4</u>	<u>5.8</u>	<u>3.3</u>	<u>3.2</u>	<u>2.9</u>
<u>1/3</u>	<u>7.2</u>	<u>4.1</u>	<u>4.0</u>	<u>3.6</u>
<u>1/2</u>	<u>9.8</u>	<u>5.6</u>	<u>5.4</u>	<u>4.9</u>
<u>3/4</u>	<u>13.8</u>	<u>7.9</u>	<u>7.6</u>	<u>6.9</u>
<u>1</u>	<u>16</u>	<u>9.2</u>	<u>8.8</u>	<u>8</u>
<u>1-1/2</u>	<u>20</u>	<u>11.5</u>	<u>11</u>	<u>10</u>
<u>2</u>	<u>24</u>	<u>13.8</u>	<u>13.2</u>	<u>12</u>
<u>3</u>	<u>34</u>	<u>19.6</u>	<u>18.7</u>	<u>17</u>
<u>5</u>	<u>56</u>	<u>32.2</u>	<u>30.8</u>	<u>28</u>
<u>7-1/2</u>	<u>80</u>	<u>46</u>	<u>44</u>	<u>40</u>
<u>10</u>	<u>100</u>	<u>57.5</u>	<u>55</u>	<u>50</u>

<u>HP</u>	<u>115 V</u>	<u>200 V</u>	<u>208 V</u>	<u>230 V</u>
NOTES:				
(1) – The values in this table are full-load currents for motors running at usual speeds and motors with normal torque characteristics. Motors built for especially low speeds or high torques may have higher full-load currents, and multispeed motors will have full-load current varying with speed, in which case the nameplate current ratings shall be used. The voltages listed are rated motor voltages. The currents listed shall be permitted for system voltage ranges of 110 – 120, and 220 – 240 volts.				
(2) – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.				
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Table 28.3
Full-load current two-phase alternating-current motors (4-wire)

<u>HP</u>	<u>Induction type squirrel-cage and wound-rotor amperes</u>				
	<u>115 V</u>	<u>230 V</u>	<u>460 V</u>	<u>575 V</u>	<u>2300 V</u>
<u>1/2</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>0.8</u>	
<u>3/4</u>	<u>4.8</u>	<u>2.4</u>	<u>1.2</u>	<u>1.0</u>	
<u>1</u>	<u>6.4</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>	
<u>1-1/2</u>	<u>9</u>	<u>4.5</u>	<u>2.3</u>	<u>1.8</u>	
<u>2</u>	<u>11.8</u>	<u>5.9</u>	<u>3</u>	<u>2.4</u>	
<u>3</u>		<u>8.3</u>	<u>4.2</u>	<u>3.3</u>	
<u>5</u>		<u>13.2</u>	<u>6.6</u>	<u>5.3</u>	
<u>7-1/2</u>		<u>19</u>	<u>9</u>	<u>8</u>	
<u>10</u>		<u>24</u>	<u>12</u>	<u>10</u>	
<u>15</u>		<u>36</u>	<u>18</u>	<u>14</u>	
<u>20</u>		<u>47</u>	<u>23</u>	<u>19</u>	
<u>25</u>		<u>59</u>	<u>29</u>	<u>24</u>	
<u>30</u>		<u>69</u>	<u>35</u>	<u>28</u>	
<u>40</u>		<u>90</u>	<u>45</u>	<u>36</u>	
<u>50</u>		<u>113</u>	<u>56</u>	<u>45</u>	
<u>60</u>		<u>133</u>	<u>67</u>	<u>53</u>	<u>14</u>
<u>75</u>		<u>166</u>	<u>83</u>	<u>66</u>	<u>18</u>

HP	Induction type squirrel-cage and wound-rotor amperes				
	115 V	230 V	460 V	575 V	2300 V
<u>100</u>		<u>218</u>	<u>109</u>	<u>87</u>	<u>23</u>
<u>125</u>		<u>270</u>	<u>135</u>	<u>108</u>	<u>28</u>
<u>150</u>		<u>312</u>	<u>156</u>	<u>125</u>	<u>32</u>
<u>200</u>		<u>416</u>	<u>208</u>	<u>167</u>	<u>43</u>

NOTES:

(1) – The values in the table for full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, and multispeed motors will have full-load current varying with speed, in which case the nameplate current rating shall be used. Current in the common conductor of a 2-phase, 3-wire system will be 1.41 times the values given. The voltages listed are rated motor voltages. The currents listed shall be permitted for system voltage ranges of 110 – 120, 220 – 240, 440 – 480, and 550 – 600 volts.

(2) – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.4
Full-load current three-phase alternating-current motors

HP	Induction type squirrel-cage and wound-rotor amperes						Synchronous type unity power factor^a amperes			
	115 V	200 V	208 V	230 V	460 V	575 V	230 V	460 V	575 V	2300 V
<u>1/2</u>	<u>4.4</u>	<u>2.5</u>	<u>2.4</u>	<u>2.2</u>	<u>1.1</u>	<u>0.9</u>				
<u>3/4</u>	<u>6.4</u>	<u>3.7</u>	<u>3.5</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>				
<u>1</u>	<u>8.4</u>	<u>4.8</u>	<u>4.6</u>	<u>4.2</u>	<u>2.1</u>	<u>1.7</u>				
<u>1-1/2</u>	<u>12.0</u>	<u>6.9</u>	<u>6.6</u>	<u>6.0</u>	<u>3.0</u>	<u>2.4</u>				
<u>2</u>	<u>13.6</u>	<u>7.8</u>	<u>7.5</u>	<u>6.8</u>	<u>3.4</u>	<u>2.7</u>				
<u>3</u>		<u>11.0</u>	<u>10.6</u>	<u>9.6</u>	<u>4.8</u>	<u>3.9</u>				
<u>5</u>		<u>17.5</u>	<u>16.7</u>	<u>15.2</u>	<u>7.6</u>	<u>6.1</u>				
<u>7-1/2</u>		<u>25.3</u>	<u>24.2</u>	<u>22</u>	<u>11</u>	<u>9</u>				
<u>10</u>		<u>32.2</u>	<u>30.8</u>	<u>28</u>	<u>14</u>	<u>11</u>				

HP	<u>Induction type squirrel-cage and wound-rotor amperes</u>							<u>Synchronous type unity power factor^a amperes</u>			
	<u>115 V</u>	<u>200 V</u>	<u>208 V</u>	<u>230 V</u>	<u>460 V</u>	<u>575 V</u>	<u>2300 V</u>	<u>230 V</u>	<u>460 V</u>	<u>575 V</u>	<u>2300 V</u>
15		48.3	46.2	42	21	17					
20		62.1	59.4	54	27	22					
25		78.2	74.8	68	34	27		53	26	21	
30		92	88	80	40	32		63	32	26	
40		120	114	104	52	41		83	41	33	
50		150	143	130	65	52		104	52	42	
60		177	169	154	77	62	16	123	61	49	12
75		221	211	192	96	77	20	155	78	62	15
100		285	273	248	124	99	26	202	101	81	20
125		359	343	312	156	125	31	253	126	101	25
150		414	396	360	180	144	37	302	151	121	30
200		552	528	480	240	192	49	400	201	161	40
250					302	242	60				
300					361	289	72				
350					414	336	83				
400					477	382	95				
450					515	412	103				
500					590	472	118				

^a For 90 and 80 percent power factor, the above figures shall be multiplied by 1.1 and 1.25 respectively.

NOTE – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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

1. Proposed new joint Canada-US standard, UL/ULC 79A, Standard for Power-Operated Pumps for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent (E0-E85)

PROPOSAL

28.2.4 When a requirement in this standard refers to the horsepower rating of a motor, and the motor is not rated in horsepower, the appropriate table of the National Electrical Code, NFPA 70 that gives the relationships between horsepower and full-load currents for motors shall be used. In the application of requirements based on horsepower to a motor not related in horsepower, use shall be made of the appropriate tables [Table 28.1, Full-load current in amperes, direct current motors; Table 28.2, Full-load current in amperes, single phase alternating current motors; Table 28.3, Full-load current two-phase alternating-current motors (4-wire); and Table 28.4, Full-load current three-phase alternating-current motors] that gives the relationships between horsepower and full-load currents for motors. For a universal motor, the table applying to a single-phase, alternating-current motors, Table 28.2, shall be used when the motor is marked for use on alternating current only; otherwise, the table applying to direct-current motors, Table 28.1, shall be used.

Table 28.1
Full-load current in amperes, direct current motors

HP	Armature voltage rating^a					
	90 V	120 V	180 V	240 V	500 V	550 V
<u>1/4</u>	<u>4.0</u>	<u>3.1</u>	<u>2.0</u>	<u>1.6</u>		
<u>1/3</u>	<u>5.2</u>	<u>4.1</u>	<u>2.6</u>	<u>2.0</u>		
<u>1/2</u>	<u>6.8</u>	<u>5.4</u>	<u>3.4</u>	<u>2.7</u>		
<u>3/4</u>	<u>9.6</u>	<u>7.6</u>	<u>4.8</u>	<u>3.8</u>		
<u>1</u>	<u>12.2</u>	<u>9.5</u>	<u>6.1</u>	<u>4.7</u>		
<u>1-1/2</u>		<u>13.2</u>	<u>8.3</u>	<u>6.6</u>		
<u>2</u>		<u>17</u>	<u>10.8</u>	<u>8.5</u>		
<u>3</u>		<u>25</u>	<u>16</u>	<u>12.2</u>		
<u>5</u>		<u>40</u>	<u>27</u>	<u>20</u>		
<u>7-1/2</u>		<u>58</u>		<u>29</u>	<u>13.6</u>	<u>12.2</u>
<u>10</u>		<u>76</u>		<u>38</u>	<u>18</u>	<u>16</u>
<u>15</u>				<u>55</u>	<u>27</u>	<u>24</u>
<u>20</u>				<u>72</u>	<u>34</u>	<u>31</u>
<u>25</u>				<u>89</u>	<u>43</u>	<u>38</u>
<u>30</u>				<u>106</u>	<u>51</u>	<u>46</u>

HP	Armature voltage rating^a					
	90 V	120 V	180 V	240 V	500 V	550 V
<u>40</u>				<u>140</u>	<u>67</u>	<u>61</u>
<u>50</u>				<u>173</u>	<u>83</u>	<u>75</u>
<u>60</u>				<u>206</u>	<u>99</u>	<u>90</u>
<u>75</u>				<u>255</u>	<u>123</u>	<u>111</u>
<u>100</u>				<u>341</u>	<u>164</u>	<u>148</u>
<u>125</u>				<u>425</u>	<u>205</u>	<u>185</u>
<u>150</u>				<u>506</u>	<u>246</u>	<u>222</u>
<u>200</u>				<u>675</u>	<u>330</u>	<u>294</u>

^a These are average direct-current quantities.

NOTE – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.2
Full-load currents in amperes single-phase alternating-current motors

HP	115 V	200 V	208 V	230 V
<u>1/6</u>	<u>4.4</u>	<u>2.5</u>	<u>2.4</u>	<u>2.2</u>
<u>1/4</u>	<u>5.8</u>	<u>3.3</u>	<u>3.2</u>	<u>2.9</u>
<u>1/3</u>	<u>7.2</u>	<u>4.1</u>	<u>4.0</u>	<u>3.6</u>
<u>1/2</u>	<u>9.8</u>	<u>5.6</u>	<u>5.4</u>	<u>4.9</u>
<u>3/4</u>	<u>13.8</u>	<u>7.9</u>	<u>7.6</u>	<u>6.9</u>
<u>1</u>	<u>16</u>	<u>9.2</u>	<u>8.8</u>	<u>8</u>
<u>1-1/2</u>	<u>20</u>	<u>11.5</u>	<u>11</u>	<u>10</u>
<u>2</u>	<u>24</u>	<u>13.8</u>	<u>13.2</u>	<u>12</u>
<u>3</u>	<u>34</u>	<u>19.6</u>	<u>18.7</u>	<u>17</u>
<u>5</u>	<u>56</u>	<u>32.2</u>	<u>30.8</u>	<u>28</u>
<u>7-1/2</u>	<u>80</u>	<u>46</u>	<u>44</u>	<u>40</u>

<u>HP</u>	<u>115 V</u>	<u>200 V</u>	<u>208 V</u>	<u>230 V</u>
<u>10</u>	<u>100</u>	<u>57.5</u>	<u>55</u>	<u>50</u>

NOTES:

(1) – The values in this table are full-load currents for motors running at usual speeds and motors with normal torque characteristics. Motors built for especially low speeds or high torques may have higher full-load currents, and multispeed motors will have full-load current varying with speed, in which case the nameplate current ratings shall be used. The voltages listed are rated motor voltages. The currents listed shall be permitted for system voltage ranges of 110 – 120, and 220 – 240 volts.

(2) – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.3
Full-load current two-phase alternating-current motors (4-wire)

<u>HP</u>	<u>Induction type squirrel-cage and wound-rotor amperes</u>				
	<u>115 V</u>	<u>230 V</u>	<u>460 V</u>	<u>575 V</u>	<u>2300 V</u>
<u>1/2</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>0.8</u>	
<u>3/4</u>	<u>4.8</u>	<u>2.4</u>	<u>1.2</u>	<u>1.0</u>	
<u>1</u>	<u>6.4</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>	
<u>1-1/2</u>	<u>9</u>	<u>4.5</u>	<u>2.3</u>	<u>1.8</u>	
<u>2</u>	<u>11.8</u>	<u>5.9</u>	<u>3</u>	<u>2.4</u>	
<u>3</u>		<u>8.3</u>	<u>4.2</u>	<u>3.3</u>	
<u>5</u>		<u>13.2</u>	<u>6.6</u>	<u>5.3</u>	
<u>7-1/2</u>		<u>19</u>	<u>9</u>	<u>8</u>	
<u>10</u>		<u>24</u>	<u>12</u>	<u>10</u>	
<u>15</u>		<u>36</u>	<u>18</u>	<u>14</u>	
<u>20</u>		<u>47</u>	<u>23</u>	<u>19</u>	
<u>25</u>		<u>59</u>	<u>29</u>	<u>24</u>	
<u>30</u>		<u>69</u>	<u>35</u>	<u>28</u>	
<u>40</u>		<u>90</u>	<u>45</u>	<u>36</u>	
<u>50</u>		<u>113</u>	<u>56</u>	<u>45</u>	
<u>60</u>		<u>133</u>	<u>67</u>	<u>53</u>	<u>14</u>

HP	Induction type squirrel-cage and wound-rotor amperes				
	115 V	230 V	460 V	575 V	2300 V
<u>75</u>		<u>166</u>	<u>83</u>	<u>66</u>	<u>18</u>
<u>100</u>		<u>218</u>	<u>109</u>	<u>87</u>	<u>23</u>
<u>125</u>		<u>270</u>	<u>135</u>	<u>108</u>	<u>28</u>
<u>150</u>		<u>312</u>	<u>156</u>	<u>125</u>	<u>32</u>
<u>200</u>		<u>416</u>	<u>208</u>	<u>167</u>	<u>43</u>

NOTES:

(1) – The values in the table for full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, and multispeed motors will have full-load current varying with speed, in which case the nameplate current rating shall be used. Current in the common conductor of a 2-phase, 3-wire system will be 1.41 times the values given. The voltages listed are rated motor voltages. The currents listed shall be permitted for system voltage ranges of 110 – 120, 220 – 240, 440 – 480, and 550 – 600 volts.

(2) – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.4
Full-load current three-phase alternating-current motors

HP	Induction type squirrel-cage and wound-rotor amperes						Synchronous type unity power factor^a amperes				
	115 V	200 V	208 V	230 V	460 V	575 V	2300 V	230 V	460 V	575 V	2300 V
<u>1/2</u>	<u>4.4</u>	<u>2.5</u>	<u>2.4</u>	<u>2.2</u>	<u>1.1</u>	<u>0.9</u>					
<u>3/4</u>	<u>6.4</u>	<u>3.7</u>	<u>3.5</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>					
<u>1</u>	<u>8.4</u>	<u>4.8</u>	<u>4.6</u>	<u>4.2</u>	<u>2.1</u>	<u>1.7</u>					
<u>1-1/2</u>	<u>12.0</u>	<u>6.9</u>	<u>6.6</u>	<u>6.0</u>	<u>3.0</u>	<u>2.4</u>					
<u>2</u>	<u>13.6</u>	<u>7.8</u>	<u>7.5</u>	<u>6.8</u>	<u>3.4</u>	<u>2.7</u>					
<u>3</u>		<u>11.0</u>	<u>10.6</u>	<u>9.6</u>	<u>4.8</u>	<u>3.9</u>					
<u>5</u>		<u>17.5</u>	<u>16.7</u>	<u>15.2</u>	<u>7.6</u>	<u>6.1</u>					
<u>7-1/2</u>		<u>25.3</u>	<u>24.2</u>	<u>22</u>	<u>11</u>	<u>9</u>					

HP	Induction type squirrel-cage and wound-rotor amperes							Synchronous type unity power factor ^a amperes			
	115 V	200 V	208 V	230 V	460 V	575 V	2300 V	230 V	460 V	575 V	2300 V
10		32.2	30.8	28	14	11					
15		48.3	46.2	42	21	17					
20		62.1	59.4	54	27	22					
25		78.2	74.8	68	34	27		53	26	21	
30		92	88	80	40	32		63	32	26	
40		120	114	104	52	41		83	41	33	
50		150	143	130	65	52		104	52	42	
60		177	169	154	77	62	16	123	61	49	12
75		221	211	192	96	77	20	155	78	62	15
100		285	273	248	124	99	26	202	101	81	20
125		359	343	312	156	125	31	253	126	101	25
150		414	396	360	180	144	37	302	151	121	30
200		552	528	480	240	192	49	400	201	161	40
250					302	242	60				
300					361	289	72				
350					414	336	83				
400					477	382	95				
450					515	412	103				
500					590	472	118				

^a For 90 and 80 percent power factor, the above figures shall be multiplied by 1.1 and 1.25 respectively.

NOTE — Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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BSR/UL 79B, Standard for Safety for Power-Operated Pumps for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil

1. Proposed new joint Canada-US standard, UL/ULC 79B, Standard for Power-Operated Pumps for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil

PROPOSAL

28.2.4 When a requirement in this standard refers to the horsepower rating of a motor, and the motor is not rated in horsepower, the appropriate table of the National Electrical Code, NFPA 70 that gives the relationships between horsepower and full-load currents for motors shall be used. In the application of requirements based on horsepower to a motor not related in horsepower, use shall be made of the appropriate tables [Table 28.1, Full-load current in amperes, direct current motors; Table 28.2, Full-load current in amperes, single phase alternating current motors; Table 28.3, Full-load current two-phase alternating-current motors (4-wire); and Table 28.4, Full-load current three-phase alternating-current motors] that gives the relationships between horsepower and full-load currents for motors. For a universal motor, the table applying to a single-phase, alternating-current motors, Table 28.2, shall be used when the motor is marked for use on alternating current only; otherwise, the table applying to direct-current motors, Table 28.1, shall be used.

Table 28.1
Full-load current in amperes, direct current motors

HP	Armature voltage rating^a					
	90 V	120 V	180 V	240 V	500 V	550 V
<u>1/4</u>	<u>4.0</u>	<u>3.1</u>	<u>2.0</u>	<u>1.6</u>		
<u>1/3</u>	<u>5.2</u>	<u>4.1</u>	<u>2.6</u>	<u>2.0</u>		
<u>1/2</u>	<u>6.8</u>	<u>5.4</u>	<u>3.4</u>	<u>2.7</u>		
<u>3/4</u>	<u>9.6</u>	<u>7.6</u>	<u>4.8</u>	<u>3.8</u>		
<u>1</u>	<u>12.2</u>	<u>9.5</u>	<u>6.1</u>	<u>4.7</u>		
<u>1-1/2</u>		<u>13.2</u>	<u>8.3</u>	<u>6.6</u>		
<u>2</u>		<u>17</u>	<u>10.8</u>	<u>8.5</u>		
<u>3</u>		<u>25</u>	<u>16</u>	<u>12.2</u>		
<u>5</u>		<u>40</u>	<u>27</u>	<u>20</u>		
<u>7-1/2</u>		<u>58</u>		<u>29</u>	<u>13.6</u>	<u>12.2</u>
<u>10</u>		<u>76</u>		<u>38</u>	<u>18</u>	<u>16</u>
<u>15</u>				<u>55</u>	<u>27</u>	<u>24</u>
<u>20</u>				<u>72</u>	<u>34</u>	<u>31</u>
<u>25</u>				<u>89</u>	<u>43</u>	<u>38</u>

<u>HP</u>	<u>Armature voltage rating^a</u>					
	<u>90 V</u>	<u>120 V</u>	<u>180 V</u>	<u>240 V</u>	<u>500 V</u>	<u>550 V</u>
<u>30</u>				<u>106</u>	<u>51</u>	<u>46</u>
<u>40</u>				<u>140</u>	<u>67</u>	<u>61</u>
<u>50</u>				<u>173</u>	<u>83</u>	<u>75</u>
<u>60</u>				<u>206</u>	<u>99</u>	<u>90</u>
<u>75</u>				<u>255</u>	<u>123</u>	<u>111</u>
<u>100</u>				<u>341</u>	<u>164</u>	<u>148</u>
<u>125</u>				<u>425</u>	<u>205</u>	<u>185</u>
<u>150</u>				<u>506</u>	<u>246</u>	<u>222</u>
<u>200</u>				<u>675</u>	<u>330</u>	<u>294</u>

^a These are average direct-current quantities.

NOTE – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.2
Full-load currents in amperes single-phase alternating-current motors

<u>HP</u>	<u>115 V</u>	<u>200 V</u>	<u>208 V</u>	<u>230 V</u>
<u>1/6</u>	<u>4.4</u>	<u>2.5</u>	<u>2.4</u>	<u>2.2</u>
<u>1/4</u>	<u>5.8</u>	<u>3.3</u>	<u>3.2</u>	<u>2.9</u>
<u>1/3</u>	<u>7.2</u>	<u>4.1</u>	<u>4.0</u>	<u>3.6</u>
<u>1/2</u>	<u>9.8</u>	<u>5.6</u>	<u>5.4</u>	<u>4.9</u>
<u>3/4</u>	<u>13.8</u>	<u>7.9</u>	<u>7.6</u>	<u>6.9</u>
<u>1</u>	<u>16</u>	<u>9.2</u>	<u>8.8</u>	<u>8</u>
<u>1-1/2</u>	<u>20</u>	<u>11.5</u>	<u>11</u>	<u>10</u>
<u>2</u>	<u>24</u>	<u>13.8</u>	<u>13.2</u>	<u>12</u>
<u>3</u>	<u>34</u>	<u>19.6</u>	<u>18.7</u>	<u>17</u>
<u>5</u>	<u>56</u>	<u>32.2</u>	<u>30.8</u>	<u>28</u>

HP	115 V	200 V	208 V	230 V
<u>7-1/2</u>	<u>80</u>	<u>46</u>	<u>44</u>	<u>40</u>
<u>10</u>	<u>100</u>	<u>57.5</u>	<u>55</u>	<u>50</u>

NOTES:

(1) – The values in this table are full-load currents for motors running at usual speeds and motors with normal torque characteristics. Motors built for especially low speeds or high torques may have higher full-load currents, and multispeed motors will have full-load current varying with speed, in which case the nameplate current ratings shall be used. The voltages listed are rated motor voltages. The currents listed shall be permitted for system voltage ranges of 110 – 120, and 220 – 240 volts.

(2) – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.3
Full-load current two-phase alternating-current motors (4-wire)

HP	Induction type squirrel-cage and wound-rotor amperes				
	115 V	230 V	460 V	575 V	2300 V
<u>1/2</u>	<u>4</u>	<u>2</u>	<u>1</u>	<u>0.8</u>	
<u>3/4</u>	<u>4.8</u>	<u>2.4</u>	<u>1.2</u>	<u>1.0</u>	
<u>1</u>	<u>6.4</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>	
<u>1-1/2</u>	<u>9</u>	<u>4.5</u>	<u>2.3</u>	<u>1.8</u>	
<u>2</u>	<u>11.8</u>	<u>5.9</u>	<u>3</u>	<u>2.4</u>	
<u>3</u>		<u>8.3</u>	<u>4.2</u>	<u>3.3</u>	
<u>5</u>		<u>13.2</u>	<u>6.6</u>	<u>5.3</u>	
<u>7-1/2</u>		<u>19</u>	<u>9</u>	<u>8</u>	
<u>10</u>		<u>24</u>	<u>12</u>	<u>10</u>	
<u>15</u>		<u>36</u>	<u>18</u>	<u>14</u>	
<u>20</u>		<u>47</u>	<u>23</u>	<u>19</u>	
<u>25</u>		<u>59</u>	<u>29</u>	<u>24</u>	
<u>30</u>		<u>69</u>	<u>35</u>	<u>28</u>	
<u>40</u>		<u>90</u>	<u>45</u>	<u>36</u>	
<u>50</u>		<u>113</u>	<u>56</u>	<u>45</u>	

HP	Induction type squirrel-cage and wound-rotor amperes				
	115 V	230 V	460 V	575 V	2300 V
<u>60</u>		<u>133</u>	<u>67</u>	<u>53</u>	<u>14</u>
<u>75</u>		<u>166</u>	<u>83</u>	<u>66</u>	<u>18</u>
<u>100</u>		<u>218</u>	<u>109</u>	<u>87</u>	<u>23</u>
<u>125</u>		<u>270</u>	<u>135</u>	<u>108</u>	<u>28</u>
<u>150</u>		<u>312</u>	<u>156</u>	<u>125</u>	<u>32</u>
<u>200</u>		<u>416</u>	<u>208</u>	<u>167</u>	<u>43</u>

NOTES:

(1) – The values in the table for full-load current are for motors running at speeds usual for belted motors and motors with normal torque characteristics. Motors built for especially low speeds or high torques may require more running current, and multispeed motors will have full-load current varying with speed, in which case the nameplate current rating shall be used. Current in the common conductor of a 2-phase, 3-wire system will be 1.41 times the values given. The voltages listed are rated motor voltages. The currents listed shall be permitted for system voltage ranges of 110 – 120, 220 – 240, 440 – 480, and 550 – 600 volts.

(2) – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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Table 28.4
Full-load current three-phase alternating-current motors

HP	Induction type squirrel-cage and wound-rotor amperes							Synchronous type unity power factor^a amperes			
	115 V	200 V	208 V	230 V	460 V	575 V	2300 V	230 V	460 V	575 V	2300 V
<u>1/2</u>	<u>4.4</u>	<u>2.5</u>	<u>2.4</u>	<u>2.2</u>	<u>1.1</u>	<u>0.9</u>					
<u>3/4</u>	<u>6.4</u>	<u>3.7</u>	<u>3.5</u>	<u>3.2</u>	<u>1.6</u>	<u>1.3</u>					
<u>1</u>	<u>8.4</u>	<u>4.8</u>	<u>4.6</u>	<u>4.2</u>	<u>2.1</u>	<u>1.7</u>					
<u>1-1/2</u>	<u>12.0</u>	<u>6.9</u>	<u>6.6</u>	<u>6.0</u>	<u>3.0</u>	<u>2.4</u>					
<u>2</u>	<u>13.6</u>	<u>7.8</u>	<u>7.5</u>	<u>6.8</u>	<u>3.4</u>	<u>2.7</u>					
<u>3</u>		<u>11.0</u>	<u>10.6</u>	<u>9.6</u>	<u>4.8</u>	<u>3.9</u>					
<u>5</u>		<u>17.5</u>	<u>16.7</u>	<u>15.2</u>	<u>7.6</u>	<u>6.1</u>					

HP	<u>Induction type squirrel-cage and wound-rotor amperes</u>							<u>Synchronous type unity power factor^a amperes</u>			
	<u>115 V</u>	<u>200 V</u>	<u>208 V</u>	<u>230 V</u>	<u>460 V</u>	<u>575 V</u>	<u>2300 V</u>	<u>230 V</u>	<u>460 V</u>	<u>575 V</u>	<u>2300 V</u>
<u>7-1/2</u>		<u>25.3</u>	<u>24.2</u>	<u>22</u>	<u>11</u>	<u>9</u>					
<u>10</u>		<u>32.2</u>	<u>30.8</u>	<u>28</u>	<u>14</u>	<u>11</u>					
<u>15</u>		<u>48.3</u>	<u>46.2</u>	<u>42</u>	<u>21</u>	<u>17</u>					
<u>20</u>		<u>62.1</u>	<u>59.4</u>	<u>54</u>	<u>27</u>	<u>22</u>					
<u>25</u>		<u>78.2</u>	<u>74.8</u>	<u>68</u>	<u>34</u>	<u>27</u>		<u>53</u>	<u>26</u>	<u>21</u>	
<u>30</u>		<u>92</u>	<u>88</u>	<u>80</u>	<u>40</u>	<u>32</u>		<u>63</u>	<u>32</u>	<u>26</u>	
<u>40</u>		<u>120</u>	<u>114</u>	<u>104</u>	<u>52</u>	<u>41</u>		<u>83</u>	<u>41</u>	<u>33</u>	
<u>50</u>		<u>150</u>	<u>143</u>	<u>130</u>	<u>65</u>	<u>52</u>		<u>104</u>	<u>52</u>	<u>42</u>	
<u>60</u>		<u>177</u>	<u>169</u>	<u>154</u>	<u>77</u>	<u>62</u>	<u>16</u>	<u>123</u>	<u>61</u>	<u>49</u>	<u>12</u>
<u>75</u>		<u>221</u>	<u>211</u>	<u>192</u>	<u>96</u>	<u>77</u>	<u>20</u>	<u>155</u>	<u>78</u>	<u>62</u>	<u>15</u>
<u>100</u>		<u>285</u>	<u>273</u>	<u>248</u>	<u>124</u>	<u>99</u>	<u>26</u>	<u>202</u>	<u>101</u>	<u>81</u>	<u>20</u>
<u>125</u>		<u>359</u>	<u>343</u>	<u>312</u>	<u>156</u>	<u>125</u>	<u>31</u>	<u>253</u>	<u>126</u>	<u>101</u>	<u>25</u>
<u>150</u>		<u>414</u>	<u>396</u>	<u>360</u>	<u>180</u>	<u>144</u>	<u>37</u>	<u>302</u>	<u>151</u>	<u>121</u>	<u>30</u>
<u>200</u>		<u>552</u>	<u>528</u>	<u>480</u>	<u>240</u>	<u>192</u>	<u>49</u>	<u>400</u>	<u>201</u>	<u>161</u>	<u>40</u>
<u>250</u>					<u>302</u>	<u>242</u>	<u>60</u>				
<u>300</u>					<u>361</u>	<u>289</u>	<u>72</u>				
<u>350</u>					<u>414</u>	<u>336</u>	<u>83</u>				
<u>400</u>					<u>477</u>	<u>382</u>	<u>95</u>				
<u>450</u>					<u>515</u>	<u>412</u>	<u>103</u>				
<u>500</u>					<u>590</u>	<u>472</u>	<u>118</u>				

^a For 90 and 80 percent power factor, the above figures shall be multiplied by 1.1 and 1.25 respectively.

NOTE – Linear interpolation may be used to calculate motor currents for motors whose rated voltage does not appear in this Table.

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BSR/UL 147, *Standard for Safety for Hand-Held Torches for Fuel Gases*

1. Topic – MAPP is no longer in production additional changes

PROPOSAL

4 Service Pressure Ratings

4.1 The service pressure rating of a torch unit intended for use with propane ~~or propylene or Methylacetylene-Propadiene, Stabilized Gas (MPS-Gas)~~ shall not be less than 250 psig (1.7 MPa).

7 Materials

~~7.8 Copper or brass tubing and fittings containing more than 67-percent copper shall not be used for parts in contact with MPS-Gas~~

15 Valve-Endurance Test

15.2 Samples of each different style of valve are to be subjected to a 1500-cycle test, conducted manually and with a closing force sufficient to stop leakage. The valve inlet is to be pressurized aerostatically during the test at 100 psig (690 kPa) if for use with propane, ~~MPS-Gas~~ or all fuel gases other than butane or butane-propane mixtures and at 50 psig (345 kPa) if for use with butane or butane-propane mixtures.

22 Fuel Gas Compatibility

22.1 General

Table 22.1
Test liquids for nonmetallic materials

Gas in contact with part	Test liquid
Propane, propane-butane mixtures ^a	n-Hexane
Methylacetylene-Propadiene-Stabilized (MPS)	Liquid MPS
Other fuel gases other than propane, MPS-Gas , or hydrogen	Specified fuel Gas in liquid phase
Hydrogen	Test waived
Propylene	Liquid propylene
^a If the torch unit is for butane only, butane in the liquid phase may be used as the test fluid.	

BSR/UL 147A, Standard for Safety for Nonrefillable (Disposable) Type Fuel Gas Cylinder Assemblies

1. Topic – MAPP is no longer in production

PROPOSAL

1 Scope

1.1 These requirements cover nonrefillable cylinder assemblies for use with propane, ~~Methylacetylene-Propadiene, Stabilized (MPS-Gas),~~ and propylene.

~~1.3 Methylacetylene-Propadiene, Stabilized (MPS-Gas) used in nonrefillable cylinder assemblies shall be as defined in the Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes, NFPA 51-2002.~~

10 Materials

~~10.10 Copper or brass materials containing more than 67 percent copper shall not be used for parts in contact with MPS-Gas.~~

15 Start-to-Discharge and Resealing-Pressure, Tests of Pressure Relief Valves

Table 15.1

Start-to-discharge (S-T-D) and resealing-pressure limits

Fuel gas	S-T-D pressure range	Minimum reseal pressure
	psig (kPa)	psig (kPa)
Propane, MPS-Gas	360 - 480 (2480 - 3307)	240 (1656)
Propylene	390 - 520 (2691 - 3588)	260 (1794)

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BSR/UL 962, Standard for Safety for Household and Commercial Furnishings

3. Addition of Construction, Entrapment Test, and Instruction Requirements for Storage Bed Units

PROPOSAL

33A.1 A storage bed unit is considered to comply with Mechanical Enclosures and Guards – Mechanical Considerations, 11.3, when all of the following conditions are met:

- a) Any point or part of the furnishing that is considered to present a risk of entrapment or personal injury shall be visible to the operator such that they can determine the proximity of an individual to the entrapment area when positioned at the operator controls while performing the intended function; and
- b) The storage bed unit with motorized ~~life~~ lift mechanism shall be provided with a momentary-contact switch with a security lockout device that disables operation of the furnishing to deter playing with the control by children or persons with cognitive disabilities;
 - 1) The lockout device may be a passcode, proximity sensor that requires a unique sensor to activate (such as RFID), a physical key, a two-step process (such as pressing 2 keys in the correct order, or other means that would deter use by a child;
 - 2) A lockout (electronic or mechanical) system shall automatically reset and lockout the movement of the furnishing after a maximum of 2 minutes of inactivity. Inactivity is when the operator is no longer actuating any switches;
 - 3) A switch that controls the direction of travel shall be capable of being stopped and the direction of travel reversed at any point in the operation of the furnishing; and
 - 4) Upon power failure the furnishing shall remain in the existing position. Upon reinstatement of power the furnishing shall not move until the operator activates the switch controlling movement.

5. Revisions to Requirements for Tamper-Resistant Receptacles

PROPOSAL

26.2 A non-locking type 125-volt, 15 and 20 ampere receptacle (ANSI/NEMA 5-15R or 5-20R) used in ~~areas identified in Article 406.12 of NFPA 70 furnishings intended for use in a residence, motel, hotel, child care facility, preschool, education facility, medical area where accessible to the general public, dormitory, or where children are expected to be present~~ shall be a Tamper-Resistant type.

Exception No. 1: This requirement does not apply when receptacles are located more than 5-1/2 feet (1.7m) above the floor.

Exception No. 2: This requirement does not apply when receptacles are part of a luminaire or appliance.

Exception No. 3: This requirement does not apply when the receptacle is located behind a keyed and locked cover secured to the furnishing.

8. Revisions to Flammability Requirements for Non-Electrical Parts

PROPOSAL

37.4.1 Polymeric or similar material used in the construction of a furnishing that is used as an enclosure or support for live parts shall ~~comply with 11.5, have a minimum flammability classification of HB. The flammability classification is to be determined by tests specified in UL 94. A material classified using 1/8-inch (3.2 mm) thick bar specimens is able to be employed in thicknesses less than 1/8 inch in the furnishing.~~

12. Addition of UL 62368-1 to Annex A

PROPOSAL

2.30A CORD, INTERCONNECTING – A conductor or cable running between two furnishings.

Table A6.1
Interconnecting Conductors and Cable Types

Furnishing type	Allowable interconnecting conductors and cable types		
	Potential energy source		
	PS1, or 15 watts or less ^D	PS2, or Class 2 or LPS	PS3, or SELV
Portable	A or B or C	B or C	C
Stationary	A or B or C	B or C	C
Fixed	A or B or C	B or C	C

A) The conductor or cable shall be rated for the intended temperature, power and voltage.

B) Cords or cables not evaluated as a part of the component product requirement and not contained within a metal or polymeric enclosure in accordance with Table A3.1 shall be a jacketed type CL3, CL3R, CL3P, Power-limited Circuit Cable or other jacketed type cord with a minimum 0.013 inch (0.33 mm) jacket thickness or the combined conductor and jacket thickness not less than 0.013 inch (0.33 mm). Individual conductors may not be utilized outside a fire enclosure or without an overall jacket covering.

C) The cable or cord shall comply with Power Supply Connections, Section 10, or other jacketed type cord with a minimum average jacket thickness of 0.015 inch (0.38 mm) and with a VW-1 flammability rating. Individual conductors may not be utilized outside a fire enclosure or without an overall jacket covering. SPT-2 and SPT-3 cord types are acceptable.

D) 15 watts or less under any loading condition. See A12.1, Circuit Power Limit Measurement Test (Other Than PS1/PS2/PS3).

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BSR/UL 1479, Standard for Fire Tests of Penetration Firestops

1. Moisture Content of Wood Construction

PROPOSAL

5.2.3 For wood construction, the moisture content of the wood shall not be greater than 13% as determined by an electrical resistance method.

2. Pressure Measurement

PROPOSAL

5.7.1.2 The differential pressure between the exposed and unexposed surfaces of the test assembly is to be measured at sufficient locations to determine the specified pressure differential at the elevations specified in 5.7.3.1. The pressure sensors shall be located where they will not be subject to direct impingement of convection currents from the flames or in the path of the exhaust gases. Tubing connected to the pressure sensors shall be horizontal both in the furnace and as they exit through the furnace wall, such that the pressure is relative to the same positional height from the inside to the outside of the furnace.

NOTE: See Annex A3 for information regarding differential pressure measurement.

5.7.1.3 The pressure sensors shall be located where they will not be subjected to direct impingement of convection currents from the flames or in the path of the exhaust gases.

5.7.1.4 Tubing connected to each pressure sensor shall be horizontal both in the furnace and at its egress through the furnace wall, such that the pressure is relative to the same elevation from the inside to the outside of the furnace.

Appendix Annex A (Informative)

A3 Supplementary information on differential pressure measurements

A3.1 Below are two possible methods that may be used to determine whether or not a test specimen has been exposed to the specified minimum positive pressure differential.

A3.2 The linear pressure gradient of the furnace may be determined by the difference in measured pressure of at least two pressure sensors separated by a vertical distance in the furnace. A typical vertical distance between the two pressure sensors is one-half the height of the furnace chamber. The elevation of the neutral plane may be determined based upon the measured pressure differentials. The elevation above which the specified positive pressure differential exists can then be calculated based upon an assumed gradient of 0.01 inches in water gauge/feet (8.2 Pa/m) of height. Test specimens located above this elevation will be exposed to the specified minimum positive pressure differential. Test specimens located below this elevation will not.

A3.3 A pressure probe may be located at or below the specified elevation and this probe may be used to determine the minimum pressure differential by direct measurement.

3. Pressure Sensor Type

PROPOSAL

5.7.2.2 The pressure sensors are to be either of the "T" type or the "tube" type measuring probe tips are to be as illustrated in Figure 5.5 or Figure 5.6, respectively the equivalent, and manufactured from stainless steel or equivalent material. The steel baffle shown in Figure 5.5 is optional.

NOTE: The characteristics of air flow are different from furnace to furnace. The steel baffle is intended to provide additional shielding, at the discretion of the test laboratory, to the T-shaped probe from air flow currents within the furnace that may affect pressure readings.

Figure 5.5
Pressure measurement probe

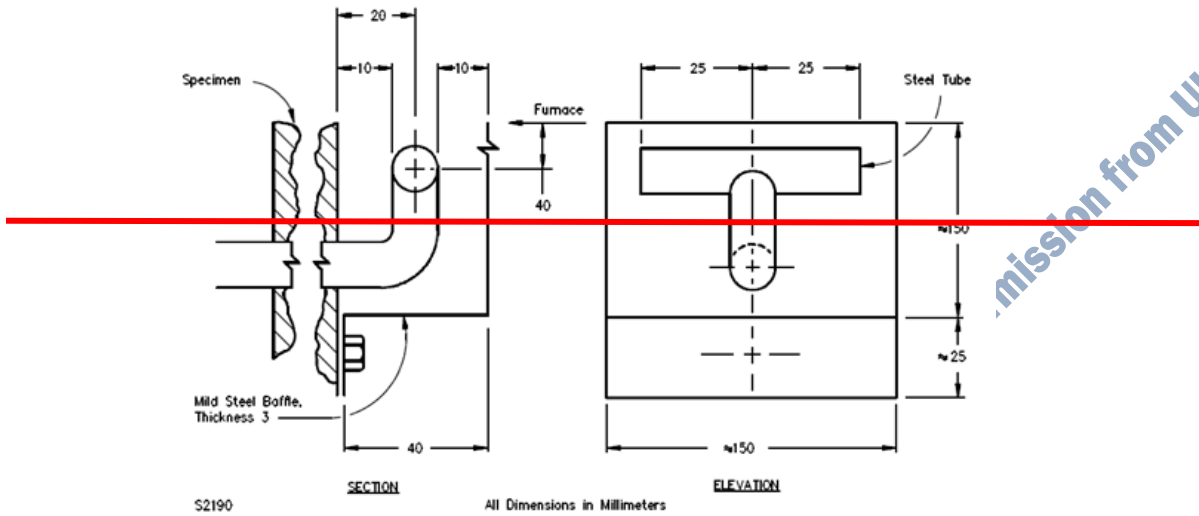


Figure 5.5
Pressure measurement probe T-shaped probe

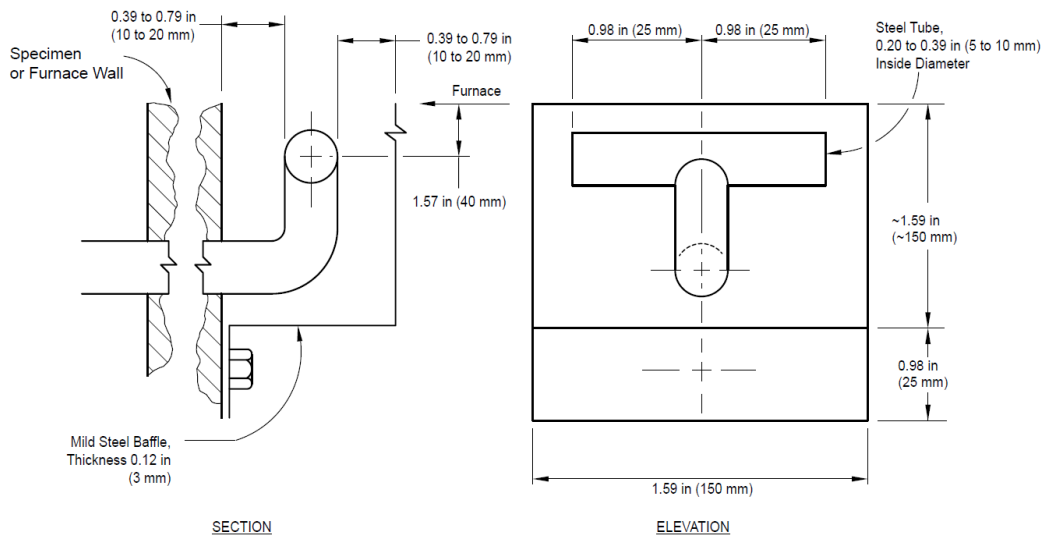
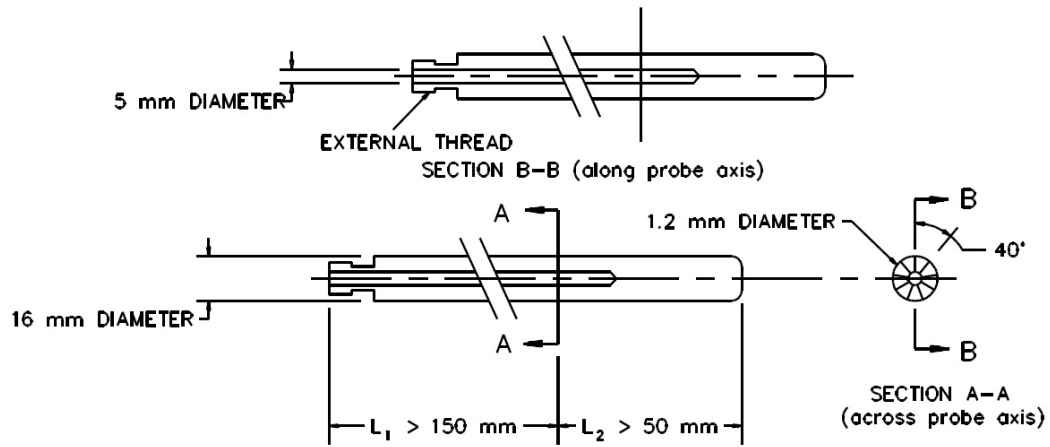


Figure 5.6
Pressure measurement probe – Tube probe



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BSR/UL 2034, Standard for Safety for Single and Multiple Station Carbon Monoxide Alarms

1. Markings

PROPOSAL

67 Paint Loading Test

67.1 Unless marked in accordance with ~~87.1(j)~~ 87.2(l), an alarm shall operate as intended and shall comply with the requirements of the Sensitivity Test, Section 41, after painting, if the alarm assembly, screens, openings, or similar items are capable of becoming clogged or covered by painting.

87 General

87.2 The following markings are required to be on all alarms:

- a) Name or identifying symbol and address of the manufacturer or private labeler.
- b) Model number and date of manufacture. The date of manufacture shall be non-coded and in the format YEAR (in 4 digits), MONTH (in letters), and DAY (in 2 digits) located on the outside surface of the CO alarm.
- c) Identification of the product (carbon monoxide alarm shall be marked in contrasting color from the background on the face of the unit), lights, switches, and meters, regarding their function unless their function is obvious. The following message shall be located adjacent to the visual indicator for alarm: "Exit to fresh air."
- d) Maximum rating of fuse in each fuse holder.
- e) Identification of batteries by part number, manufacturer's model number or equivalent, located adjacent to the component.
- f) Reference to the manufacturer's published instructions.
- g) Maintenance instructions, such as cleaning and battery replacement.
- h) Distinction between alarm, pre-alarm, end-of-life, and trouble signals on units employing these signals.
- i) Test instructions and frequency. Not less than once per week for battery-powered alarms and not less than once per month for other than battery-powered alarms.
- j) If a manufacturer produces alarms at more than one factory, each such assembly shall have a distinctive marking to identify it as the product of a particular factory.
- k) The following warning shall be placed on the carbon monoxide alarm. The hazard symbol and letters used for the word "WARNING" shall be boldfaced type having a minimum uppercase letter height of 0.120 inch (3.05 mm). The minimum vertical spacing between lines of type shall be 0.046 inch (1.17 mm). ~~(These dimensions correspond to 12-point type.) Lowercase letters shall be compatible with the uppercase letter specification.~~

"WARNING"

Carbon monoxide (CO) is a colorless, odorless, poisonous gas. You can't taste, see, or smell CO, but it can kill in just minutes.


This alarm will sound in a 4-beep pattern if life threatening levels of CO are detected.

If the alarm sounds:

- 1) Immediately evacuate all occupants from the space and go outdoors to fresh air.
- 2) Call emergency responders (911 or fire department) for help; notify the building or vehicle owner, as necessary.

88 General

88.1 Each single and multiple station carbon monoxide alarm shall be provided with installation instructions which shall include the following information:

- a) Typical installation drawing layouts for the unit(s) indicating locations and wiring methods which shall be in accordance with the National Electrical Code or Canadian Electrical Code. Locations where alarms are not to be installed shall also be included.
- b) Description of the operation, testing, and proper maintenance procedures for the unit(s).
- c) Replacement parts, such as lamps or batteries, shall be identified in the instructions by a part number, manufacturer's model number, or the equivalent, and information included as to where parts are obtainable.
- d) The hazard symbol , the word "WARNING," and at least the following or equivalent information in an obvious and prominent manner, such as by being underlined, encircled, or printed in larger or different color type. The letters used for the word "warning" shall be boldfaced in a color that contrasts with the background and shall be a minimum size of 18 points or a minimum of 1.5 times larger than the safety message letters. The letters used for the safety message words shall be boldfaced Helvetica type with a minimum size of 12 points. Lowercase letters shall be compatible with the uppercase letter specification. The safety message shall be separate and distinct from the other messages and graphics in the owner's manual.

"WARNING"

Carbon monoxide (CO) is a colorless, odorless, poisonous gas. You can't taste, see, or smell CO, but it can kill in just minutes.

This alarm will sound in a 4-beep pattern if life threatening levels of CO are detected.

~~Carbon monoxide is a toxic gas that can quickly kill adults and children with no warning.~~

~~This alarm will sound if acute hazardous levels of carbon monoxide are detected – it cannot be seen, smelled, or tasted by humans.~~

If the alarm sounds:

- 1) Immediately evacuate all occupants from the space and go outdoors to fresh air.
- 2) Call emergency responders (911 or fire department) for help; notify the building or vehicle owner, as necessary.

BSR/UL 2079, Standard for Tests for Fire Resistance of Building Joint Systems

1. Expansion Factor Test

PROPOSAL

28.5 Expansion factor test

~~28.5.1 When tested as described in 28.5.2—28.5.4, samples previously exposed to the environmental exposure conditions shall have an expansion factor within 3 standard deviations (3σ) of the mean of the maximum expansion factor of the “as received” samples or have at least 90% of the average maximum expansion factor of the “as received” samples.~~

~~Exception: Should the specified conditions not be met, the material is to be subjected to the exposure condition for which the largest decrease in performance occurred. The material is then to be installed in a representative firestop system and subjected to the Fire Endurance Test. The system shall meet the performance criteria for at least 75% of the F rating period.~~

~~28.5.2 Sets consisting of five $2 \pm 1/8$ in (51 ± 3 mm) diameter discs are to be die cut from material samples. A minimum of one set, subjected to the accelerated aging exposure, and a minimum of one set, subjected to the high humidity exposure, are to be tested. Samples are to be examined, weighed, and measured before and after exposures. An additional set of samples is to be retained “as received”. Additional sets of samples subjected to the supplemental exposure conditions indicated above are to be tested when applicable. Materials for which die cutting is not practical (i.e. molded materials, caulks) are to be molded into disks which have diameters of 2 in (50.8 mm).~~

~~28.5.3 A muffle furnace capable of maintaining temperatures of $572 \pm 5^\circ\text{F}$ ($300 \pm 2.7^\circ\text{C}$) is to be used.~~

~~28.5.4 The thickness of each disc is to be measured to the nearest 0.001 in (.03 mm) at five locations. The five measurements are to be averaged to obtain the average thickness. Each disc is to be placed inside a test pipe which has an inside diameter not more than 0.08 in (2 mm) larger than the disc. The disc is to be totally covered with a weight having a mass of 5 g/cm² (10.2 lb/ft²). The test pipe, containing the disc, is to be placed in the muffle furnace preheated to $572 \pm 5^\circ\text{F}$ ($300 \pm 2.7^\circ\text{C}$) for 30 min. After 30 min, the test pipe is to be removed from the muffle furnace and cooled to ambient temperature. After cooling, the minimum and maximum height of char is to be measured to the nearest 1/16 in (1.6 mm). The expansion factor is to be calculated using the ratio of the expanded thickness to the initial measured thickness.~~

28.5.1 Sets consisting of five $2 \pm 1/8$ inches (51 ± 3 mm) diameter discs are to be die-cut from material samples. Materials for which die-cutting is not practical (i.e. molded materials, caulks) are to be molded into discs which have diameters of $2 \pm 1/8$ inches (51 ± 3 mm). The initial thickness of each disc is to be measured to the nearest 0.001 inch (0.03 mm) at five locations. Measurements are to be taken as described in 28.5.2. The five measurements are to be averaged to obtain the average thickness. A minimum of one set shall be subjected to the accelerated aging environmental exposure, and a minimum of one set shall be subjected to the high humidity environmental exposure. Additional sets of samples subjected to the supplemental environmental exposure conditions indicated above are to be tested when applicable. An additional set of samples not subjected to environmental exposures is to be retained “as received”. Samples are to be examined, weighed, and measured before any exposures for the purpose of establishing the initial thickness and after exposures for informational purposes only.

28.5.2 Each disc is to be placed inside a test pipe which has an inside diameter not more than 0.08 inches (2 mm) larger than the disc. The disc is to be totally covered with a weight having a mass of 5 g/cm² (10.2 lbs/ft²). Measurements are to be made from the top of test pipe to the top of the weight (measured depth) at four locations around the edges of the disc and one from the center. The thickness is to be calculated by subtracting the measured depth and thickness of the weight from the total height of the test pipe. After initial thickness for each disc is determined, discs are to be removed from test pipes and subjected to environmental exposures as necessary.

28.5.3 A muffle furnace capable of maintaining temperatures of $572 \pm 5^\circ\text{F}$ ($300 \pm 2.7^\circ\text{C}$) is to be used.

28.5.4 After environmental exposure and examination, weighing and remeasuring as described in 28.5.1 or after initial measurements for the “as received” sample set, each disc is to be placed inside a test pipe which has an inside diameter not more than 0.08 inches (2 mm) larger than the disc. The disc is to be totally covered with a weight having a mass of 5 g/cm² (10.2 lbs/ft²). The test pipe, containing the disc, is to be placed in the muffle furnace preheated to 572 ±5 °F (300 ±2.7 °C) for 30 min. After 30 min, the test pipe is to be removed from the muffle furnace and cooled to ambient temperature. After cooling, the height of char is to be measured to the nearest 0.001 inch (0.03 mm). Measurements are to be taken in the same manner described in 28.5.2 with samples remaining in the test pipes with weights left on top of the samples. The expanded thickness is to be calculated by subtracting the measured depth and thickness of the weight from the total height of the test pipe. The expansion factor is to be calculated as the ratio of the average expanded thickness to the average initial measured thickness for each disc.

28.5.5 When tested as described in 28.5.1 – 28.5.4, samples previously exposed to the environmental exposure conditions shall comply with the following:

- a) Each sample shall have an expansion factor within 3 standard deviations (3-σ) of the mean expansion factor of the “as received” samples; or
- b) Each sample shall have at least 90 % of the mean expansion factor of the “as received” samples.

Exception: Should the specified conditions not be met, the material is to be subjected to the exposure condition for which the largest decrease in performance occurred. The material is then to be installed in a representative joint system and subjected to the Fire Endurance Test. The system shall meet the performance criteria for at least 75 % of the fire endurance rating period.

2. Expansion Pressure Test

PROPOSAL

28.4 Expansion pressure test

28.4.1 When tested as described in 28.4.2 – 28.4.4, samples previously exposed to the environmental exposure conditions shall comply with the following:

- a) Each sample shall maintain a peak expansion pressure within 3 standard deviations (3-σ) of the mean of the “as-received” samples, or maintain at least 90% of the average peak expansion pressure of the “as received” samples.
- b) The average time of the peak expansion pressure shall fall within 3 standard deviations (3-σ) of the average time of the peak expansion pressure of the “as received” samples, or have at least 90% of the average time of the peak expansion pressure of the “as received” samples.

*Exception: Should the specified conditions not be met, the material is to be subjected to the exposure condition for which the largest decrease in performance occurred. The material is then to be installed in a representative firestop joint system and subjected to the Fire Endurance Test. The system shall meet the performance criteria for at least 75% of the **F** fire endurance rating period.*

3. Head of Wall Joint Systems

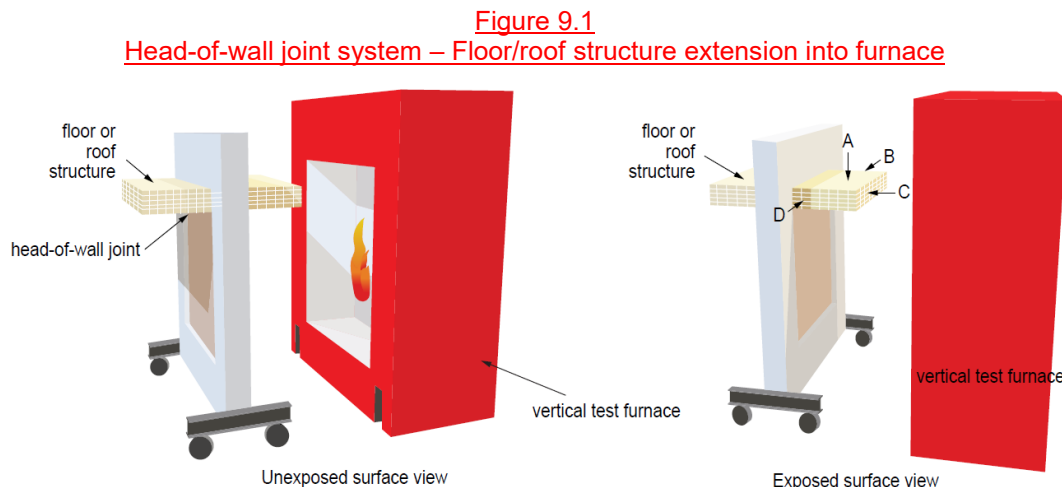
PROPOSAL

9 Head-of-Wall Joint Systems

9.1 Head-of-wall joint systems are designed for installation in vertical linear openings between wall and floor or roof structures. The floor or roof structure used for the test assembly is to extend a minimum of 12 inches (305 mm) beyond each surface of the wall structure. The top, sides and front face of the portion of

a mass timber floor or roof structure extending beyond the surface of the wall structure into the furnace chamber may optionally be protected with Type X gypsum board (or equivalent), with the number of layers of gypsum board representing the proposed rating of the joint system.

NOTE – When testing floor or roof assemblies to UL 263, the floor or roof specimen is only required to be exposed to fire from its underside.



KEY:
A: top face
B: side face
C: front face
D: side face

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4. Pressure Measurement

PROPOSAL

14 Furnace Pressure

14.1 The differential pressure between the exposed and unexposed surfaces of the test assembly is to be measured at sufficient locations to determine the specified pressure differential at the elevations specified in 14.7. is to be calculated based on measurements taken at the locations specified in 14.4 or 14.5, as appropriate, and based on the linear pressure gradient of the furnace. The linear pressure gradient of the furnace is to be determined by the difference in measured pressure of at least two pressure sensors separated by a vertical distance in the furnace. The minimum vertical distance between pressure sensors shall be one half the height of the furnace chamber. The pressure sensors are to be located where they will not be subjected to direct impingement of convection currents. Tubing connected to each pressure sensor is to be horizontal both in the furnace and at its egress through the furnace wall such that the pressure is relative to the same elevation from the inside to the outside of the furnace.

NOTE: See Annex C2 for information regarding differential pressure measurement.

14.1A The pressure sensors shall be located where they will not be subjected to direct impingement of convection currents from the flames or in the path of the exhaust gases.

14.1B Tubing connected to each pressure sensor shall be horizontal both in the furnace and at its egress through the furnace wall such that the pressure is relative to the same elevation from the inside to the outside of the furnace.

Appendix Annex C (Informative)

C2 Supplementary information on differential pressure measurement

C2.1 Below are two possible methods that may be used to determine whether or not a test specimen has been exposed to the specified minimum positive pressure differential.

C2.2 The linear pressure gradient of the furnace may be determined by the difference in measured pressure of at least two pressure sensors separated by a vertical distance in the furnace. A typical vertical distance between the two pressure sensors is one-half the height of the furnace chamber. The elevation of the neutral plane may be determined based upon the measured pressure differentials. The elevation above which the specified positive pressure differential exists can then be calculated based upon an assumed gradient of 0.01 inches of water gauge/feet of height (8.2 Pa/m). Test specimens located above this elevation will be exposed to the specified minimum positive pressure differential. Test specimens located below this elevation will not.

C2.3 A pressure probe may be located at or below the specified elevation and this probe may be used to determine the minimum pressure differential by direct measurement.

5. Pressure Sensor Type

PROPOSAL

14.2 The pressure sensors are to be either of the "T" type or the "tube" type as illustrated in Figure 14.1 or Figure 14.2, respectively, and ~~are to be~~ manufactured from stainless steel ~~or equivalent material~~. The steel baffle shown in Figure 14.1 is optional.

NOTE: The characteristics of air flow are different from furnace to furnace. The steel baffle is intended to provide additional shielding, at the discretion of the test laboratory, to the T-shaped probe from air flow currents within the furnace that may affect pressure readings.

Figure 14.1

Pressure sensors

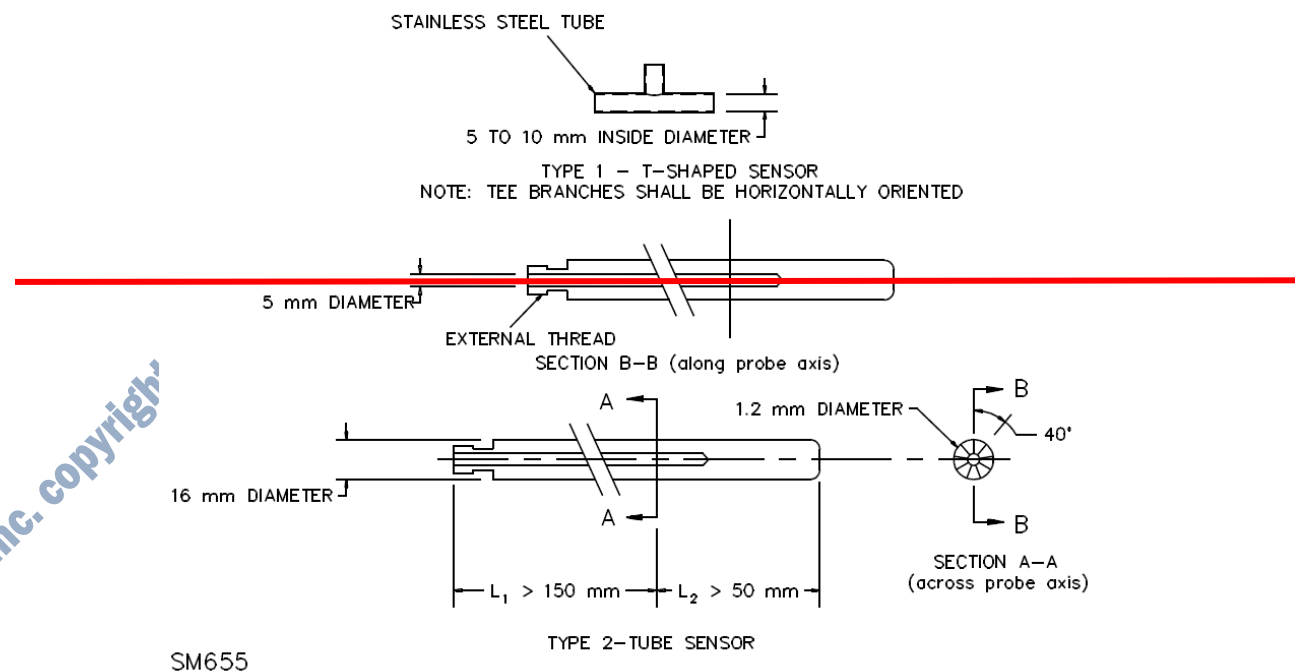
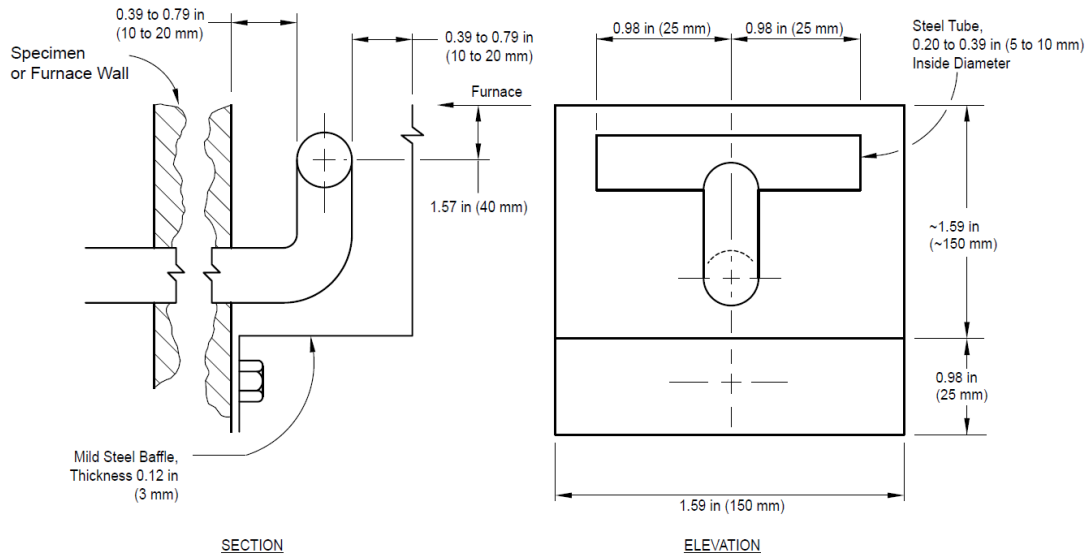


Figure 14.1
 Pressure sensors measurement probe – T-shaped probe



The "T" branches shall be horizontally oriented.

s2190c

Figure 14.2
 Pressure measurement probe – Tube probe

