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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.

ACI (American Concrete Institute)
Shannon Banchero; shannon.banchero@concrete.org | 38800 Country Club Drive | Farmington Hills, MI 48331  www.concrete.org

New Standard
BSR/ACI CODE-365-202x, Performing a Service Life Evaluation—Code and Commentary (new standard)
Stakeholders: Structural engineers, contractors.
Project Need: This code will provide for the process for performing a service life prediction, independent of the specific model or approach that is to be used. This will provide some uniformity and clarity for the practitioner for what is the minimum standard of practice for service life evaluation, and assist the end user to interpret and compare the results of service life predictions.
Interest Categories: Consultants, academics/educators, users, designers, researchers.
Scope: This standard practice provides requirements for performing a Service Life Evaluation as part of the design process for new structures and implementing the results of the evaluation into the construction phase. This standard practice can be used as part of a design-bid-build project, a design-bid project, or other project delivery options. The practice is independent of the specific model or technique used to perform the service life evaluation. The Service Life Engineer performing the evaluation can either be the prime consultant or a subconsultant. A Service Life Report is produced as part of this standard documenting the service life evaluation, followed by a Service Life Record Report documenting the implementation into the new construction.

ADA (Organization) (American Dental Association)
Pual Bralower; bralowerp@ada.org | 211 East Chicago Avenue | Chicago, IL 60611-2678  www.ada.org

New Standard
BSR/ADA Standard No. 1108-202x, Dentistry - Implementation Guidance for the ADA-HL7 Dental Health Functional Profile (new standard)
Stakeholders: Dentists, Dental software suppliers.
Project Need: A new standard is required to provide guidance for the implementation in a dental electronic health record (EHR) of the ADA-HL7 Dental Health Functional Profile (DHFP).
Interest Categories: Consumer, General Interest, Producer.
Scope: The intent of this standard is to provide guidance for the implementation in a dental electronic health record (EHR) of the ADA-HL7 Dental Health Functional Profile (DHFP). This new standard will detail the larger HL7 context (the “why”) for an EHR implementation of the DHFP and will specify the required technical functions (the “what”) for that EHR DHFP implementation. Specifying the particular approach (the “how”) any particular EHR vendor will take to implement the technical aspects (functions) of the DHFP is not included.
New Standard
BSR/ADA Standard No. 1110-202x, Dentistry - Validation Dataset Guidance for Image Analysis Systems using Artificial Intelligence (new standard)
Stakeholders: AI System users, developers and regulators.
Project Need: Unlike with human beings, Artificial Intelligence (AI) Systems cannot in general be analyzed or interrogated to test their comprehension of diagnostic tasks, their understanding of relevant features, or their reasoning in the analytic process. Therefore, confidence in such systems should be limited by confidence in the Validation Dataset(s) used to measure their performance. Therefore, a standard for the Dataset content, collection, calculation, and confidence measures is necessary: to aid users by creating a basis for comparing systems, to aid regulators by defining best practices, and to aid designers by providing a framework for system testing. By focusing on the process of validation, the standard will promote quality, comparability, and ethical standards, while not impinging on the creativity of system developers.
Interest Categories: Consumer, General Interest, Producer.
Scope: (A) Standards for Content: Establishment of qualitative, quantitative, and novelty measures of image samples needed for each intended use. Establishment of parameters for providing coverage of various subpopulations. Establishment of needed metadata elements to support the AI system validation process, to support statistical and other analyses of the dataset itself, and to support security and ethics requirements. (B) Standards for Collection: Establishment of credentials and processes for collecting image samples, and for tagging images with Dx or Tx findings, including the provenance of that tagging. Establishment of requirements for obtaining and maintaining patient permission for including images in the dataset. Establishment of security requirements for images and metadata in the dataset. (C) Standards for Calculation: Establishment of processes for AI System validation using the Validation Dataset, and for calculation of AI System performance based on that validation. (D) Standards for Confidence: Establishment of levels of acceptability for methods of establishing ground truth of image samples. Establishment of a process for sequestering the Validation Dataset from the development of the system to be validated.

National Adoption
Stakeholders: Dentists, manufacturers.
Project Need: Excavators have been extracted from the ISO document for curettes and scalers due to multiple differences in form, fit, and function of these types of dental hand instruments. Therefore, it would be appropriate to create a separate national standard for excavators.
Interest Categories: Consumer, General Interest, Producer.
Scope: This document specifies dimensions and performance requirements for excavators used in dentistry.
ADA (Organization) (American Dental Association)
Paul Bralower; bralowerp@ada.org | 211 East Chicago Avenue | Chicago, IL 60611-2678   www.ada.org

National Adoption
BSR/ADA Standard No. 205-202x, Dentistry - Tissue Punches (national adoption with modifications of ISO 23445:2021)
Stakeholders: Dentists, manufacturers.
Project Need: Tissue punches are sold and used in the United States. Currently, no national standard exists for these products. Therefore, the recommendation is to proceed for a modified adoption of this international standard as a national standard.
Interest Categories: Consumer, General Interest, Producer.
Scope: This document specifies requirements and their test methods for tissue punches used with a handpiece in dentistry especially for oral surgical implant procedures, such as cutting holes or notches in and removing of gingival tissue. It also specifies the requirements for their marking and labeling.

ASTM (ASTM International)
Laura Klineburger; accreditation@astm.org | 100 Barr Harbor Drive | West Conshohocken, PA 19428-2959   www.astm.org

National Adoption
BSR/ASTM ISO/IEC 17011-202x, Conformity assessment - Requirements for accreditation bodies accrediting conformity assessment bodies (identical national adoption of ISO/IEC 17011)
Stakeholders: This impacts all stakeholders that utilize conformity assessment.
Project Need: Simply an adoption of the standard to affix the ANS designation.
Interest Categories: ASTM utilizes ISO/IEC 17011 throughout a multitude of standards for the basis of acceptance of quality for accreditation bodies.
Scope: This standard defines the requirements for accreditation bodies. It is used as the basis of the acceptance of accreditation bodies across the world. Specifically for the United States it is used additionally for regulators and specifiers for the acceptance of accreditation bodies and their own quality requirements if they themselves assess conformity assessment bodies

CSA (CSA America Standards Inc.)
Debbie Chesnik; ansi.contact@csagroup.org | 8501 East Pleasant Valley Road | Cleveland, OH 44131-5575   www.csagroup.org

Revision
Stakeholders: Certification manufacturers.
Project Need: There currently are no component standards that cover flue damper devices or backflow dampers. This proposal is intended to correct unintentional omissions in the ANSI Z21.66-2015 • CSA 6.14-2015, and provide coverage for an existing gap in performance and construction requirements.
Interest Categories: Consumer / User Interest; Government Agency; General Interest; Gas Supplier; Manufacturer; Research and Testing.
Scope: This Standard applies to the construction, performance, and installation procedures for a newly produced automatic damper device (hereinafter referred to as device) constructed entirely of new, unused parts and materials and designed to be used with a gas-fired appliance listed by a nationally recognized testing agency. This Standard applies to the following damper devices: (a) Vent; (b) Flue; (c) Fireplace chimney; and (d) Backflow preventer.
**New Standard**

BSR/CSA ANG 2-202x, Adsorbed Natural Gas (ANG) Container (new standard)

Stakeholders: Manufacturers, Gas Suppliers, Consumers.

Project Need: Safety.

Interest Categories: Manufacturers, Gas Suppliers, Regulators, Consumers.

Scope: Requirements for adsorbed natural gas vehicle fuel containers, which are permanently attached to the vehicle.

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**New Standard**

BSR/CSA NGV 5.3-202x, Mobile Vehicle Fueling Appliances (MVFA) (new standard)

Stakeholders: Manufacturers, Gas Suppliers, Consumers.

Project Need: Safety.

Interest Categories: Manufacturers, Gas Suppliers, Regulators, Consumers.

Scope: Requirements for mobile fueling appliances that incorporate compression and dispensing in the same appliance and dispense directly into either (a) the vehicle natural gas fuel storage system or external natural gas storage systems, or (b) the vehicle’s activated carbon adsorbents-based Adsorbed Natural Gas (ANG) fuel storage system.

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**Revision**


Stakeholders: Consumers, Manufacturers.

Project Need: To revise ANSI/CTA 709.1-E to enhance the authentication algorithm and address backwards compatibility.

Interest Categories: General interest, users, and producers.

Scope: This specification applies to a communication protocol for networked control systems. This protocol provides peer-to-peer communication for networked control and is suitable for implementing both peer-to-peer and primary-secondary control strategies.
**CTA (Consumer Technology Association)**
Catrina Akers; cakers@cta.tech | 1919 S. Eads Street | Arlington, VA  22202   www.cta.tech

**Revision**
Stakeholders: Consumers, manufacturers, service providers.
Project Need: To revise CTA-709.6-A to comply with international efforts to remove inappropriate language by updating the terms Master/Slave to Manager/Subordinate throughout the standard.
Interest Categories: Users, general interest, producers.
Scope: This standard provides mechanisms through which various vendors of control networking systems may exchange information in a standardized way. This document contains all the information necessary to read and interpret the format of data and control information that is used by ANSI/CTA 709.5. It also defines the device interface for a device as specified, which is necessary to exchange data between various devices from different manufacturers.

**ECIA (Electronic Components Industry Association)**
Laura Donohoe; ldonohoe@ecianow.org | 13873 Park Center Road, Suite 315 | Herndon, VA  20171   www.ecianow.org

**National Adoption**
BSR/EIA 60384-3-202x, Fixed capacitors for use in electronic equipment - Part 3: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte (identical national adoption of IEC 60384-3 ED7 and revision of ANSI/EIA 60384-3-2017)
Stakeholders: Electrical, electronic, and telecommunications industries.
Project Need: Adopt identical ISO or IEC standard and revise current standard.
Interest Categories: User, Producer, General Interest.
Scope: This specification applies to surface mount tantalum solid electrolyte capacitors. These capacitors are primarily intended to be mounted directly onto substrates for hybrid circuits or onto printed boards. The following two styles are considered:
- Style 1: protected capacitors;
- Style 2: unprotected capacitors.

**ECIA (Electronic Components Industry Association)**
Laura Donohoe; ldonohoe@ecianow.org | 13873 Park Center Road, Suite 315 | Herndon, VA  20171   www.ecianow.org

**National Adoption**
Stakeholders: Electrical, electronic, and telecommunications industries.
Project Need: Adopt identical ISO or IEC standard and revise current standard.
Interest Categories: User, Producer, General Interest.
Scope: This part of IEC 60384 is applicable to fixed capacitors of ceramic dielectric with a defined temperature coefficient (dielectric Class 2), intended for use in electronic equipment, including leadless capacitors but excluding fixed surface mount multilayer capacitors of ceramic dielectric, which are covered by IEC 60384-22 (Class 2). Capacitors for electromagnetic interference suppression are not included, but are covered by IEC 60384-14.
ECIA (Electronic Components Industry Association)
Laura Donohoe; ldonohoe@ecianow.org | 13873 Park Center Road, Suite 315 | Herndon, VA  20171   www.ecianow.org

National Adoption
BSR/EIA 60384-19-202x, Fixed capacitors for use in electronic equipment - Part 19: Sectional specification -
Fixed metallized polyethylene-terephthalate film dielectric surface mount d.c. capacitors (identical national adoption of IEC 60384-19 ED4 and revision of ANSI/EIA 60384-19-2017)
Stakeholders: Electrical, electronic, and telecommunications industries.
Project Need: Adopt identical ISO or IEC standard and revise current standard.
Interest Categories: User, Producer, General Interest.
Scope: This part of IEC 60384 is applicable to fixed surface-mount capacitors for direct current, with metallized electrodes and polyethylene-terephthalate dielectric for use in electronic equipment. These capacitors have metallized connecting pads or soldering strips and are intended to be mounted directly onto printed boards or onto substrates for hybrid circuits. These capacitors can have "self-healing properties" depending on conditions of use. They are primarily intended for applications where the AC component is small with respect to the rated voltage. This part of IEC 60384 specifies preferred ratings and characteristics, and selects from IEC 60384-1:2021 the appropriate quality assessment procedures, tests and measuring methods, and gives general performance requirements for this type of capacitor. Test severities and requirements specified in detail specifications referring to this sectional specification are of an equal or higher performance level. Lower performance levels are not permitted. Capacitors for electromagnetic interference suppression are not included, but are covered by IEC 60384-14.

ECIA (Electronic Components Industry Association)
Laura Donohoe; ldonohoe@ecianow.org | 13873 Park Center Road, Suite 315 | Herndon, VA  20171   www.ecianow.org

National Adoption
BSR/EIA 60384-20-202x, Fixed capacitors for use in electronic equipment - Part 20: Sectional specification -
Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors (identical national adoption of IEC 60384-20 ED4 and revision of ANSI/EIA 60384-20-2017)
Stakeholders: Electrical, electronic, and telecommunications industries.
Project Need: Adopt identical ISO or IEC standard and revise current standard.
Interest Categories: User, Producer, General Interest.
Scope: This part of IEC 60384 is applicable to fixed surface-mount capacitors for direct current, with metallized electrodes and polyphenylene sulfide dielectric for use in electronic equipment. These capacitors have metallized connecting pads or soldering strips and are intended to be mounted directly onto printed boards or onto substrates for hybrid circuits. These capacitors can have "self-healing properties" depending on conditions of use. They are primarily intended for applications where the AC component is small with respect to the rated voltage. This part of IEC 60384 specifies preferred ratings and characteristics, selects from IEC 60384-1:2021 the appropriate quality assessment procedures, tests and measuring methods, and gives general performance requirements for this type of capacitor. Test severities and requirements specified in detail specifications referring to this sectional specification are of an equal or higher performance level. Lower performance levels are not permitted. Capacitors for electromagnetic interference suppression are not included, but are covered by IEC 60384-14.
**ECIA (Electronic Components Industry Association)**
Laura Donohoe; ldonohoe@ecianow.org | 13873 Park Center Road, Suite 315 | Herndon, VA 20171   www.ecianow.org

**National Adoption**
Stakeholders: Electrical, electronic, and telecommunications industries.
Project Need: Adopt identical ISO or IEC standard and revise current standard.
Interest Categories: User, Producer, General Interest.
Scope: This part of IEC 60384 is applicable to fixed surface-mount capacitors for direct current, with metallized electrodes and polyethylene naphthalate dielectric for use in electronic equipment. These capacitors have metallized connecting pads or soldering strips and are intended to be mounted directly onto printed boards or onto substrates for hybrid circuits. These capacitors can have "self-healing properties" depending on conditions of use. They are primarily intended for applications where the AC component is small with respect to the rated voltage. This part of IEC 60384 specifies preferred ratings and characteristics, selects from IEC 60384-1:2021 the appropriate quality assessment procedures, tests, and measuring methods and gives general performance requirements for this type of capacitor. Test severities and requirements specified in detail specifications referring to this sectional specification are of an equal or higher performance level. Lower performance levels are not permitted. Capacitors for electromagnetic interference suppression are not included, but are covered by IEC 60384-14.

**ITI (INCITS) (InterNational Committee for Information Technology Standards)**
Barbara Bennett; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001   www.incits.org

**Addenda**
Stakeholders: Consumers and developers of tape drives and software that supports tape drives.
Project Need: New log parameters are necessary for software applications. Clarifications or corrections may be identified.
Scope: The following items should be considered for inclusion in SSC-5-AM1: New log parameters, Corrections and clarifications to SSC-5, Other capabilities that may fit within the scope of this project.
ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001  www.incits.org

**National Adoption**


Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.


Scope: Specifies interindustry commands which can be used for security operations. This document also provides informative directives on how to construct security mechanisms with commands defined in ISO/IEC 7816-4.

ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001  www.incits.org

**National Adoption**


Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.


Scope: Specifies security-related interindustry commands that are intended to be used for personal verification through biometric methods in integrated circuit cards. It also defines the data structure and data access methods for use of the card as a carrier of the biometric reference and/or as the device to perform the verification of the cardholder's biometric probe (on-card biometric comparison). Identification of persons using biometric methods is outside the scope of this document.

ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001  www.incits.org

**National Adoption**


Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.


Scope: Specifies the minimum information to be included in the specification sheets of Class 3 and Class 4 printers in order for users to compare the characteristics of different machines. The term “specification sheets” applies to documents which describe the performance characteristics of the printers to be included in instruction manuals, product brochures, or on websites. This document applies to printers that can be operated in an office environment. Printers requiring specially equipped rooms or specially instructed operators are not considered in this document.
**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

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

**National Adoption**


Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.


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

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

**National Adoption**


Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.


Scope: Defines physical characteristics and test methods for cards with devices, including but not limited to, power-supplying devices, displays, sensors, microphones, loudspeakers, buttons, or keypads. This document also covers aspects of coexistence of technologies of devices on the card and other machine-readable card technologies.

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

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

**National Adoption**


Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.


Scope: Defines the conformance test plan, based on ISO/IEC 10373-6, for the contactless interface of eMRTDs and eMRTD associated readers compliant with ICAO Doc 9303.
ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC  20001   www.incits.org

National Adoption
Stakeholders: ICT Industry.
Project Need: Adoption of this International Standard is beneficial to the ICT Industry.
Scope: Establishes terms, symbols, notations, and a framework for characterizing toner and ink cartridges used in printing devices that have a digital input printing path, including multi-function devices. This document is intended for equipment used in office environments. Provides a foundation for measuring, evaluating, or specifying characteristics of such toner and ink cartridges. The terms, symbols, notations, and framework established herein can be applied to such cartridges.

ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC  20001   www.incits.org

National Adoption
Stakeholders: ICT Industry.
Project Need: Adoption of this International Standard is beneficial to the ICT Industry.
Scope: The scope of this document is limited to the evaluation of black ink cartridge page yield for ink-containing cartridges (i.e., integrated ink cartridges and ink cartridges without integrated printheads) for monochrome inkjet print systems. This document can also be applied to the printer component of any multifunctional device that has a digital input printing path, including multi-function devices that contain inkjet printer components. Both liquid and solid ink products can be tested using this document.
ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001  www.incits.org

National Adoption
Stakeholders: ICT Industry.
Project Need: Adoption of this International Standard is beneficial to the ICT Industry.
Scope: The scope of this document is limited to the evaluation of ink cartridge page yield for ink-containing cartridges (i.e., integrated ink cartridges and ink cartridges without integrated printheads) for colour inkjet print systems. This document can also be applied to the printer component of any multifunctional device that has a digital input printing path, including multi-function devices that contain inkjet printer components. Both liquid and solid ink products can be tested using this document.

ITI (INCITS) (InterNational Committee for Information Technology Standards)
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001  www.incits.org

National Adoption
Stakeholders: ICT Industry.
Project Need: Adoption of this International Standard is beneficial to the ICT Industry.
Scope: Specifies a method for measuring the digital printing productivity of digital printing devices with various office applications and print job characteristics. This document is applicable to digital printing devices, including single-function and multi-function devices, regardless of print technology (e.g., inkjet, laser). Devices can be equipped with a range of paper feed and finishing options either directly connected to the computer system or via a network. It is intended to be used for black and white (B&W) as well as colour digital printing devices.
**ITI (INCITS) (InterNational Committee for Information Technology Standards)**
Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC  20001   www.incits.org

**National Adoption**
Stakeholders: ICT Industry.
Project Need: Adoption of this International Standard is beneficial to the ICT Industry.
Scope: Specifies a method for measuring the digital copying productivity of digital copying devices and multifunctional devices with various copying modes. It is applicable to digital copying devices and multifunctional devices equipped with automatic document feeder (ADF) and collating function. This document is intended to be used for black and white (B&W) as well as colour digital copying devices and multifunctional devices of any underlying marking technology.

**NEMA (ASC C12) (National Electrical Manufacturers Association)**
Paul Orr; Pau_orr@nema.org | 1300 North 17th Street, Suite 900 | Rosslyn, VA  22209   www.nema.org

**Revision**
BSR C12.10-202x, Physical Aspects of Watthour Meters - Safety Standard (revision of ANSI C12.10-2011 (R2021))
Stakeholders: Meter Manufacturers, Electric Utilities, Meter Socket Manufacturers.
Project Need: Revision to update requirements.
Interest Categories: Users, Producers, and General Interest Members.
Scope: This Standard covers the physical aspects of both detachable and bottom-connected watthour meters and associated registers. These include ratings, internal wiring arrangements, pertinent dimensions, markings, and other general specifications.
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: July 24, 2022

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 161f-202x, Air Quality within Commercial Aircraft (addenda to ANSI/ASHRAE Standard 161-2018)

The primary purpose of this proposed addendum is to remove the carbon monoxide-specific language intended to address the continuous monitoring requirement for engine oil or hydraulic fluid contamination of the bleed air. As a result, the sensor requirement language in Sections 7.2, 8.2, and 9 now focuses more broadly on suitable marker compounds intended to reliably indicate the presence of engine oil or hydraulic fluid contamination of the bleed air. This proposed addendum also adds a definition for “engine” to Section 3.

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
Comment Deadline: July 24, 2022

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
In the right climate, location, and application, natural ventilation can provide and enhance the healing environment. Natural ventilation has been successfully implemented in healthcare facilities throughout the world. This proposed addendum allows Natural Ventilation for certain limited healthcare spaces and under certain conditions. ASHRAE Standard 62.1’s natural ventilation procedure, which was completely revamped in 2019, was used as a starting point for this proposed addendum.
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

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/ASHE Addendum 170g-202x, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021)
Proposed Addendum g revises portions of Sections 3, 6, 7, and 8 to provide clarity of intent and/or correct five elements of the current standard. It also follows the continuous maintenance process in further coordination with FGI and SSPC 170 to result in a coordinated document for use by all stakeholders in the Healthcare Community.
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 B31.5-202x, Refrigeration Piping and Heat Transfer Components (revision of ANSI/ASME B31.5-2019)
Rules for this Code Section have been developed considering the needs for applications that include piping and heat transfer components for refrigerants and secondary coolants.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Jihoon Oh; ohj@asme.org
Comment Deadline: July 24, 2022

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI  48105-9723   | jsnider@nsf.org, www.nsf.org

Revision
BSR/NSF 40-202x (i45r3), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)
This Standard contains minimum requirements for residential wastewater treatment systems having rated
treatment capacities between 1,514 L/d (400 gal/d) and 5,678 L/d (1,500 gal/d). Management methods for the
treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard.
System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the
requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the
minimum specifications described herein.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI  48105-9723   | rbroker@nsf.org, www.nsf.org

Revision
BSR/NSF 173-202x (i91r1), Dietary Supplements (revision of ANSI/NSF 173-2021)
The purpose of NSF/ANSI 173 is to serve as an evaluation tool for analyzing dietary supplements. Certification to
this Standard serves as a communication tool between manufacturers of ingredients and finished product,
retailers, healthcare practitioners, and consumers. This Standard provides test methods and evaluation criteria to
allow for the determination that a dietary supplement contains the ingredients claimed on the label, either
qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances,
validated laboratory methods are not yet available for analyzing certain ingredients. In such cases, new methods
will be added to this Standard as they become available.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: rbroker@nsf.org

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL  60062-2096  | jeffrey.prusko@ul.org, https://ul.org/

New Standard
BSR/UL 1349-202x, Standard for Safety for LP-Gas Vaporizers (new standard)
These requirements cover liquefied petroleum gas (LP-Gas) vaporizers of the stationary type. Vaporizers covered
by these requirements are intended to be installed and used in accordance with the applicable Codes and
Regulations as determined by the Authority Having Jurisdiction (AHJ), such as, but not limited to: (a) In the United
States: (1) Liquefied Petroleum Gas Code, NFPA 58;  (2) National Electrical Code, NFPA 70. (b) In Canada: (1)
Natural Gas and Propane Installation Code, CAN/CSA-B149.1; (2) Canadian Propane Storage and Handling Code,
CAN/CSA-B149.2; (3) Canadian Electrical Code, CSA C22.1, Part I; (4) Provincial or other regulations.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Jeff Prusko, jeffrey.prusko@ul.org
Comment Deadline: July 24, 2022

UL (Underwriters Laboratories)
47173 Benicia Street, Fremont, CA  94538  | Derrick.L.Martin@ul.org, https://ul.org/

Revision
This proposal covers the inclusion of requirements for Chemically Recycled Plastics in Table 9.1.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Derrick Martin; Derrick.L.Martin@ul.org

UL (Underwriters Laboratories)
47173 Benicia Street, Fremont, CA  94538  | Derrick.L.Martin@ul.org, https://ul.org/

Revision
This proposal covers the inclusion of deformation resistance as an alternate test method for the Tensile Impact Test described in Paragraphs 25.3 and 26.1.3.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Derrick Martin; Derrick.L.Martin@ul.org

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL  60062-2096  | Amy.K.Walker@ul.org, https://ul.org/

Revision
BSR/UL 1082-202x, Standard for Safety for Household Electric Coffee Makers and Brewing-Type Appliances (revision of ANSI/UL 1082-2017)
This proposal for UL 1082 covers: (1) Addition of UL 969A as an alternative to existing permanency of marking requirements for cord tags.
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/Home/ProposalsDefault.aspx."
Call for Comment on Standards Proposals

Comment Deadline: August 8, 2022

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

New Standard
BSR/ASB Std 173-202x, Standard for Education and Training of Forensic Toxicology Personnel (new standard)
This document provides minimum requirements for educational qualifications, training, competency, experience, continuing education, and certification of laboratory personnel performing or overseeing forensic toxicology analysis and breath alcohol instrument calibration. This applies to the following sub-disciplines: postmortem toxicology, human performance toxicology (e.g., drug-facilitated crimes and driving-under-the-influence of alcohol or drugs) and other forensic testing (e.g., court-ordered toxicology, general forensic toxicology). Laboratory personnel that exclusively perform administrative or non-technical duties are outside the scope of this document.
Single copy price: Free
Obtain an electronic copy from: Document and comments template can be viewed on the AAFS Standards Board website at: https://www.aafs.org/academy-standards-board
Order from: Document will be provided electronically on AAFS Standards Board website (https://www.aafs.org/academy-standards-board) free of charge.
Send comments (copy psa@ansi.org) to: asb@aafs.org

AARST (American Association of Radon Scientists and Technologists)
527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision
BSR/AARST RMS-LB-202x, Radon Mitigation Standards for Schools and Large Buildings (revision of ANSI/AARST RMS-LB-2020)
This standard of practice specifies minimum requirements for methods that mitigate risks to occupants posed by radon gas, chemical vapors or other hazardous soil gases that are present within existing schools and large buildings. This revised Section 9.1.3 is the result of public comments received in 2022 for proposed revisions to Section 9.1. While retaining the intent, clarity was added due to multiple unintended interpretations voiced by commenters.
Single copy price: $TBD
Obtain an electronic copy from: https://standards.aarst.org/public-review
Order from: StandardsAssist@gmail.com
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: August 8, 2022

AARST (American Association of Radon Scientists and Technologists)
527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision
BSR/AARST RMS-MF-202x, Radon Mitigation Standards for Schools and Large Buildings (revision of ANSI/AARST RMS-MF-2020)
This standard of practice specifies minimum requirements for methods that mitigate risks to occupants posed by radon gas, chemical vapors, or other hazardous soil gases that are present within existing multifamily buildings. This revised Section 9.1.3 is the result of public comments received in 2022 for proposed revisions to Section 9.1. While retaining the intent, clarity was added due to multiple unintended interpretations voiced by commenters.
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Order from: StandardsAssist@gmail.com
Send comments (copy psa@ansi.org) to: Same

Revision
BSR/AARST SGM-SF-202x, Soil Gas Mitigation Standards for Existing Homes (revision of ANSI/AARST SGM-SF-2020)
This standard of practice specifies minimum requirements for methods that mitigate risks to occupants posed by radon gas, chemical vapors or other hazardous soil gases that are present within existing homes. This revised Section 9.1.3 is the result of public comments received in 2022 for proposed revisions to Section 9.1. While retaining the intent, clarity was added due to multiple unintended interpretations voiced by commenters.
Single copy price: $TBD
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Order from: StandardsAssist@gmail.com
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: August 8, 2022

AHAM (Association of Home Appliance Manufacturers)
1111 19th Street NW, Suite 402, Washington, DC 20036 | jpark@aham.org, www.aham.org

New Standard
BSR/AHAM AC-4-202x, Method of Assessing the Reduction Rate of Chemical Gases by a Room Air Cleaner (new standard)
This document specifies a method to evaluate the capability of a portable air cleaner to reduce the concentration of chemical gases in a specified chamber. The test is applicable to portable air cleaners commonly used in single room spaces such as those based on mechanical filtration, ultraviolet (UV), ionizers, photocatalytic oxidation, and ozone generators in-unit technology. This standard method includes definitions and performance characteristics of portable household electric room air cleaners of the types indicated. This standard method measures the relative reduction by the air cleaner of the concentration of chemical gases suspended in the air in a specified test chamber in new condition. In this standard, we do not suggest performance test methods to measure by-products of either the interaction between chemicals or between the air cleaner and the chemicals tested in this standard. The formation of by-products is an important subject. The subject of measuring by-products and chemicals is under study and AHAM will address this in future documents.

Single copy price: $200.00
Obtain an electronic copy from: https://www.aham.org/ItemDetail?iProductCode=42022&Category=PADSTD
Send comments (copy psa@ansi.org) to: John Park; jpark@aham.org

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

Addenda
BSR/ASHRAE Addendum a to Standard 41.3-202x, Standard Methods for Pressure Measurement (addenda to ANSI/ASHRAE Standard 41.3-2022)
The purpose of ANSI/ASHRAE 41.3-2022 Addendum a is to update the steady-state criteria sections.
Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
Order from: standards.section@ashrae.org
Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Addenda
BSR/ASHRAE Addendum a to Standard 41.6-202x, Standard Methods for Humidity Measurement (addenda to ANSI/ASHRAE Standard 41.6-2021)
The purposes of ANSI/ASRAE 41.6-2021 Addendum a are to (a) make it easier for the higher-tier ASHRAE standards to adopt this standard by reference, (b) update the uncertainty requirements, and (c) update the steady-state criteria sections.
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Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
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Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts
Call for Comment on Standards Proposals

Comment Deadline: August 8, 2022

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

Addenda

BSR/ASHRAE Addendum a to Standard 41.7-202x, Standard Methods for Gas Flow Measurement (addenda to ANSI/ASHRAE Standard 41.7-2021)
The purposes of ANSI/ASHRAE 41.7-2021 Addendum a are to (a) make it easier for the higher-tier ASHRAE standards to adopt this standard by reference, (b) update the uncertainty requirements, and (c) update the steady-state criteria sections.
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ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
180 Technology Parkway, Peachtree Corners, GA 30092 | cking@ashrae.org, www.ashrae.org

Addenda

The purposes of ANSI/ASRAE 41.9-2021 Addendum a are to (a) make it easier for the higher-tier ASHRAE standards to adopt this standard by reference, (b) update the uncertainty requirements, and (c) update the steady-state criteria sections.
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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

Proposed Addendum h revises Tables 8.1 and 8.2 to incorporate the unoccupied turndown column in each. This will provide clarity and consistency within this standard. Proposed Addendum h also modifies text within Sections 8.1 and 8.2 which is associated with unoccupied turndowns. This proposed addendum incorporates modifications within Addendum g of this Standard (currently in process).
Single copy price: $35.00
Order from: Send request to standards.section@ashrae.org
Send comments (copy psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts
Call for Comment on Standards Proposals

Comment Deadline: August 8, 2022

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 AG-1, Code on on Nuclear Air and Gas Treatment (revision of ANSI/ASME AG-1-2019)
This Code provides requirements for the performance, design, fabrication, installation, inspection, acceptance testing, and quality assurance of equipment used in air and gas treatment systems in nuclear facilities. This Code also provides non-mandatory guidance for systems involving components covered by this Code.
Single copy price: Free
Obtain an electronic copy from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Robert Ryan; ryanr@asme.org

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 B31J-202x, Stress Intensification Factors (i-Factors), Flexibility Factors (k-Factors), and Their Determination for Metallic Piping Components (revision of ANSI/ASME B31J-2017)
The ASME B31 Code for Pressure Piping and the ASME Boiler and Pressure Vessel Code, Section III, Nuclear Components, Subsections NC and ND piping rules require the use of stress intensification factors (SIFs or i-factors) and flexibility factors (k-factors) when checking the adequacy of components and joints (welded and nonwelded) in piping subject to various loads, including cyclic loads, that may produce fatigue failures. As used herein, where the word “Code” is used without specific identification, it means the Code that incorporates or references this Standard. Experimental methods to determine SIFs, flexibility factors, and sustained load factors are provided in the Nonmandatory Appendices. Compiled stress intensification and flexibility factor equations for common piping components are included in Table 1-1; see also Tables 1-2 and 1-3 and Figures 1-1 through 1-7.
Single copy price: Free
Obtain an electronic copy from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Ray Rahaman; rahamanr@asme.org

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 NM.1-202x, Thermoplastic Piping Systems (revision of ANSI/ASME NM.1-2020)
(a) This standard prescribes requirements for the design, materials, fabrication, erection, examination, testing, and inspection of thermoplastic piping systems. (b) Thermoplastic piping as used in this standard includes pipe, flanges, bolting, gaskets, valves, fittings, special connecting components, and the pressure containing portions of other piping components, whether manufactured in accordance with Standards referenced in this standard or specially designed. It also includes hangers and supports and other equipment items necessary to prevent overstressing the pressure containing components.
Single copy price: Free
Obtain an electronic copy from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Jihoon Oh; ohj@asme.org
Comment Deadline: August 8, 2022

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 QEI-1-202x, Standard for the Qualification of Elevator Inspectors (revision of ANSI/ASME QEI-1-2018)
This Standard includes requirements for the qualification, duties, and responsibilities of inspectors and inspector supervisors engaged in the inspection and testing of equipment to determine compliance with the requirements of ASME A17.1/CSA B44; ASME A17.3; CSA B44.1/ASME A17.5; ASME A17.6; ASME A17.7/CSA B44.7, ASME A18.1 or CSA B355, CSA B311, and ANSI/ASSE A10.4 or CSA Z185.
Single copy price: Free
Obtain an electronic copy from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Geraldine Burdeshaw; burdeshawg@asme.org

AWPA (ASC O5) (American Wood Protection Association)
P.O. Box 361784, Birmingham, AL 35236-1784 | email@awpa.com, www.awpa.com

Revision
This standard provides minimum specifications for the quality and dimensions of wood poles that are to be used as single-pole utility structures. The poles described herein are considered as simple cantilever members subject to transverse loads only. Fiber strength values, provided as a basis for determining pole class sizes, apply only to poles that meet or exceed the minimum quality specifications.
Single copy price: $50.00
Obtain an electronic copy from: email@awpa.com
Order from: email@awpa.com
Send comments (copy psa@ansi.org) to: Same

AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | kbulger@aws.org, www.aws.org

Revision
This specification provides standards for the design and manufacture of pressure-containing welded joints and structural welded joints used in the manufacture of hydraulic cylinders. Manufacturer’s responsibilities are presented as they relate to the welding practices that have been proven successful within the industry in the production of hydraulic cylinders. Included are clauses defining procedure qualification, performance qualification, workmanship and quality requirements, as well as inspection requirements and repair requirements.
Single copy price: $31.00 (AWS members)/$41.00 (non-members)
Obtain an electronic copy from: kbulger@aws.org
Order from: Kevin Bulger; kbulger@aws.org
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: August 8, 2022

CSA (CSA America Standards Inc.)
8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

Reaffirmation


This standard applies to the installation of a conversion burner with an input of 400,000 Btu per hour (117,228 W) or less and design certified as complying with the Standard for ANSI Z21.17. This standard, in conjunction with local codes or, in the absence of local codes, with the situations where an appliance is to be converted to gas with a conversion burner, provided it can be demonstrated under Parts 2 and 3 that such a conversion can be made with safety, economy, and in the best interest of the consumer. All references to “psi” throughout this standard are to be considered gage pressure, unless otherwise specified. Exhibit contains a list of standards specifically referenced in this standard, and sources from which these reference standards may be obtained.

Single copy price: Free
Obtain an electronic copy from: ansi.contact@csagroup.org
Order from: ansi.contact@csagroup.org
Send comments (copy psa@ansi.org) to: ansi.contact@csagroup.org

CSA (CSA America Standards Inc.)
8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

Reaffirmation


This Standard applies to newly produced, gas-fired high-intensity infrared heaters (see Clause 3, Definitions), hereinafter referred to as heaters or appliances, constructed entirely of new, unused parts and materials with inputs up to and including 400,000 Btu per hour (117,228 W) per burner: (a) for use with natural gas; (b) for use with manufactured gas; (c) for use with mixed gas; (d) for use with propane gas; (e) for use with LP gas-air mixtures; or (f) convertible for use with natural gas and propane gas, when provision is made for the simple conversion from one gas to the other. Heaters covered by this Standard are intended for installation in and heating of outdoor spaces or nonresidential indoor spaces and are intended for location where flammable gases or vapors are not generally present.

Single copy price: Free
Obtain an electronic copy from: ansi.contact@csagroup.org
Send comments (copy psa@ansi.org) to: ansi.contact@csagroup.org
Comment Deadline: August 8, 2022

ECIA (Electronic Components Industry Association)
13873 Park Center Road, Suite 315, Herndon, VA 20171 | idonohoe@ecianow.org, www.ecianow.org

Revision
This specification defines the requirements for a family of thin film resistor networks on silicon with various configurations, packaged in a molded, JEDEC-approved package.
Single copy price: $76.00
Obtain an electronic copy from: global.ihs.com
Send comments (copy psa@ansi.org) to: Edward Mikoski (emikoski@ecianow.org)

IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)
18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 | terry.burger@asse-plumbing.org; standards@iapmostandards.org, www.asse-plumbing.org

Revision
BSR/ASSE 1099/WSC PST-202x, Pressurized Water Storage Tanks (revision of ANSI/ASSE 1099/WSC-PST-2021)
This standard covers pressurized water storage tanks used in well-water potable water supply systems. These tanks collect and store underground water under pressurized conditions to provide cold water supply to single or multiple premises.
Single copy price: Free
Obtain an electronic copy from: terry.burger@asse-plumbing.org
Order from: terry.burger@asse-plumbing.org
Send comments (copy psa@ansi.org) to: terry.burger@asse.plumbing.org

MSS (Manufacturers Standardization Society)
127 Park Street, NE, Vienna, VA 22180-4602 | standards@msshq.org, www.mss-hq.org

Revision
BSR/MSS SP-138-202x, Quality Standard Practice for Oxygen Cleaning of Valves and Fittings (revision of ANSI/MSS SP-138-2014)
The purpose of this Standard Practice is to provide standard methods for processing valves and fittings intended to be used for Oxygen Service. The proper combination of methods depends upon the part, its method of manufacture, and the types of contamination present. It is recommended that prior to implementation of this Standard Practice, an agreement be reached between the purchaser and the product manufacturer as to the appropriate methods to be used for the product to be cleaned. This Standard Practice outlines the general requirements for cleaning, inspection, testing, and packaging of valves and fittings intended to be used for Oxygen service. Proper design and material compatibility for Oxygen systems is outside the scope of this Standard Practice.
Single copy price: $140.00
Obtain an electronic copy from: standards@msshq.org
Order from: standards@msshq.org
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: August 8, 2022

NEMA (ASC C29) (National Electrical Manufacturers Association)
1300 17th St N #900, Arlington, VA 22209 | Paul.Crampton@nema.org, www.nema.org

Revision

BSR C29.18-202X, Standard for Composite Insulators Distribution Line Post Type (revision of ANSI C29.18-2013)
This standard covers composite distribution line post-type insulators with section lengths 30.6 in (777 mm) or less made of a fiberglass-reinforced resin rod core, polymer material weathersheds, and metal end fittings as defined in this standard and intended for use on overhead lines for electric power systems. Mechanical and electrical performance levels specified herein are requirements for new insulators
Single copy price: Free
Order from: Paul.Crampton@nema.org
Send comments (copy psa@ansi.org) to: Paul.Crampton@nema.org

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org

Revision

BSR/NSF 40-202x (i50r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)
This Standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1,514 L/d (400 gal/d) and 5,678 L/d (1,500 gal/d). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard. System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.
Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org

Revision

BSR/NSF 41-202x (i13r1), Non-liquid Saturated Treatment Systems (revision of ANSI/NSF 41-2018)
This wastewater standard contains minimum requirements for treatment systems that do not utilize a liquid saturated media as a primary means of storing or treating human excreta or human excreta mixed with other organic household materials. It addresses treatment systems that treat both solid and liquid waste, as well as those that only treat solid waste. Management methods for the end products of these systems are not addressed by this Standard.
Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org
Comment Deadline: August 8, 2022

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org

Revision
BSR/NSF 46-202x (i42r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2021)
This Standard is intended for use with components and devices not covered by other NSF wastewater standards. Components and devices covered by this Standard are intended for use with greywater or blackwater, or both. Management methods for the end-products of these components and devices are not addressed in this Standard. This Standard shall in no way restrict new system designs, provided that such designs meet the minimum specifications described herein. All devices and components meeting the scope of this Standard shall comply with all of the requirements described in Sections 1 through 8. In addition, devices and components shall comply with the applicable subsequent section(s) contained in this Standard. Where subsequent sections of the standard include requirements that overlap with those found in Sections 1 through 8, the requirements of both sections shall be met unless otherwise specified in the requirements of the subsequent section.

Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

Understood the requirements and constraints

Revision
BSR/NSF 245-202x (i31r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020)
This wastewater standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities of 1514 L/d (400 gal/d) to 5678 L/d (1500 gal/d) that are designed to provide reduction of nitrogen in residential wastewater. Management methods for the treated effluent discharged from these systems are not addressed by this Standard. A system, in the same configuration, must either be demonstrated to have met the Class I requirements of NSF/ANSI 40 or must meet the Class I requirements of NSF/ANSI 40 during concurrent testing for nutrient removal.

Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

Understood the requirements and constraints

Call for Comment on Standards Proposals
Comment Deadline: August 8, 2022

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org

Revision

This Standard contains minimum requirements for onsite residential and commercial greywater treatment systems. Systems may include Greywater reuse treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d); or Commercial greywater reuse treatment systems: This applies to onsite commercial reuse treatment systems that treat combined commercial facility greywater with capacities exceeding 5,678 L/d (1,500 gal/d) and commercial facility laundry water only of any capacity. Management methods and end uses appropriate for the treated effluent discharged from greywater residential and commercial treatment systems meeting this Standard are limited to subsurface discharge to the environment only.

Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

Revision

BSR/NSF 385-202x (i14r1), Disinfection Mechanics (revision of ANSI/NSF 385-2021)
This Standard is intended for use with devices intended to disinfect wastewater after secondary treatment and prior to discharge from residential wastewater treatment systems having rated treatment capacities between 757 L/day (200 gal/day) and 5678 L/day (1500 gal/day). This Standard also applies to devices intended to be used in water reclamation and reuse. Specific requirements exist for construction and testing of individual disinfection devices based on the technology used by the device. All Devices are required to be tested against the influent challenge water as specified in Section 1.4 and to meet the minimum effluent quality requirements in accordance with 1.5. Devices shall be tested against the effluent requirements of this Standard unless the manufacturer requests certification under an effluent standard in NSF/ANSI 350 which is more stringent than this Standard.

Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org
Reaffirmation


There are differences in the cable spectrum planning practices adopted for different networks in the world. Therefore, two options for physical layer technology are included, which have equal priority and are not required to be interoperable. One technology option is based on the downstream multi-programme television distribution that is deployed in North America using 6 MHz channeling, and supports upstream transmission in the region 5-42 MHz. The other technology option is based on the corresponding European multi-programme television distribution and supports upstream in the region 5-65 MHz. Although both options have the same status, the first option was documented earlier and the second option introduced at a later time as an amendment, resulting in the document structure not reflecting this equal priority. The first of these options is defined in Section 2, Section 4, Section 5, Appendix G and Appendix C.1.1.1, whereas the second is defined by replacing the content of those sections with the content of Appendix N. Correspondingly, [ITU-T J.83-B], [NCTA] and [SMS] apply only to the first option, and [EN 300 429] only to the second. Compliance with this document requires compliance with one or other of these implementations, not with both. It is not required that equipment built to one option shall interoperate with equipment built to the other.

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

Reaffirmation


The intent of this BPI+ specification is to describe MAC layer security services for DOCSIS® CMTS - CM communications. BPI+ security goals are twofold:
- provide cable modem users with data privacy across the cable network;
- provide MSOs with service protection; i.e., prevent unauthorized users from gaining access to the network’s RF MAC services.

Single copy price: $50.00
Obtain an electronic copy from: admin@standards.scte.org
Send comments (copy psa@ansi.org) to: admin@standards.scte.org
Comment Deadline: August 8, 2022

SCTE (Society of Cable Telecommunications Engineers)
140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

Reaffirmation
This standard defines the Network Management requirements for support a DOCSIS 1.1 environment. More specifically, the specification details the SNMP v3 protocol and how it coexists with SNMP V1/V2. The RFCs and Management Information Base (MIB) requirements are detailed as well as interface numbering, filtering, event notifications, etc. Basic network management principals such as account, configuration, fault, and performance management are incorporated in this specification for better understanding of managing a high-speed cable modem environment.
Single copy price: $50.00
Obtain an electronic copy from: admin@standards.scte.org
Send comments (copy psa@ansi.org) to: admin@standards.scte.org

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, https://ul.org/

New Standard
BSR/UL 498B-202x, Standard for Safety for Receptacles with Integral Switching Means (new standard)
The proposed first edition of the Receptacles with Integral Switching Means, UL 498B, covers a receptacle with integral switching means rated 600 V or less, used in ordinary dry locations and intended for connection to a branch circuit in accordance with the National Electrical Code, NFPA 70.
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work "https://csds.ul.com/Home/ProposalsDefault.aspx."

UL (Underwriters Laboratories)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Vickie.T.Hinton@ul.org, https://ul.org/

Reaffirmation
Single copy price: Free
Order from: https://www.shopulstandards.com/
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/Home/ProposalsDefault.aspx."
Comment Deadline: August 23, 2022

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

New Standard
BSR/ASME SBS-202x, Structures for Bulk Solids (new standard)
This Standard covers the requirements for vertical stationary containers used for the storage and processing of bulk solid materials at gas pressures not exceeding 15 psig (100 kPa) internally or externally, at temperatures up to 212 deg. F (100 deg. C). This Standard contains requirements, prohibitions, and guidance for bulk solids containers, including materials of construction, solids loading characteristics, design, fabrication, examination, testing, and overpressure protection.
Single copy price: Free
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Paul Stumpf; stumpfp@asme.org

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

Reaffirmation
BSR/ASME B89.1.6-2002 (R202x), Measurement of Plain Internal Diameters for Use as Master Rings or Ring Gages (reaffirmation of ANSI/ASME B89.1.6-2002 (R2017))
This Standard is intended to establish uniform practices for the measurement of master rings or ring gages using horizontal methods.
Single copy price: $36.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Justin Cassamassino; cassasmassinoj@asme.org

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 A90.1-202x, Safety Standard for Belt Manlifts (revision of ANSI/ASME A90.1-2015)
This Standard applies to the manufacture, installation, maintenance, inspection, and operation of belt manlifts. Belt manlifts covered by this scope consist of steps (platforms) and accompanying handholds mounted on, or attached to, an endless belt operating vertically in one direction only and being supported by, and driven through, pulleys at the top and bottom. These belt manlifts are intended for conveyance of persons only.
Single copy price: Free
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Geraldine Burdeshaw; burdeshawg@asme.org
Technical Reports Registered with ANSI

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

Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to (psa@ansi.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

Reaffirmed Technical Report


Refines the AVA_VAN assurance family activities defined in ISO/IEC 18045 and provides more specific guidance on the identification, selection and assessment of relevant potential vulnerabilities in order to conduct an ISO/IEC 15408 evaluation of a software target of evaluation. Leverages publicly available information security resources to support the method of scoping and implementing ISO/IEC 18045 vulnerability analysis activities.

Single copy price: $60.00
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ITI (INCITS) (InterNational Committee for Information Technology Standards)

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

Reaffirmed Technical Report


Addresses how security assurance can be stated for products where the risk of the security environment requires the support of physical security mechanisms; a survey of physical security attacks directed against different types of hardware embodiments including a description of known physical attacks; guidance on the principles, best practices and techniques for the design of tamper protection mechanisms and methods for mitigation; and guidance on the evaluation or testing of hardware tamper protection mechanisms.

Single copy price: $81.00
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Technical Reports Registered with ANSI

ITI (INCITS) (InterNational Committee for Information Technology Standards)
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

**Reaffirmed Technical Report**


Defines an integrated XML implementation of ISO 19115 1, ISO 19115 2, and concepts from ISO/TS 19139 by defining the following artefacts: (a) a set of XML schema required to validate metadata instance documents conforming to conceptual model elements defined in ISO 19115 1, ISO 19115 2, and ISO/TS 19139; (b) a set of ISO/IEC 19757 3 (Schematron) rules that implement validation constraints in the ISO 19115 1 and ISO 19115 2 UML models that are not validated by the XML schema; (c) an Extensible Stylesheet Language Transformation (XSLT) for transforming ISO 19115-1 metadata encoded using the ISO/TS 19139 XML schema and ISO 19115 2 metadata encoded using the ISO/TS 19139 2 XML schema into an equivalent document that is valid against the XML schema defined in this document.

Single copy price: $105.00
Order from: https://webstore.ansi.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

**Reaffirmed Technical Report**


Defines the framework for semantic interoperability of geographic information. This framework defines a high-level model of the components required to handle semantics in the ISO geographic information standards with the use of ontologies.

Single copy price: $81.00
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ITI (INCITS) (InterNational Committee for Information Technology Standards)
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

**Reaffirmed Technical Report**


Defines data quality encoding in XML. It is an XML schema implementation derived from ISO 19157:2013 and the data quality related concepts from ISO 19115 2.

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Technical Reports Registered with ANSI

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

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

**Reaffirmed Technical Report**


Defines the data capture method, the relationships between the coordinate reference systems and their parameters, as well as the calibration of airborne lidar (light detection and ranging) sensors. Also standardizes the service metadata for the data capture method, the relationships between the coordinate reference systems and their parameters and the calibration procedures of airborne lidar systems as well as the associated data types and code lists that have not been defined in other ISO geographic information international standards.

Single copy price: $81.00
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**ITI (INCITS) (InterNational Committee for Information Technology Standards)**

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

**Reaffirmed Technical Report**

INCITS/ISO/TS 19163-1:2016 [R2022], Geographic information - Content components and encoding rules for imagery and gridded data - Part 1: Content model, a Technical Specification prepared by INCITS and registered with ANSI (reaffirm technical report)

Classifies imagery and regularly spaced gridded thematic data into types based on attribute property, sensor type, and spatial property, and defines an encoding-neutral content model for the required components for each type of data. It also specifies logical data structures and the rules for encoding the content components in the structures. The binding between the content and a specific encoding format will be defined in the subsequent parts of ISO 19163.

Single copy price: $93.00
Order from: https://webstore.ansi.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

**Reaffirmed Technical Report**

INCITS/TR-24-1999 [R2022], Information Technology - Tape and Tape Medium Changers (FC-TAPE), a Technical Report prepared by INCITS and registered with ANSI (reaffirm technical report)

This technical report defines a profile that selects the features and options of certain standards that are required to operate streaming devices and medium changers in a Public arbitrated loop environment. Devices that operate in a Public arbitrated loop environment are by definition capable of operating in a Private arbitrated loop environment. The primary objective of this technical report is the precise definition of those options so that devices conforming with this profile are guaranteed to operate. A second objective of this technical report is to simplify implementations and their associated documentation, testing, and support requirements. This technical report prohibits and requires both mandatory and optional features of the referenced standards to meet these objectives.

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ITI (INCITS) (InterNational Committee for Information Technology Standards)
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

Reaffirmed Technical Report


Provides definitions and measurement requirements for parameters related to signal quality on FC links. The document describes measurement methods for non-equalized and equalized links. The document describes new types of jitter associated with reference receivers and methods for determining signal quality in closed eye systems. MSQS does not supersede the previously published Fibre Channel Methodologies for Jitter and Signal Quality Specification technical report (hereinafter referred to as FC-MJSQ). MSQS represents additional information and methods that are not included in FC-MJSQ.

Single copy price: $60.00
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Withdrawal of Technical Reports Registered with ANSI

Withdrawal of a Technical Report that is registered with ANSI is determined by the responsible ANSI-Accredited Standards Developer. The following Technical Reports are hereby withdrawn in accordance with the Developers own procedures.

ITI (INCITS) (InterNational Committee for Information Technology Standards)
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

Direct inquiries to: INCITS Secretariat; comments@standards.incits.org
Final Actions on American National Standards

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

AAMI (Association for the Advancement of Medical Instrumentation)
901 N. Glebe Road, Suite 300, Arlington, VA  22203  | abenedict@aami.org, www.aami.org

New Standard
ANSI/AAMI ST98-2022, Cleaning validation of health care products - Requirements for development and validation of a cleaning process for medical devices (new standard) Final Action Date: 6/17/2022

ABYC (American Boat and Yacht Council)
613 Third Street, Suite 10, Annapolis, MD  21403  | bgoodwin@abyinc.org, www.abyinc.org

New Standard
ANSI/ABYC E-13-2022, Lithium Ion Batteries (new standard) Final Action Date: 6/16/2022

Revision

Revision

Revision

ACP (American Clean Power Association)
1501 M Street NW, Suite 900, Washington, DC  20005  | Standards@cleanpower.org, www.cleanpower.org

New Standard

APCO (Association of Public-Safety Communications Officials-International)
351 N. Williamson Boulevard, Daytona Beach, FL  32114-1112  | apcostandards@apcoIntnl.org, www.apcoIntnl.

Revision

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

Withdrawal
Withdrawal

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

Withdrawal

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

ANSI/ASME A112.6.4/CSA B79.4-2022, Roof, Deck, and Balcony Drains (revision and redesignation of ANSI/ASME A112.6.4-2003 (R2012)) Final Action Date: 6/15/2022

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

Revision


Revision

Revision

Revision

CSI (CSA America Standards Inc.)
8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

Revision


ITI (INCITS) (InterNational Committee for Information Technology Standards)
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

Withdrawal


NEMA (ASC C78) (National Electrical Manufacturers Association)
1300 N 17th St, Rosslyn, VA 22209 | Michael.Erbesfeld@nema.org, www.nema.org

Reaffirmation

ANSI C78.5-2017 (R2022), Standard for Electric Lamps - Specifications for Performance of Self-ballasted Compact Fluorescent Lamps (reaffirmation of ANSI C78.5-2017) Final Action Date: 6/16/2022
NEMA (ASC C78) (National Electrical Manufacturers Association)
1300 N 17th St, Rosslyn, VA 22209 | Michael.Erbesfeld@nema.org, www.nema.org

Reaffirmation

Reaffirmation

Revision

Revision
ANSI C78.21-2022, Incandescent lamps: PAR and R Shapes (revision of ANSI C78.21-2011 (R2016)) Final Action Date: 6/16/2022

Revision
ANSI C78.43-2022, Electric Lamps - Single-Ended Metal Halide Lamps (revision of ANSI C78.43-2017) Final Action Date: 6/16/2022

NEMA (ASC C82) (National Electrical Manufacturers Association)
1300 N 17th St, Rosslyn, VA 22209 | Michael.Erbesfeld@nema.org, www.nema.org

Reaffirmation
ANSI C82.4-2017 (R2022), Standard for Lamp Ballasts - Ballasts for High-Intensity-Discharge and Low-Pressure Sodium Lamps (Multiple-Supply Type) (reaffirmation of ANSI C82.4-2017) Final Action Date: 6/16/2022

Reaffirmation

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

Revision
ANSI/NSF 21-2022 (i9r1), Thermoplastic Refuse Containers (revision of ANSI/NSF 21-2019) Final Action Date: 6/12/2022

Revision

Revision

Revision
**NSF (NSF International)**
789 N. Dixboro Road, Ann Arbor, MI  48105-9723   | rbrooker@nsf.org, www.nsf.org

**Revision**
ANSI/NSF 455-2-2022 (i23r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 6/12/2022

**Revision**

**TAPPI (Technical Association of the Pulp and Paper Industry)**
15 Technology Parkway, Suite 115, Peachtree Corners, GA  30092  | standards@tappi.org, www.tappi.org

**New Standard**
ANSI/TAPPI T 211 om-2022, Ash in wood, pulp, paper and paperboard: Combustion at 525C (new standard) Final Action Date: 6/14/2022

**New Standard**
ANSI/TAPPI T 252 om-2022, pH and electrical conductivity of hot water extracts of pulp, paper, and paperboard (new standard) Final Action Date: 6/14/2022

**New Standard**
ANSI/TAPPI T 400 sp-2022, Sampling and accepting a single lot of paper, paperboard, containerboard, or related product (new standard) Final Action Date: 6/16/2022

**New Standard**
ANSI/TAPPI T 412 om-2022, Moisture in pulp, paper and paperboard (new standard) Final Action Date: 6/16/2022

**New Standard**
ANSI/TAPPI T 435 om-2022, Hydrogen ion concentration (pH) of paper extracts (hot extraction method) (new standard) Final Action Date: 6/16/2022

**New Standard**
ANSI/TAPPI T 509 om-2022, Hydrogen ion concentration (pH) of paper extracts (cold extraction method) (new standard) Final Action Date: 6/14/2022

**New Standard**
ANSI/TAPPI T 538 om-2022, Roughness of paper and paperboard (Sheffield method) (new standard) Final Action Date: 6/14/2022

**New Standard**
ANSI/TAPPI T 543 om-2022, Bending resistance of paper (Gurley-type tester) (new standard) Final Action Date: 6/14/2022

**New Standard**
ANSI/TAPPI T 610 sp-2022, Preparation of indicators and standard solutions (new standard) Final Action Date: 6/14/2022

**New Standard**
ANSI/TAPPI T 684 om-2022, Gross heating value of black liquor (new standard) Final Action Date: 6/14/2022
TAPPI (Technical Association of the Pulp and Paper Industry)
15 Technology Parkway, Suite 115, Peachtree Corners, GA  30092  | standards@tappi.org, www.tappi.org

New Standard
ANSI/TAPPI T 1009 om-2022, Tensile strength and elongation at break for fiber glass mats (new standard) Final Action Date: 6/14/2022

Reaffirmation
ANSI/TAPPI T 268 om-2013 (R2022), Weight-volume measurement of pulpwood (reaffirmation of ANSI/TAPPI T 268 om-2013) Final Action Date: 6/14/2022

Reaffirmation

Reaffirmation
ANSI/TAPPI T 550 om-2013 (R2022), Determination of equilibrium moisture in pulp, paper and paperboard for chemical analysis (reaffirmation of ANSI/TAPPI T 550 om-2013) Final Action Date: 6/14/2022

Reaffirmation
ANSI/TAPPI T 1016 om-2010 (R2022), Average fiber diameter of fiber glass mats (reaffirmation of ANSI/TAPPI T 1016 om-2010) Final Action Date: 6/14/2022

Revision

Revision
ANSI/TAPPI T 489 om-2022, Bending resistance (stiffness) of paper and paperboard (Taber-type tester in basic configuration) (revision of ANSI/TAPPI T 489 om-2015) Final Action Date: 6/16/2022

Revision
ANSI/TAPPI T 494 om-2022, Tensile properties of paper and paperboard (using constant rate of elongation apparatus) (revision of ANSI/TAPPI T 494 om-2013) Final Action Date: 6/14/2022

Revision
ANSI/TAPPI T 555 om-2022, Roughness of paper and paperboard (Print-surf method) (revision of ANSI/TAPPI T 555 om-2015) Final Action Date: 6/14/2022

Revision
ANSI/TAPPI T 569 om-2022, Internal bond strength (Scott type) (revision of ANSI/TAPPI T 569 om-2014) Final Action Date: 6/14/2022

Revision
ANSI/TAPPI T 648 om-2022, Viscosity of coating clay slurry (revision of ANSI/TAPPI T 648 om-2014) Final Action Date: 6/14/2022

Revision
ANSI/TAPPI T 702 om-2022, Rheological measurements for characterization of polyolefins: Low-density polyethylene (LDPE) for extrusion coating (revision of ANSI/TAPPI T 702 om-2014) Final Action Date: 6/14/2022
TAPPI (Technical Association of the Pulp and Paper Industry)
15 Technology Parkway, Suite 115, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Revision

TIA (Telecommunications Industry Association)
1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org

Addenda

New Standard
ANSI/TIA 5071-2022, Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling (new standard) Final Action Date: 6/16/2022

Revision

UL (Underwriters Laboratories)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Casey.Granata@ul.org, https://ul.org/

National Adoption
ANSI/UL 60947-1-2022, Standard for safety for Low-Voltage Switchgear and Controlgear - Part 1: General Rules (national adoption of IEC 60947-1 with modifications and revision of ANSI/UL 60947-1-2013 (R2019)) Final Action Date: 5/31/2022

New Standard

Reaffirmation

Revision

Revision

Revision
Revision
ANSI/UL 1917-2022, Solid-State Fan Speed Controls (revision of ANSI/UL 1917-2013 (R2017)) Final Action Date: 6/17/2022

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.

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- 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.
ANSI Accredited Standards Developer
AAFS (American Academy of Forensic Sciences)
New membership opportunities for existing consensus bodies: Application Deadline: July 22, 2022

New membership opportunities for existing consensus bodies: Anthropology, Bloodstain Pattern Analysis, CSI, DNA, Dogs and Sensors, Firearms and Toolmarks, Footwear and Tire, Forensic Document Examination, Friction Ridge, Mass Fatality Management and Disaster Victim Identification, Medicolegal Death Investigation, Toxicology, Wildlife Forensics

Application Deadline: July 22, 2022

The Academy Standards Board (ASB) of the American Academy of Forensic Sciences (AAFS) is an ANSI-accredited Standards Development Organization. It is announcing a call for new members for all existing consensus bodies. The consensus bodies have 7 to 25 members based on applications received. Members will be selected by the Board of Directors of the ASB. The ASB has seven interest categories, applicants are encouraged to apply in their self-selected interest category. A person may apply to one or more Consensus Body, and need not indicate the same interest category for each Consensus Body application. An on-line application form is available at https://www.aafs.org/academy-standards-board, the website also contains links to several relevant documents describing the ASB. Applicants are requested to submit the online form to be considered for serving on the ASB consensus bodies by July 22, 2022. Please direct questions to: Teresa Ambrosius, TAmbrosius@aafs.org, 719-453-1036.

ANSI Accredited Standards Developer
AAFS (American Academy of Forensic Sciences)
New Consensus Body: Forensic Odontology: Application Deadline: July 22, 2022

The Academy Standards Board (ASB) of the American Academy of Forensic Sciences (AAFS) is an ANSI-accredited Standards Development Organization. It is announcing the formation of a new Consensus Body: Forensic Odontology. The Consensus Body will have 7 to 25 members based on applications received. Members will be selected by the Board of Directors of the ASB. The ASB has seven interest categories, applicants are encouraged to apply in their self-selected interest category. A person may apply in one or more interest categories. An on-line application form is available at https://www.aafs.org/academy-standards-board, the website also contains links to several relevant documents describing the ASB. Applicants are requested to submit the online form to be considered for serving on the Forensic Odontology Consensus Body by July 22, 2022. Please direct questions to: Teresa Ambrosius, TAmbrosius@aafs.org, 719-453-1036.

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

BSR/ASME A90.1-202x, Safety Standard for Belt Manlifts (revision of ANSI/ASME A90.1-2015)

BSR/ASME B31.5-202x, Refrigeration Piping and Heat Transfer Components (revision of ANSI/ASME B31.5-2019)

BSR/ASME B31J-202x, Stress Intensification Factors (i-Factors), Flexibility Factors (k-Factors), and Their Determination for Metallic Piping Components (revision of ANSI/ASME B31J-2017)
Call for Members (ANS Consensus Bodies)

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

BSR/ASME B89.1.6-2002 (R202x), Measurement of Plain Internal Diameters for Use as Master Rings or Ring Gages (reaffirmation of ANSI/ASME B89.1.6-2002 (R2017))

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

BSR/ASME NM.1-202x, Thermoplastic Piping Systems (revision of ANSI/ASME NM.1-2020)

**AWPA (ASC O5) (American Wood Protection Association)**
P.O. Box 361784, Birmingham, AL 35236-1784 | email@awpa.com, www.awpa.com


**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | kbulger@aws.org, www.aws.org


**CSA (CSA America Standards Inc.)**
8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

BSR/CSA ANG 2-202x, Adsorbed Natural Gas (ANG) Container (new standard)

**CSA (CSA America Standards Inc.)**
8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

BSR/CSA NGV 5.3-202x, Mobile Vehicle fueling appliances (MVFA) (new standard)

**CTA (Consumer Technology Association)**
1919 S. Eads Street, Arlington, VA 22202 | cakers@cta.tech, www.cta.tech


CTA is seeking new members to join the consensus body. CTA and the R7 Consumer Electronics Networking Committee are particularly interested in adding new members (called “users”) who acquire control electronics networking systems from those who create them, and in adding new members who neither produce nor use control electronics networking system products, and others (called members with a “general interest”).
Call for Members (ANS Consensus Bodies)

CTA (Consumer Technology Association)
1919 S. Eads Street, Arlington, VA 22202 | cakers@cta.tech, www.cta.tech

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ECIA (Electronic Components Industry Association)
13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org


BSR/EIA 60384-3-202x, Fixed capacitors for use in electronic equipment - Part 3: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte (identical national adoption of IEC 60384-3 ED7 and revision of ANSI/EIA 60384-3-2017)


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 503-2022/AM1-202x, Information technology - SCSI Stream Commands-5 (SSC-5) - Amendment 1 (SSC-5-AM1) (addenda to INCITS 503-2022)

ITI (INCITS) (InterNational Committee for Information Technology Standards)
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

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**ITI (INCITS) (InterNational Committee for Information Technology Standards)**
700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org


**MSS (Manufacturers Standardization Society)**
127 Park Street, NE, Vienna, VA 22180-4602 | standards@msshq.org, www.mss-hq.org

BSR/MSS SP-138-202x, Quality Standard Practice for Oxygen Cleaning of Valves and Fittings (revision of ANSI/MSS SP-138-2014)

**NEMA (ASC C29) (National Electrical Manufacturers Association)**
1300 17th St N #900, Arlington, VA 22209 | Paul.Crampton@nema.org, www.nema.org

BSR C29.18-202X, Standard for Composite Insulators Distribution Line Post Type (revision of ANSI C29.18-2013)
Call for Members (ANS Consensus Bodies)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 40-202x (i45r3), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 40-202x (i50r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 41-202x (i13r1), Non-liquid Saturated Treatment Systems (revision of ANSI/NSF 41-2018)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 46-202x (i42r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2021)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | rbrooker@nsf.org, www.nsf.org
BSR/NSF 173-202x (i91r1), Dietary Supplements (revision of ANSI/NSF 173-2021)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 245-202x (i31r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 385-202x (i14r1), Disinfection Mechanics (revision of ANSI/NSF 385-2021)
American National Standards (ANS) Announcements

Corrections

CSA - CSA America Standards Inc.

Designation of proposal is BSR Z21.21-2021/CSA 6.5-202x

The 6/17/2022, CSA - CSA America Standards Inc. PINS notice mistakenly referenced the A addenda of Z21.21. This proposal should have been listed as follows:


Please direct inquiries to: Debbie Chesnik; ansi.contact@csagroup.org

Corrections

SPRI - Single Ply Roofing Industry

BSR/SPRI/RCI NT-1-2012 (R202x) redesignated as BSR/SPRI/IIBEC NT-1-2012 (R202x)

The 6/17/2022, SPRI - Single Ply Roofing Industry PINS notice mistakenly referenced an incorrect designation and project intent. This notice should have been designated as follows:

BSR/SPRI/IIBEC NT-1-2012 (R202x), Detection and Location of Latent Moisture in Building Roofing Systems by Nuclear Radioisotopic Thermalization (reaffirmation and redesignation of ANSI/SPRI/RCI NT-1-2012 (R2017))

Please direct inquiries to: Linda King; info@spri.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 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
- 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
- Information about standards Incorporated by Reference (IBR): https://ibr.ansi.org/
- ANSI - Education and Training: www.standardslearn.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)
- UL (Underwriters Laboratories)

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 Contact Information

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

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

AAMI
Association for the Advancement of Medical Instrumentation
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Arlington, VA  22203
www.aami.org
Amanda Benedict
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AARST
American Association of Radon Scientists and Technologists
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ABYC
American Boat and Yacht Council
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ACI
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ACP
American Clean Power Association
1501 M Street NW, Suite 900
Washington, DC  20005
www.cleanpower.org
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Standards@cleanpower.org

ADA (Organization)
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211 East Chicago Avenue
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bralowerp@ada.org

AHAM
Association of Home Appliance Manufacturers
1111 19th Street NW, Suite 402
Washington, DC  20036
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John Park
jpark@aham.org

APCO
Association of Public-Safety Communications Officials-International
351 N. Williamson Boulevard
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www.apcolnti.org
Mindy Adams
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ASHRAE
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
180 Technology Parkway
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American Society of Mechanical Engineers
Two Park Avenue, M/S 6-2B
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100 Barr Harbor Drive
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Laura Klineburger
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AWPA (ASC O5)
American Wood Protection Association
P.O. Box 361784
Birmingham, AL  35236
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8669 NW 36th Street, Suite 130
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CSA
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Debbie Chesnik
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CTA
Consumer Technology Association
1919 S. Eads Street
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www.cta.tech
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ECIA
Electronic Components Industry Association
13873 Park Center Road, Suite 315
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IAPMO (ASSE Chapter)
ASSE International Chapter of IAPMO
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ITI (INCITS)
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MSS
Manufacturers Standardization Society
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Vienna, VA  22180
www.mss-hq.org
Kaley Garubba
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NEMA (ASC C12)
National Electrical Manufacturers Association
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Rosslyn, VA  22209
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Paul Orr
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NEMA (ASC C29)
National Electrical Manufacturers Association
1300 17th St N #900,
Arlington, VA  22209
www.nema.org
Paul Crampton
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NEMA (ASC C82)
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NSF
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789 N. Dixboro Road
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Allan Rose
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Jason Snider
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Rachel Brooker
rbrooker@nsf.org

SCTE
Society of Cable Telecommunications Engineers
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www.scte.org
Kim Cooney
kcooney@scte.org

TAPII
Technical Association of the Pulp and Paper Industry
15 Technology Parkway, Suite 115
Peachtree Corners, GA  30092
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William Millians
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TIA
Telecommunications Industry Association
1320 North Courthouse Road, Suite 200
Arlington, VA  22201
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Teesha Jenkins
standards-process@tiaonline.org

UL
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171 Nepean Laboratories
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Griff Edwards
griff.edwards@ul.org
# ISO & IEC Draft International Standards

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

## COMMENTS

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); comments on ISO documents must be submitted electronically in the approved ISO template and as a Word document as other formats will not be accepted. Those regarding IEC documents should be sent to Tony Zertuche, General Secretary, USNC/IEC, at ANSI's New York offices (tvertuche@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

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<tr>
<td>TC 20</td>
<td>Fine ceramics</td>
<td>ISO/ DIS 3180, Fine ceramics (advanced ceramics, advanced technical ceramics) - Methods for chemical analysis of calcium phosphate based powders for non-biomedical applications - 4/22/2022, $77.00</td>
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<tr>
<td>TC 131</td>
<td>Fluid power systems</td>
<td>ISO/ DIS 20145, Pneumatic fluid power - Test methods for measuring acoustic emission pressure levels of exhaust silencers - 9/1/2022, $102.00</td>
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<td>TC 60</td>
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<td>Health Informatics</td>
<td>ISO/IEEE FDIS 11073-20601, Health informatics - Device interoperability - Part 20601: Personal health device communication - Application profile - Optimized exchange protocol - , $215.00</td>
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<tr>
<td>TC 215</td>
<td>Health Informatics</td>
<td>ISO/IEEE FDIS 11073-10407, Health informatics - Device interoperability - Part 10407: Personal health device communication - Device specialization - Blood pressure monitor -, $125.00</td>
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<tr>
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<td>ISO/IEEE FDIS 11073-10420, Health informatics - Device interoperability - Part 10420: Personal health device communication - Device specialization - Body composition analyzer -, $134.00</td>
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Metallic and other inorganic coatings (TC 107)
ISO/FDIS 24674, Method and requirements for plasma nitriding and follow-up PVD hard coatings on cold-work mould steels - 9/18/2021, $40.00

Paper, board and pulps (TC 6)
ISO/DIS 24118-1.2, Paper and board - Stylus contact method - Part 1: Determination of surface roughness - 4/18/2022, $53.00

Petroleum products and lubricants (TC 28)
ISO/DIS 17308, Petroleum products and other liquids - Ethanol - Determination of electrical conductivity - 9/5/2022, $58.00

Plastics (TC 61)
ISO/FDIS 16396-1, Plastics - Polyamide (PA) moulding and extrusion materials - Part 1: Designation system and basis for specifications - 5/22/2021, $67.00

Road vehicles (TC 22)
ISO/DIS 23150, Road vehicles - Data communication between sensors and data fusion unit for automated driving functions - Logical interface - 4/15/2022, $245.00

Rubber and rubber products (TC 45)
ISO/DIS 5978, Rubber or plastics-coated fabrics - Determination of blocking resistance - 4/15/2022, $40.00

Ships and marine technology (TC 8)
ISO/DIS 5476, Ships and Marine Technology - Virtual reality and simulation training systems for lifesaving appliances and arrangements - 4/15/2022, $62.00

Small tools (TC 29)
ISO/FDIS 17631, Ships and marine technology - Shipboard plans for fire control, damage control, life-saving appliances and means of escape - 7/21/2019, $93.00


ISO/DIS 9182-4, Tools for pressing - Guide pillars - Part 4: Type C, pillars with taper lead and bush - 9/8/2022, $40.00

ISO/DIS 9182-5, Tools for pressing - Guide pillars - Part 5: Type D, end-locking pillars with flange - 9/4/2022, $40.00

Soil quality (TC 190)
ISO/DIS 11267, Soil quality - Inhibition of reproduction of Collembola (Folsomia candida) by soil contaminants - 9/4/2022, $107.00

ISO/DIS 22036, Soil, treated biowaste and sludge - Determination of elements using inductively coupled plasma optical emission spectrometry (ICP-OES) - 4/15/2022, $93.00

Solid biofuels (TC 238)
ISO/DIS 18123, Solid biofuels - Determination of volatile matter - 4/15/2022, $46.00

ISO/DIS 18134-3, Solid biofuels - Determination of moisture content - Oven dry method - Part 3: Moisture in general analysis sample - 4/17/2022, $40.00

(TC 321)
ISO/DIS 32110, Transaction assurance in E-commerce - Vocabulary - 9/4/2022, $53.00

Terminology (principles and coordination) (TC 37)
ISO/FDIS 24019, Simultaneous interpreting delivery platforms - Requirements and recommendations - 11/8/2020, $98.00

Tractors and machinery for agriculture and forestry (TC 23)
ISO/DIS 7914, Forestry machinery - Portable chain-saws - Minimum handle clearance and sizes - 9/2/2022, $46.00

ISO/DIS 19932-1, Equipment for crop protection - Knapsack sprayers - Part 1: Safety and environmental requirements - 4/21/2022, $82.00

ISO/DIS 19932-2, Equipment for crop protection - Knapsack sprayers - Part 2: Test methods - 4/21/2022, $88.00

ISO/DIS 19932-3, Equipment for crop protection - Knapsack sprayers - Part 3: Inspection of knapsack sprayers in use - 4/21/2022, $46.00

ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 17360, Automatic identification and data capture techniques - Supply chain applications of RFID - Product tagging, product packaging, transport units, returnable transport units (RTIs) and returnable packaging items (RPIs) - 4/16/2022, $112.00


IEC Standards

Electric traction equipment (TC 9)
9/2843(F)/FDIS, IEC 62590-3-1 ED1: Railway applications - Fixed installations - Electronic power converters - Part 3-1: AC traction applications - Electronic power compensators, 07/15/2022

Electrical accessories (TC 23)
23B/1399/CD, IEC 60884-3-2 ED1: Plugs and socket-outlets for household and similar purposes - Particular requirements for accessories incorporating electronic components to perform additional functions, 09/09/2022

Electromechanical components and mechanical structures for electronic equipments (TC 48)
48B/2973/FDIS, IEC 63171-5 ED1: Connectors for electrical and electronic equipment - Part 5: Detail specification for 2-way M8 and M12 circular connectors, shielded or unshielded, free and fixed - Mechanical mating information, pin assignment and additional requirements for Type 5, 07/29/2022

Fuel Cell Technologies (TC 105)
105/914(F)/FDIS, IEC 62282-4-600 ED1: Fuel cell technologies - Part 4-600: Fuel cell power systems for propulsion other than road vehicles and auxiliary power units (APU) - Fuel cell/battery hybrid systems performance test methods for excavators, 07/01/2022

Industrial-process measurement and control (TC 65)
65E/906(F)/FDIS, IEC 62453-2 ED3: Field device tool (FDT) interface specification - Part 2: Concepts and detailed description, 07/08/2022


Laser equipment (TC 76)

Quantities and units, and their letter symbols (TC 25)
Rotating machinery (TC 2)
2/2099(F)/CDV, IEC 60034-27-2 ED1: Rotating electrical machines - Part 27-2: On-line partial discharge measurements on the stator winding insulation of rotating electrical machines, 08/26/2022

Semiconductor devices (TC 47)
47/2767/NP, PNW 47-2767 ED1: Semiconductor devices - Performance evaluation of autonomous vehicle detection system - Part 2: Optical performance testing methods of thermal imaging device, 09/09/2022

Surface mounting technology (TC 91)
91/1797/NP, PNW 91-1797 ED1: Environmental testing - Part 2: Tests - Test XD: Resistance of components and assemblies to cleaning solvents, 09/09/2022
# 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).

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<td><strong>Earth-moving machinery (TC 127)</strong></td>
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<tr>
<td>ISO 19014-2:2022, Earth-moving machinery - Functional safety - Part 2: Design and evaluation of hardware and architecture requirements for safety-related parts of the control system, $200.00</td>
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<td><strong>Information and documentation (TC 46)</strong></td>
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<td>ISO 3297:2022, Information and documentation - International standard serial number (ISSN), $149.00</td>
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<tr>
<td>ISO 9300:2022, Measurement of gas flow by means of critical flow nozzles, $250.00</td>
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<td>ISO 5167-1:2022, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 1: General principles and requirements, $200.00</td>
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<tr>
<td>ISO 5167-4:2022, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 4: Venturi tubes, $149.00</td>
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<td><strong>Mechanical testing of metals (TC 164)</strong></td>
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<td>ISO 23838:2022, Metallic materials - High strain rate torsion test at room temperature, $200.00</td>
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Newly Published ISO & IEC Standards
Newly Published ISO & IEC Standards

**Nuclear energy (TC 85)**

ISO 19461-2:2022, Radiological protection - Measurement for the clearance of waste contaminated with radioisotopes for medical application - Part 2: Management of solid radioactive waste in nuclear medicine facilities, $149.00

**Plastics (TC 61)**

ISO 5148:2022, Plastics - Determination of specific aerobic biodegradation rate of solid plastic materials and disappearance time (DT50) under mesophilic laboratory test conditions, $111.00

ISO 22007-2:2022, Plastics - Determination of thermal conductivity and thermal diffusivity - Part 2: Transient plane heat source (hot disc) method, $149.00

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

ISO 13266:2022, Thermoplastics piping systems for non-pressure underground drainage and sewerage - Thermoplastics shafts or risers for inspection chambers and manholes - Determination of resistance against surface and traffic loading, $48.00

ISO 13267:2022, Thermoplastics piping systems for non-pressure underground drainage and sewerage - Thermoplastics inspection chamber and manhole bases - Test methods for buckling resistance, $73.00

ISO 13268:2022, Thermoplastics piping systems for non-pressure underground drainage and sewerage - Thermoplastics shafts or risers for inspection chambers and manholes - Determination of ring stiffness, $73.00

ISO/PAS 22101-1:2022, Polyethylene reinforced with short glass fibres (PE-sGF) piping systems for industrial applications - Part 1: General, $149.00

ISO/PAS 22101-2:2022, Polyethylene reinforced with short glass fibres (PE-sGF) piping systems for industrial applications - Part 2: Pipes, $149.00

**Refrigeration (TC 86)**


**Road vehicles (TC 22)**

ISO 4513:2022, Road vehicles - Visibility - Method for establishment of eyellipses for drivers eye location, $175.00

ISO 23828:2022, Fuel cell road vehicles - Energy consumption measurement - Vehicles fuelled with compressed hydrogen, $200.00

ISO 13209-3:2022, Road vehicles - Open Test sequence eXchange format (OTX) - Part 3: Standard extensions and requirements, $250.00

ISO 22900-2:2022, Road vehicles - Modular vehicle communication interface (MVCI) - Part 2: Diagnostic protocol data unit (D-PDU API), $250.00

**Rubber and rubber products (TC 45)**

ISO 1138:2022, Rubber compounding ingredients - Carbon black - Determination of sulfur content, $48.00

**Small craft (TC 188)**

ISO 13590:2022, Small craft - Personal watercraft - Construction and system installation requirements, $175.00

**Sterilization of health care products (TC 198)**

ISO 18362:2016/Amd 1:2022, Manufacture of cell-based health care products - Control of microbial risks during processing - Amendment 1, $20.00

**Surface chemical analysis (TC 201)**

ISO 23170:2022, Surface chemical analysis - Depth profiling - Non-destructive depth profiling of nanoscale heavy metal oxide thin films on Si substrates with medium energy ion scattering, $175.00

**Sustainable development in communities (TC 268)**

ISO 37110:2022, Sustainable cities and communities - Management requirements and recommendations for open data for smart cities and communities - Overview and general principles, $73.00

ISO 37168:2022, Smart community infrastructures - Guidance on smart transportation by Electric, Connected and Autonomous Vehicles (eCAVs) and its application to on-demand responsive passenger services with shared vehicles, $111.00

ISO 37181:2022, Smart community infrastructures - Smart transportation by autonomous vehicles on public roads, $73.00

ISO 37182:2022, Smart community infrastructures - Smart transportation for fuel efficiency and pollution emission reduction in bus transportation services, $73.00
Terminology (principles and coordination) (TC 37)
ISO 12199:2022, Alphabetical ordering of multilingual terminological and lexicographical data represented in the Latin alphabet, $225.00

Textiles (TC 38)
ISO 24584:2022, Textiles - Smart textiles - Test method for sheet resistance of conductive textiles using non-contact type, $73.00

Transfusion, infusion and injection equipment for medical use (TC 76)
ISO 8536-3:2009/Amd 1:2022, Infusion equipment for medical use - Part 3: Aluminium caps for infusion bottles - Amendment 1, $20.00

Water efficient products - Rating (TC 316)
ISO 31600:2022, Water efficiency labelling programmes - Requirements with guidance for implementation, $225.00

ISO Technical Reports
Ergonomics (TC 159)
ISO/TR 9241-380:2022, Ergonomics of human-system interaction - Part 380: Survey result of HMD (Head-Mounted Displays) characteristics related to human-system interaction, $200.00

ISO Technical Specifications
Health Informatics (TC 215)
ISO/TS 16843-6:2022, Health informatics - Categorial structures for representation of acupuncture - Part 6: Acupuncture effects, $73.00

Industrial automation systems and integration (TC 184)
ISO/TS 8000-82:2022, Data quality - Part 82: Data quality assessment: Creating data rules, $73.00

Information and documentation (TC 46)
ISO/TS 22943:2022, Information and documentation - Principles of identification, $73.00

Mechanical testing of metals (TC 164)
ISO/TS 21913:2022, Temperature verification method applied to dynamic fatigue testing, $111.00

ISO/IEC JTC 1 Technical Reports
ISO/IEC TR 5895:2022, Cybersecurity - Multi-party coordinated vulnerability disclosure and handling, $111.00

ISO/IEC JTC 1, Information Technology
ISO/IEC 23053:2022, Framework for Artificial Intelligence (AI) Systems Using Machine Learning (ML), $200.00
ISO/IEC 24039:2022, Information technology - Smart city digital platform reference architecture - Data and service, $149.00
ISO/IEC 23093-3:2022, Information technology - Internet of media things - Part 3: Media data formats and APIs, $250.00
ISO/IEC 27036-2:2022, Cybersecurity - Supplier relationships - Part 2: Requirements, $200.00

IEC Standards
Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)
IEC 60966-2-8 Ed. 1.0 b:2022, Radio frequency and coaxial cable assemblies - Part 2-8: Detail specification for cable assemblies for radio and TV receivers - Frequency range up to 3000 MHz, Screening class A++, IEC 61169-47 connectors, $51.00
IEC 62783-1-1 Ed. 1.0 en:2022, Twinax cables for digital communications - Part 1-1: Time domain test methods for twinax cables for digital communications - General requirements, $89.00

Electrical accessories (TC 23)
IEC 63044-5-1 Amd.1 Ed. 1.0 b:2022, Amendment 1 - Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-1: EMC requirements, conditions and test set-up, $25.00
IEC 63044-5-1 Ed. 1.1 b:2022, Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-1: EMC requirements, conditions and test set-up, $228.00
Newly Published ISO & IEC Standards

IEC 63044-5-2 Amd.1 Ed. 1.0 b:2022, Amendment 1 - Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light-industrial environments, $13.00

IEC 63044-5-2 Ed. 1.1 b:2022, Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-2: EMC requirements for HBES/BACS used in residential, commercial and light-industrial environments, $133.00

IEC 63044-5-3 Amd.1 Ed. 1.0 b:2022, Amendment 1 - Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-3: EMC requirements for HBES/BACS used in industrial environments, $13.00

IEC 63044-5-3 Ed. 1.1 b:2022, Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) - Part 5-3: EMC requirements for HBES/BACS used in industrial environments, $51.00

IEC 60336 Ed. 5.0 b Cor.1:2022, Corrigendum 1 - Medical electrical equipment - X-ray tube assemblies for medical diagnosis - Focal spot dimensions and related characteristics, $0.00

IEC 62985 Ed. 1.0 b Cor.1:2022, Corrigendum 1 - Methods for calculating size specific dose estimates (SSDE) for computed tomography, $0.00

IEC 60086-1 Ed. 13.0 b Cor.1:2022, Corrigendum 1 - Primary batteries - Part 1: General, $0.00

IEC 60086-2 Ed. 14.0 b Cor.1:2022, Corrigendum 1 - Primary batteries - Part 2: Physical and electrical specifications, $0.00

IEC 60050-113 Amd.5 Ed. 1.0 b:2022, Amendment 5 - International Electrotechnical Vocabulary (IEV) - Part 113: Physics for electrotechnology, $183.00

IEC Technical Reports

Surface mounting technology (TC 91)

IEC/TR 61760-3-1 Ed. 1.0 en:2022, Surface mounting technology - Part 3-1: Standard method for the specification of components for through hole reflow (THR) soldering - Guidelines for through hole diameter design with solder paste surface printing method, $221.00

IEC/TS 61760-3-1 Ed. 1.0 en:2022, Surface mounting technology - Part 3-1: Standard method for the specification of components for through hole reflow (THR) soldering - Guidelines for through hole diameter design with solder paste surface printing method, $221.00

IEC/TS 61760-3-1 Ed. 1.0 en:2022, Surface mounting technology - Part 3-1: Standard method for the specification of components for through hole reflow (THR) soldering - Guidelines for through hole diameter design with solder paste surface printing method, $221.00

IEC/TS 61760-3-1 Ed. 1.0 en:2022, Surface mounting technology - Part 3-1: Standard method for the specification of components for through hole reflow (THR) soldering - Guidelines for through hole diameter design with solder paste surface printing method, $221.00

IEC 62055-31 Ed. 2.0 b:2022, Electricity metering - Payment systems - Part 31: Particular requirements - Static payment meters for active energy (classes 0.5, 1 and 2), $354.00

IEC 62055-31 Ed. 2.0 en:2022 CMV, Electricity metering - Payment systems - Part 31: Particular requirements - Static payment meters for active energy (classes 0.5, 1 and 2), $710.00

IEC 62054-5 Ed. 3.0 b:2022, Electrical insulating materials - Determination of the effects of ionizing radiation - Part 5: Procedures for assessment of ageing in service, $183.00

IEC 60544-5 Ed. 3.0 en:2022 (Redline version), Electrical insulating materials - Determination of the effects of ionizing radiation - Part 5: Procedures for assessment of ageing in service, $239.00

Fibre optics (TC 86)

IEC 60793-1-1 Ed. 5.0 en:2022, Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance, $51.00

IEC 60793-1-1 Ed. 5.0 en:2022 (Redline version), Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance, $66.00

Other

IEC 63318 Ed. 1.0 b:2022, Specifications for SELV DC systems conforming to the ESMAP multi-tier framework tier 2 and tier 3 requirements for household electricity supply, $89.00

Primary cells and batteries (TC 35)

IEC 60086-1 Ed. 13.0 b Cor.1:2022, Corrigendum 1 - Primary batteries - Part 1: General, $0.00

IEC 60086-2 Ed. 14.0 b Cor.1:2022, Corrigendum 1 - Primary batteries - Part 2: Physical and electrical specifications, $0.00

Terminology (TC 1)

IEC 60050-113 Amd.5 Ed. 1.0 b:2022, Amendment 5 - International Electrotechnical Vocabulary (IEV) - Part 113: Physics for electrotechnology, $183.00

Newly Published ISO & IEC Standards
Call for U.S. TAG Administrator
ISO/TC 324 - Sharing Economy
Comment Deadline: July 15, 2022

ANSI directly administers the U.S. TAG Administrator for ISO/TC 324 with the support of the Organization for the Advancement of Structured Information Standards (OASIS). OASIS has advised ANSI to relinquish its role as U.S. TAG Administrator for this committee.

ISO/TC 324 operates under the following scope:

*Standardization in the field of sharing economy.*

*Excluded: Technical aspects of information security or risk management guidelines already covered by ISO/IEC JTC 1/SC27 and ISO/TC 262, respectively.*

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](mailto:isot@ansi.org)).

Establishment of ISO Technical Committee
ISO/IEC 341 - Heat Supply Network
Comment Deadline: July 15, 2022

A new ISO Technical Committee, ISO/TC 341 – *Heat supply network*, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 341 operates under the following scope:

*Standardization in the field of HSN including design, construction, integration, control and regulation based on heating and cooling supply pipeline system.*


Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI’s ISO Team ([isot@ansi.org](mailto:isot@ansi.org)).
International Organization for Standardization (ISO)

Establishment of ISO Technical Committee
ISO/TC 339 – Small hydropower plants
Comment Deadline: July 8, 2022
A new ISO Technical Committee, ISO/TC 339 – Small hydropower plants, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 339 operates under the following scope:

Standardization in the field of small hydropower plants

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

Establishment of ISO Technical Committee
ISO/TC 340 – Natural gas fueling stations
Comment Deadline: July 8, 2022
A new ISO Technical Committee, ISO/TC 340 – Natural gas fueling stations, has been formed. The Secretariat has been assigned to France (AFNOR).

ISO/TC 340 operates under the following scope:

Standardization in the field of design, construction and operation of stations for fuelling compressed natural gas (CNG) and liquefied natural gas (LNG) to vehicles. It includes equipment, safety devices and maintenance.

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

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

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

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

For further information about the USA TBT Inquiry Point, please visit: https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point Contact the USA TBT Inquiry Point at (301) 975-2918; F: (301) 926-1559; E: usatbtep@nist.gov or notifyus@nist.gov.
FOREWORD

The primary purpose of this proposed addendum is to remove the carbon monoxide-specific language intended to address the continuous monitoring requirement for engine oil or hydraulic fluid contamination of the bleed air. As a result, the sensor requirement language in Sections 7.2, 8.2, and 9 now focuses more broadly on suitable marker compounds intended to reliably indicate the presence of engine oil or hydraulic fluid contamination of the bleed air. This proposed addendum also adds a definition for “engine” to Section 3.

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

Addendum f to Standard 161-2018

Revise Section 3 (Definitions) as shown below. The remainder of Section 3 is unchanged.

engine: either a propulsion engine or an auxiliary power unit engine.

Revise Section 7.2 (Bleed Air Contaminant Monitoring) as shown below.

7.2 Bleed Air Contaminant Monitoring. Monitoring in the air supply system for specific sources of bleed air contaminants is intended to facilitate pilot and maintenance actions where necessary and to provide an indication of contaminants in the air supply system that are supplied to the cabin and/or cockpit.

Validation shall require investigating the effectiveness and feasibility of any sensor to ensure that it can be installed, while accounting for cost, reliability, accuracy, maintainability, and viability. Operational procedures shall be developed for both airline maintenance and aircrew response to measured levels.

One or more sensors intended to identify either particles or a chemical substance or substances indicative of air supply system contamination by partly or fully pyrolyzed engine oil and/or hydraulic fluid shall be installed. The indicator substance or substances shall:

a. be shown to be associated with the presence of partly or fully pyrolyzed engine oil in any phase (i.e., gas, liquid, solid) and/or hydraulic fluid in any phase;

b. have a sufficiently low background level that its presence can be reliably attributed to these contaminants; and

c. be measured with sufficient sensitivity to reliably detect the occurrence of these contamination events.

The sensor or sensors shall sample the airstream no less frequently than once every 60 seconds.

Supply air shall be sampled by at least one sensor before it enters the cabin or cockpit. A separate sensor is recommended for each air supply source, such as each engine and the APU, so that it is possible to identify and isolate the source of contamination in the event it is detected. Monitoring before the mix manifold is likely to provide better information to help identify the source of the contamination; however, this area may be more difficult to monitor.
Indication from the sensors shall be displayed in the flight deck and recorded anytime the concentration is at or above the trigger point. The trigger point is defined as a concentration that may not be high enough to be associated with a negative health impact on its own but rather indicates the presence of partly or fully pyrolyzed engine oils or hydraulic fluids.

The trigger point shall be high enough above background levels to indicate contamination but not so high above background levels to miss events. An exceedance shall be defined as the trigger point concentration being maintained for a predetermined and appropriate sampling period (dependent on the contaminant) while in flight or on the ground. Any exceedance shall be recorded in the aircraft technical log and maintenance records, and appropriate action shall be taken immediately in accordance with the relevant regulations and effective and approved maintenance procedures to identify and address the potential source of contamination.

The record of the duration and levels of each exceedance shall be made available as follows for at least the 60 days following a flight on which an exceedance occurs:

a. To airline maintenance staff to aid in identifying appropriate corrective actions
b. To any occupants present on the given flight, including crew members or their representatives, with a medical record indicating symptoms that could reasonably be attributed to exposure to one or more relevant contaminants, in order to assist their physicians in diagnosis and treatment

The response to an exceedance will vary depending on the number, magnitude, and frequency of triggered events. For example, an unexplained single exceedance without reports of relevant symptoms from crew or passengers may require only a general check of main engine components for problems such as engine oil overfill, visible leaks, and hydraulic leaks. Higher-value exceedances or multiple triggered events (either during a single sector or on separate sectors), especially if they include reports of symptoms consistent with exposure to partly combusted engine oil or hydraulic fluid, will require a higher degree of maintenance investigation and action, such as swab testing of the bleed ducts to check for engine oil leaks.

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

**Revise Section 8.2 (General) as shown below.**

<p>| 8.2 General |</p>
<table>
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| **Design** | a. The APU and engine inlets can potentially be entry points for hydraulic fluid, fuel, oil, and deicing fluid. Means to limit the ingestion of these fluids should be evaluated during the design phase (prevention through design). One example is the use of dedicated compressors for outside air supply, rather than the more traditional bleed air systems, which may minimize the potential entry of engine/APU contaminants into the cabin air. Other design considerations that have been implemented include changing the location of the APU inlet and/or installing a physical barrier either around or in front of the inlet to physically divert contaminants from entering the inlet (Informative Note: e.g., raising the APU inlet off the surface of the aircraft or installing a diverter ahead of the APU inlet). Airlines and manufacturers should consider the necessity and feasibility of applying these measures to the fleet.  

b. Air-cleaning technologies to reduce contamination in bleed air sources before it is introduced to the cabin and cockpit may be considered. |
BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 161-2018, Air Quality within Commercial Aircraft
First Public Review Draft

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<tr>
<td>a. An appropriate marker for bleed air contamination shall be monitored in accordance with Section 7.2 of this standard.</td>
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<tr>
<td>b. Ozone should be continuously monitored on flights where ozone is expected to be encountered. See FAA Advisory Circular 120-38 for more information.</td>
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<tr>
<td>c. Measurements that exceed the limits described in this standard shall be recorded.</td>
</tr>
<tr>
<td>d. Sampling and monitoring devices that are reliable and easy to operate would be useful in the cabin and flight deck as an additional source of information to validate and/or quantify certain types of contamination events.</td>
</tr>
<tr>
<td>e. An international database of factual information from flights where suspicion of contaminated air exists should be established; see SHK RL 2001:41eR3 for guidance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Responsible employees shall be given training, supplies, and time to clean contaminated surfaces in order to mitigate potential health hazards associated with crew or passenger contact; see Circular 344-AN/202 11 for guidance.</td>
</tr>
<tr>
<td>b. If a buildup of residue is noted in the APU/engines, air-conditioning packs, and ducts, the affected components shall either be removed and cleaned or replaced to prevent additional contamination. If the pack burn air is not dumped overboard, passengers and crew shall not be on board during a pack burn. Maintenance workers shall be educated on the need to avoid exposure to contaminants in the bleed air system during pack burn and associated system inspection and cleaning procedures. When it is not possible to effectively clean airborne contaminants that deposit on high surface-area components, such as acoustical duct lining, water separator coalescer bags, ozone converters, and heat exchangers, those components shall be removed and either cleaned or replaced. (Informative Note: See also Section A3, “ECS Cleaning Procedures.”)</td>
</tr>
<tr>
<td>c. To address air supply contamination, the pilot shall first identify the location of the source and isolate it (pack management) and then document it according to airline procedures.</td>
</tr>
<tr>
<td>d. If symptoms that could reasonably be attributed to exposure to one or more contaminants associated with an episodic event, such as smoke/fumes in the cabin/flight deck or other evidence of internal air supply contamination or ozone exposure, are reported to the pilot and involve one or more passenger or crew member as evidenced by an aircraft maintenance log entry, the aircraft shall be turned over to maintenance prior to next dispatch to identify and address the source of air supply contamination according to airline maintenance manual procedures.</td>
</tr>
<tr>
<td>e. Ground-based air supply systems/equipment (including high and low pressure) shall be inspected and serviced at least every three months in order to prevent the contamination of aircraft systems and to ensure the integrity of the equipment.</td>
</tr>
</tbody>
</table>

**Revise Section 9 (Measurements) as shown below.**

**9. MEASUREMENTS**

The section specifies measurements that shall be made when determining whether specific requirements of this standard are met. Continuous measurement of environmental variables is not mandated by this standard, with the exception of bleed air contamination markers in accordance with Section 7.2 of this standard, carbon monoxide.
BSR/ASHRAE/ASHE Addendum e

to ANSI/ASHRAE/ASHE Standard 170-2021

Public Review Draft

Proposed Addendum e to
Standard 170-2021, Ventilation of
Health Care Facilities

Second Public Review (May 2022)
(Draft shows Proposed Independent Substantive Changes
to Previous Public Review Draft)

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.

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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 offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

In the right climate, location and application, natural ventilation can provide and enhance the healing environment. Natural ventilation has been successfully implemented in healthcare facilities throughout the world. This proposed addendum allows Natural Ventilation for certain limited healthcare spaces and under certain conditions. ASHRAE Standard 62.1’s natural ventilation procedure which was completely revamped in 2019 was used as a starting point for this proposed addendum.

[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and strikethrough (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 e to 170-2021

Revise Section 6.10 as shown below. Columns in Table 6-3 have been editorially switched to show Function of Space listed in the first column. Spaces originally under General patient room, Urgent care exam, and Occupational therapy have been moved to separate line items in Table 6-3, with no change in the Referenced Table column.

6.10 Fan-Assisted Natural Ventilation

6.10.1 General Requirements. Any zone designed for natural ventilation shall include a mechanical ventilation system designed in accordance with this Standard except as noted below. Using outside air through natural ventilation intakes as a means of supply air is acceptable for spaces listed in Table 6-3, provided that the air is mechanically removed from the space, and meets pressure relationships, minimum total ach, and design temperature and humidity ranges listed in the Reference Table column. All spaces designed for natural ventilation shall include a mechanical ventilation system designed in accordance with this Standard except as noted below.

Table 6-3 – Spaces acceptable for Natural Ventilation

<table>
<thead>
<tr>
<th>Function of Space</th>
<th>Reference Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>General patient room; General exam room; physical therapy; Patient bedroom, resident room</td>
<td>7-1</td>
</tr>
<tr>
<td>General exam room</td>
<td>7-1</td>
</tr>
<tr>
<td>Physical therapy</td>
<td>7-1</td>
</tr>
<tr>
<td>Patient bedroom</td>
<td>7-1</td>
</tr>
<tr>
<td>Resident room</td>
<td>7-1</td>
</tr>
<tr>
<td>Examination/Observation</td>
<td>8-1</td>
</tr>
<tr>
<td>Urgent care exam; Urgent care observation; General examination room</td>
<td>8-2</td>
</tr>
<tr>
<td>Room Type</td>
<td>Section</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Psychiatric examination room</td>
<td>8-2</td>
</tr>
<tr>
<td>Psychiatric consultation room</td>
<td>8-2</td>
</tr>
<tr>
<td>Psychiatric group room</td>
<td>8-2</td>
</tr>
<tr>
<td>Psychiatric seclusion room</td>
<td>8-2</td>
</tr>
<tr>
<td>Physical therapy individual room</td>
<td>8-2</td>
</tr>
<tr>
<td>Physical therapy exercise area</td>
<td>8-2</td>
</tr>
<tr>
<td>Hydrotherapy</td>
<td>8-2</td>
</tr>
<tr>
<td>Physical therapeutic pool</td>
<td>8-2</td>
</tr>
<tr>
<td>Speech therapy room</td>
<td>8-2</td>
</tr>
<tr>
<td>Occupational therapy room</td>
<td>8-2</td>
</tr>
<tr>
<td>Prosthetics and orthotics room</td>
<td>8-2</td>
</tr>
<tr>
<td>Dental treatment</td>
<td>8-2</td>
</tr>
<tr>
<td>Other dental treatment areas</td>
<td>8-2</td>
</tr>
<tr>
<td>Toilet room</td>
<td>8-2</td>
</tr>
<tr>
<td>Occupational therapy, resident living/activity/dining, resident room, physical therapy, resident corridor, toilet/bathing room</td>
<td>9-1</td>
</tr>
<tr>
<td>Resident living/activity/dining</td>
<td>9-1</td>
</tr>
<tr>
<td>Resident room</td>
<td>9-1</td>
</tr>
<tr>
<td>Physical therapy</td>
<td>9-1</td>
</tr>
<tr>
<td>Resident corridor</td>
<td>9-1</td>
</tr>
<tr>
<td>Toilet/bathing room</td>
<td>9-1</td>
</tr>
</tbody>
</table>

6.10.2 Intakes. In this section, an intake is defined as a device that is located in the outside of the building through which air is taken from the outdoors and introduced into the building. Fan-assisted natural ventilation intakes shall meet the following requirements:

a. Intakes shall be at least 10 times the crack/leakage area of the room-space, and have a maximum face velocity of 100 fpm at the minimum total air change rate required by this Standard. (Informative Note: The 100 fpm is a sizing criterion, not an operational limit. Refer to 2021 ASHRAE Handbook-Fundamentals, Chapter 16 for information regarding crack/leakage area of the space.)

b. The device that is mechanically removing the air shall remain operational when the intake is open.

c. Intakes shall be limited to those dimensions allowable by the local authority having jurisdiction.

d. The natural ventilation design shall maintain the required pressure relationships required in Tables 7-1, 8-1, 8-2, and 9-1 with adjacent spaces.

e. Intakes shall include a screening device designed to prevent intrusion by insects and vermin.

f. Intakes shall be located such that the minimum separation distance between the intake to any specific potential outdoor contaminant source shall be equal to or greater than the separation distance listed in
Table 6-1,

Exceptions to 6.10.2f:
1. As allowed by 6.3.1.1 Exception 3
2. The minimum separation distance between landscaped grade and a natural ventilation air intake shall be 3 ft (1 m).

6.10.3 Filtration. Fan-assisted natural ventilation air introduced in accordance with Section 6.10.1 is exempt from meeting the requirements of Section 6.4 provided it is part of a system meeting the requirements in this section.

6.10.4 Condensation Mitigation. Effective interior air barriers, insulation, or other means that separate fan-assisted naturally ventilated spaces from mechanically-cooled spaces shall be provided, such that condensation does not occur on indoor surfaces.

6.10.5 Outdoor Air Quality. Fan-assisted natural ventilation air introduced in accordance with Section 6.10.1 shall meet the following requirements:
   b. Compliance with ASHRAE Standard 62.1, Section 4.3.b.8 shall include identification of potential biological contaminant sources.

Informative Note: For more information, see US EPA (2006). Facilities implementing natural ventilation are encouraged to monitor PM10 and/or PM2.5 via local sensors. Monitoring PM10 and/or PM2.5 with local sensors can be helpful in implementing natural ventilation.

Revise Informative Appendix E as shown below. The remainder of Informative Appendix E is unchanged.

INFORMATIVE APPENDIX E
INFORMATIVE REFERENCES AND BIBLIOGRAPHY

BSR/ASHRAE/ASHE Addendum g to ANSI/ASHRAE/ASHE Standard 170-2021

Public Review Draft

Proposed Addendum g to Standard 170-2021, Ventilation of Health Care Facilities

First Public Review (May 2022)
(Draft shows Proposed Changes to Current Standard)

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092
BSR/ASHRAE/ASHE Addendum g to ANSI/ASHRAE/ASHE Standard 170-2021, Ventilation of Health Care Facilities
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FOREWORD

Proposed Addendum g revises portions of Sections 3, 6, 7 & 8 to provide clarity of intent and/or correct five elements (indicated below) of the current standard. It also follows the continuous maintenance process in further coordination with FGI and SSPC 170 to result in a coordinated document for use by all stakeholders in the Healthcare Community.

Proposed Addendum g consists of the following general edits:

- Add new definition for Hybrid Operating Room
- Title edits to the Tables associating the Table directly to the Section where derived.
- Revisions to Table 6-2 relating to coordinating the recent Class II & III Imaging rooms to their associated OR’s & Procedure rooms and correlating Supply Air Outlets.
- Revisions to Chapters 7 & 8 coordinating the Nuclear Medicine Treatment space to align Tables 7-1 & 8-1 (and associated footnotes) along with minor edits to Section 8.7 and adding a new Section 7.7 matching Section 8.7
- Minor edits to Table 7-1 correcting an error (opposite switch) from OA and Total ACH for Seclusion room.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and strikethrough (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 g to 170-2021

Add the following new definition in Section 3 as shown below. The remainder of Section 3 is unchanged.

**hybrid operating room:** A room that meets the definition of an operating room (OR) and has permanently installed equipment to enable diagnostic imaging before, during, and after surgical procedures. **Informative Note:** This space is functionally equivalent to Class 3 Imaging rooms. Imaging equipment may include MRI, fixed single-plane and bi-plane tomographic imaging systems, and computed tomography equipment. Use of portable imaging technology does not make an OR a hybrid operating room.

**Revise Table 6-1** (Table Title only) as shown below.

**Table 6-1** 6.3.1 Air Intake Minimum Separation Distance

**Revise Table 6-2** as shown below. The remainder of Table 6-2 is unchanged.

**Table 6-2** 6.7.2 Supply Air Outlets

<table>
<thead>
<tr>
<th>Space Designation (According to Function)</th>
<th>Supply Air Outlet Classificationa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating rooms*, procedure rooms</td>
<td>Supply diffusers within the primary supply diffuser array; Group E, nonaspirating; Additional supply diffusers within the room; Group E</td>
</tr>
<tr>
<td>Operating rooms and Class 3 Imaging roomsb</td>
<td></td>
</tr>
<tr>
<td>Procedure Rooms and Class 2 Imaging rooms</td>
<td>Group E</td>
</tr>
</tbody>
</table>
**Revise Table 7-1 as shown below. The remainder of Table 7-1 and normative notes is unchanged.**

### Table 7-1. Design Parameters – Inpatient Spaces

<table>
<thead>
<tr>
<th>Function of Space (dd)</th>
<th>Pressure Relationship to Adjacent Areas (n)</th>
<th>Minimum Outdoor ach</th>
<th>Minimum Total ach</th>
<th>All Room Air Exhausted Directly to Outdoors (j)</th>
<th>Air Recirculated by Means of Room Units (a)</th>
<th>Unoccupied Turndown</th>
<th>Minimum Filter Efficiencies (bd)</th>
<th>Design Relative Humidity (k), %</th>
<th>Design Temperature (l), °F/°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEHAVIORAL AND MENTAL HEALTH FACILITIES (k)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seclusion room (FGI 2.1–2.4.3 &amp; 2.2–2.12.4.3)</td>
<td>NR</td>
<td>4-2</td>
<td>2-4</td>
<td>NR</td>
<td>NR</td>
<td>Yes</td>
<td>MERV-8</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>DIAGNOSTIC AND TREATMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 1 imaging room (FGI 2.2–3.4.1.2 &amp; Table 2.2-2) (kk)</td>
<td>NR (jj)</td>
<td>2</td>
<td>6</td>
<td>NR (jj)</td>
<td>NR</td>
<td>Yes</td>
<td>MERV-8</td>
<td>Max 60</td>
<td>72–78/22–26</td>
</tr>
<tr>
<td>Class 2 imaging room (FGI 2.2–3.4.1.2 &amp; Table 2.2-2) (d), (p), (kk)</td>
<td>Positive</td>
<td>3</td>
<td>15</td>
<td>NR</td>
<td>No</td>
<td>Yes</td>
<td>MERV-14</td>
<td>Max 60</td>
<td>70–75/21–24</td>
</tr>
<tr>
<td>Class 3 imaging room (FGI 2.2–3.4.1.2 &amp; Table 2.2-2) (m), (o), (kk)</td>
<td>Positive</td>
<td>4</td>
<td>20</td>
<td>NR</td>
<td>No</td>
<td>Yes</td>
<td>MERV-16 (hh)</td>
<td>20–60</td>
<td>68–75/21–24</td>
</tr>
<tr>
<td>Nuclear medicine hot lab (see Section 7.7) (FGI 2.2–3.4.8.22)</td>
<td>Negative</td>
<td>NR</td>
<td>2</td>
<td>6</td>
<td>Yes</td>
<td>No</td>
<td>Yes (ff)</td>
<td>MERV-8</td>
<td>NR</td>
</tr>
</tbody>
</table>

**Normative Notes for Table 7-1:**

jj. Negative pressure and room exhaust is required if open mixing of isotopes or gaseous studies are performed as a part of nuclear treatment procedures within the imaging room. See also Section 7.7 (*Informative Note: Open mixing of isotopes, if performed, is typically performed in the hot lab.*)

kk. The facility governing body shall inform design engineers relating to room function or use (which function is applicable) for Class 1, Class 2, or Class 3 imaging rooms.

---

**Revise Table 8-1 as shown below. The remainder of Table 8-1 and normative notes is unchanged.**

### Table 8-1. Design Parameters – Specialized Outpatient Spaces

<table>
<thead>
<tr>
<th>Function of Space (dd)</th>
<th>Pressure Relationship to Adjacent Areas (n)</th>
<th>Minimum Outdoor ach</th>
<th>Minimum Total ach</th>
<th>All Room Air Exhausted Directly to Outdoors (j)</th>
<th>Air Recirculated by Means of Room Units (a)</th>
<th>Minimum Filter Efficiencies (bd)</th>
<th>Design Relative Humidity (k), %</th>
<th>Design Temperature (l), °F/°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIAGNOSTIC AND TREATMENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class 1 imaging room (FGI 2.1–3.5.2.4[1]b)[i]) (ff)</td>
<td>NR (hh)</td>
<td>2</td>
<td>6</td>
<td>NR (hh)</td>
<td>NR</td>
<td>MERV-8</td>
<td>Max 60</td>
<td>72–78/22–26</td>
</tr>
</tbody>
</table>

**Normative Notes for Table 8-1:**

hh. Negative pressure and room exhaust is required if open mixing of isotopes or gaseous studies are performed as a part of nuclear treatment procedures within the imaging room. See also Section 8.7 (*Informative Note: Open mixing of isotopes, if performed, is typically performed in the hot lab.*)
Add new Section 7.7 as shown below. This matches exactly Section 8.7 currently in the standard.

7.7 Nuclear Medicine. Refer to Table 7.1 of this standard for both nuclear medicine treatment spaces and nuclear medicine hot-lab spaces when radiopharmaceutical preparation is performed on site (not premixed) and radioactive materials (radionuclides) are mixed/distributed from their protective containers within this room. When dose administration and preparation uses only low-level premixed radioactive materials, then negative air pressure and room exhaust is not indicated and these nuclear medicine spaces will follow the Class 1 Imaging room space of this standard for ventilation requirements.

Revise Table 8-2 (Table Title and Normative Notes only) as shown below.

Table 8-2 8.2 Design Parameters—General Outpatient Spaces (q)

Normative Notes for Table 8-2 8.2:

Revise Section 8.4.1 as shown below.

8.4.1 Operating Rooms (ORs), Operating/Surgical Cystoscopic Rooms, and Caesarean Delivery Rooms, and Class 3 Imaging Rooms. Refer to Section 7.4.1 of this standard.

Revise Section 8.7 as shown below.

8.7 Nuclear Medicine. Refer to Table 8-2 8.2 of this standard for both nuclear medicine treatment spaces and nuclear medicine hot-lab spaces when radiopharmaceutical preparation is performed on site (not premixed) and radioactive materials (radionuclides) are mixed/distributed from their protective containers within this room. When dose administration and on-site mixing and preparation uses only low-level premixed radioactive materials, then a hot lab negative air pressure and room exhaust is not indicated and these nuclear medicine spaces will follow the general examination Class 1 Imaging room space in Table 8-2 8.1 of this standard for ventilation requirements.

Revise Table 9-1 (Table Title and Normative Notes only) as shown below.

Table 9-1 9.1 Design Parameters for Residential Health, Care, and Support-Specific Spaces

Normative Notes for Table 9-1 9.1:
### ASME B31.5 PROPOSAL FOR IMPACT TEST REQUIREMENTS

<table>
<thead>
<tr>
<th>CURRENT TEXT</th>
<th>PROPOSED TEXT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>523.2 Limitations on Materials</strong></td>
<td><strong>523.2 Limitations on Materials</strong></td>
</tr>
<tr>
<td><strong>523.2.1 General. The materials listed in Table 502.3.1 shall not be used at design metal temperatures above those for which stress values are given in the Table. The materials shall not be used below the minimum temperature listed unless they meet the requirements of para. 523.2.2.</strong></td>
<td><strong>523.2 General. The materials listed in Table 502.3.1 shall not be used at design metal temperatures warmer than above those for which stress values are given in the Table. The materials shall not be used below the minimum temperature listed unless they meet the requirements of one of the following:</strong></td>
</tr>
<tr>
<td></td>
<td>(a) Paragraph <strong>523.2.2</strong> or (b) <strong>ASME B31T, Standard Toughness Requirements for Piping.</strong></td>
</tr>
<tr>
<td></td>
<td>It is required that each set of requirements described in (a) and (b) be used independently of the other.</td>
</tr>
</tbody>
</table>

**ADD TO B31.5-2015, APPENDIX A: REFERENCE DOCUMENTS AS PART OF THIS PROPOSAL:**

**ASME B31T, Standard Toughness Requirements for Piping.**
**PROPOSAL:**

Revise the existing definition of $t_c$ by adoption of B31.3-2020 paragraph 328.5.4(c) with minor editorial corrections to list US units first and adjust metric conversion:

<table>
<thead>
<tr>
<th>Current Code 2019 – Para 527.3.5(b)</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>$t_c = 0.7\bar{T}_b$ and not less than ¼ in. (6 mm) except on thin material $1.4\bar{T}_b$ is acceptable</td>
<td>$t_c = 0.7\bar{T}_b$ and not less than ¼ in. (6 mm) except on thin material $1.4\bar{T}_b$ is acceptable, lesser of $0.7\bar{T}_b$ or ¼ in. (6 mm)</td>
</tr>
</tbody>
</table>

Addition are in **Red** and underlined. Deletions are shown as strike-throughs and hi-lited in **Yellow**.
<table>
<thead>
<tr>
<th>Current Code 2019</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>No current language exists in the standard regarding closure welds.</td>
<td>538.4.4 Closure Welds. Where <strong>two systems or portions of systems which have been successfully tested in accordance with para. 538.4, or which contain closure welds complying with this paragraph, are joined</strong> (which may include closure welds complying with this paragraph), <strong>but</strong> where pressure and leak testing is considered impracticable, the final weld connecting to the operational piping systems need not be pressure tested or leak tested in accordance with paras. 538.4.1-538.4.3 provided the weld is examined in-process in accordance with para. 536.6.2 and passes with 100% radiographic examination in accordance with para. 536.6.3 or 100% ultrasonic examination in accordance with para. 536.6.4.</td>
</tr>
</tbody>
</table>

Clean Markup

| 538.4.4 Closure Welds. Where two systems or portions of systems which have been successfully tested in accordance with para. 538.4, or which contain closure welds complying with this paragraph, are joined, but where pressure and leak testing is considered impracticable, the final weld connecting the systems need not be pressure tested or leak tested in accordance with paras. 538.4.1-538.4.3 provided the weld is examined in-process in accordance with para. 536.6.2 and passes with 100% radiographic examination in accordance with para. 536.6.3 or 100% ultrasonic examination in accordance with para. 536.6.4. |

First consideration additions are in **Red** and underlined. Deletions are shown as strike-throughs and highlighted in **Yellow**
Recirculation additions are in **Blue** and underlined. Deletions are shown as strike-throughs and highlighted in **Green**
Second Recirculation additions are in **Purple** and underlined. Deletions are shown as strike-throughs and highlighted in **Brown**
Normative Annex X
Approval of scaling and alternate system configurations

N-X.1 General description

Following successful testing and certification of a single treatment system, alternate treatment system configurations may be evaluated by the certification body for certification, without testing. When doing this, the certification body shall follow the design modification review guidelines specified in this annex. Alternate systems shall be certified based on a comparison only to the tested system, not to other certified alternate systems that have not undergone a full performance test.

A model series may include models designed to treat different volumes or have other variations from the tested system, provided they can be expected to provide equivalent levels of treatment. Sometimes more than one system must undergo at least some testing in order to justify a full model series, but a single test is normally sufficient. Alternate systems proposed as part of a model series shall be certified based on a comparison only to the tested systems. For example, if the system undergoing full performance testing was a 500 gpd system, the proposed 1000 and 1200 gpd systems would both be compared to the proportional scale up targets calculated from the 500 gpd tested system. The certification body could not compare the 1000 gpd system to the tested system and then develop proportional scale up targets for the 1200 gpd system based on the 1000 gpd system.

Alternate systems approval is dependent on proportionality. When design hydraulic capacity is different from tested system hydraulic capacity, scaling becomes part of the review. It may not always be possible to justify scaling due to lack of proportionality or other out of tolerance aspects in the manufacturer’s proposal. In these cases, it may be possible to set up a limited testing program to demonstrate performance. A test plan with acceptance criteria shall be prepared before any testing is initiated. The test plan shall be determined by the certification body and accepted by the treatment system manufacturer before testing may begin.
N-X.2 Design review

Certification of alternate systems shall include but not be limited to the following in a review for equivalency with the tested system:

- tanks – volume and geometry;
- aeration – all air delivery components;
- media;
- filtration;
- circulation;
- additives;
- membranes;
- pumps; or
- surface loading rate

N-X.2.1 Tanks

N-X.2.1.1 Alternate tanks shall meet the requirements in Table N-X.1.

<table>
<thead>
<tr>
<th></th>
<th>Activated Sludge</th>
<th>Trickling Filter</th>
<th>Sequencing Batch Reactor</th>
<th>Membrane</th>
<th>Non-contained media (trench)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretreatment</td>
<td>-5 to +50%</td>
<td>-5 to +50%</td>
<td>-5 to +50%</td>
<td>-5 to +50%</td>
<td>-5 to +50%</td>
</tr>
<tr>
<td>anoxic</td>
<td>-5 to +50%</td>
<td>N/A</td>
<td>N/A</td>
<td>-5 to +50%</td>
<td>N/A</td>
</tr>
<tr>
<td>aeration</td>
<td>-5 to +30%¹</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>clarification</td>
<td>-5 to +50%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>process tank</td>
<td>N/A</td>
<td>-5 to +50%</td>
<td>-5 to +50%</td>
<td>-5 to +50%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

¹When aeration or process tank size exceeds 15% of target volume, additional aeration may be needed to account for additional mixing requirements inside the larger tank. The manufacturer may submit calculations to demonstrate mixing.

N-X.2.1.2 Tank scale up tolerances are dependent on technology. The certification body will determine if exceeding the tolerance is acceptable for tanks, on a case-by-case basis. For example, an increase in tank size exceeding the limits in Table N-X.1 may be beneficial for treatment due to the added buffer volume to help with shock loading of high strength waste or cleaning chemicals. Specific rationale for allowing anything outside limits specified in N-X.1 shall always be included in writing.

N-X.2.1.3 Structural integrity of tanks shall be included in the review. Structural integrity may be demonstrated by one of the following methods:

- professional engineer’s review including a certified letter or certified drawings. An analysis demonstrating structural performance acceptable for use conditions shall be included;
- documentation demonstrating certification to CSA B66;
- documentation demonstrating certification to IAPMO/ANSI Z1000; or
- documentation demonstrating certification to IGC 262.
N-X.2.1.4 Tank geometry shall be included as part of an alternate system certification review. When tank geometry differs significantly from the tested system, testing may be required to demonstrate the differences do not negatively impact treatment. Treatment technology shall be considered when evaluating differences in geometry. The depth of aerated tanks shall not be less than 85% of the tested tank depth to assure equivalent oxygen transfer.

N-X.2.2 Air Delivery

N-X.2.2.1 A +20/-10% tolerance is acceptable for air delivery, with justification provided by the manufacturer in airflow calculations for reductions greater than 5%. When the alternate system aeration depth differs from the tested system, the difference in backpressure on the air delivery mechanism shall be included in the calculations of airflow.

N-X.2.2.2 The certification body will determine if exceeding the +20% tolerance is acceptable for aeration requirements, as applicable.

N-X.2.3 Media

A +10/-5% tolerance is acceptable for media. The tolerance is based on the proportional target volume and surface area of media.

N-X.2.4 Filtration

N-X.2.4.1 A +10/-5% tolerance is acceptable for filtration. The tolerance is based on the proportional target. The certification body shall determine the appropriate comparison aspects for filtration, which could be volume, surface area, or both, depending on the filtration technology used.

N-X.2.4.2 Septic tank effluent filters used at the outlet to a pretreatment chamber may not require scaling, provided the filter used during testing is:

- certified to NSF/ANSI Standard 46; and
- the certified flow range meets or exceeds the capacity of the scaled system in gallons per day.

N-X.2.5 Circulation

N-X.2.5.1 A +10/-5% tolerance is acceptable for circulation to trickling filters.

N-X.2.5.2 A +20/-10% tolerance is acceptable for circulation for denitrification

N-X.2.6 Additives

A +10/-5% tolerance is acceptable for dosing of additives, such as coagulant, a carbon source for denitrification, or biological supplements. Increasing frequency of additive dosing or increasing volume per additive dose are both acceptable ways to address scale up.

N-X.2.7 Membranes

N-X.2.7.1 A +30/-5% tolerance is acceptable for membrane surface area.

N-X.2.5.2 Pumps driving water through the membrane shall not create a pressure drop across the membrane that exceeds 110% of the tested system membrane pressure drop.
N-X.2.8 Pumps

N-X.2.8.1 Pumps shall be sized or controlled by valve to deliver flow meeting the requirements for their function.

N-X.2.8.2 Treatment system effluent pumps may not need to meet specific size requirements if their only function is to discharge treated water from the system.

N-X.2.9 Other components

Additional components critical to the treatment process shall be addressed as part of the review. In the absence of other justification, proportionality shall be used for approval.
5 Product requirements

5.3.3 Microbiological contaminants

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Aerobic</th>
<th>Yeast / mold</th>
<th>Enterobacteriaceae</th>
</tr>
</thead>
<tbody>
<tr>
<td>vitamin and/or mineral ingredient</td>
<td>$1 \times 10^3$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
</tr>
<tr>
<td>botanical ingredient – nonextract</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>$1 \times 10^1$ CFU/g</td>
<td>$1 \times 10^4$ CFU/g</td>
</tr>
<tr>
<td>botanical ingredient – extract / other</td>
<td>$1 \times 10^4$ CFU/g</td>
<td>$1 \times 10^3$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
</tr>
<tr>
<td>dietary supplement ingredient</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Upon the presence of *E. coli*, Section 7.3.6.2 is to be followed to determine whether the colonies are enterovirulent. There is a zero tolerance for the presence of enterovirulent *E. coli*.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th><em>Salmonella</em> spp.</th>
<th><em>E. coli</em></th>
<th><em>S. aureus</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>vitamin and/or mineral ingredient</td>
<td>ND²</td>
<td>ND²</td>
<td>ND²</td>
</tr>
<tr>
<td>botanical ingredient – nonextract</td>
<td>ND²</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>ND²</td>
</tr>
<tr>
<td>botanical ingredient – extract / other</td>
<td>ND²</td>
<td>ND²</td>
<td>ND²</td>
</tr>
<tr>
<td>dietary supplement ingredient</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Upon the presence of *E. coli*, Section 7.3.6.2 is to be followed to determine whether the colonies are enterovirulent. There is a zero tolerance for the presence of enterovirulent *E. coli*.

² ND = Not detected. Not detected requires that no colonies shall be present in 10 g of sample when tested under the conditions of the USP Method cited in Section 7.3. The detection level for this testing is 10 CFU/g for the period of time tested.
Table 5.3
Acceptable limits for microbiological contaminants in finished products

<table>
<thead>
<tr>
<th>Finished products</th>
<th>Aerobic</th>
<th>Yeast/mold</th>
<th>Enterobacteriaceae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 finished products</td>
<td>1 × 10^3 CFU/g</td>
<td>1 × 10^2 CFU/g</td>
<td>1 × 10^2 CFU/g</td>
</tr>
<tr>
<td>containing only vitamin and minerals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 2 finished products</td>
<td>1 × 10^4 CFU/g</td>
<td>1 × 10^3 CFU/g</td>
<td>1 × 10^2 CFU/g</td>
</tr>
<tr>
<td>containing botanical ingredient extract</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ other dietary supplement ingredient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 3 finished products</td>
<td>1 × 10^7 CFU/g</td>
<td>1 × 10^6 CFU/g</td>
<td>1 × 10^4 CFU/g</td>
</tr>
<tr>
<td>containing botanical ingredients nonextract</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The category designation shall be based on ingredients present at 1% or more by weight in the formula as provided in the full product formulation. For a product containing ingredients from more than one category, the finished product category will be assigned based on the ingredient with the highest category number.

Table 5.4
Acceptable limits for pathogenic microbiological contaminants in finished products

<table>
<thead>
<tr>
<th>Finished products</th>
<th>Salmonella-spp.</th>
<th>E. coli^2</th>
<th>S. aureus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 1 finished products</td>
<td>ND^3</td>
<td>ND^3</td>
<td>ND^3</td>
</tr>
<tr>
<td>containing only vitamin and minerals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 2 finished products</td>
<td>ND^3</td>
<td>ND^3</td>
<td>ND^3</td>
</tr>
<tr>
<td>containing botanical ingredient extract</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/ other dietary supplement ingredient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category 3 finished products</td>
<td>ND^3</td>
<td>1 × 10^2 CFU/g</td>
<td>ND^3</td>
</tr>
<tr>
<td>containing botanical ingredients nonextract</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

^1 The category designation shall be based on ingredients present at 1% or more by weight in the formula as provided in the full product formulation. For a product containing ingredients from more than one category, the finished product category will be assigned based on the ingredient with the highest category number.

Examples:

a) A product containing only Vitamin C and zinc shall be in Category 1.

b) A product containing Vitamin C, zinc, and green tea extract shall be in Category 2.

c) A product containing Vitamin C, zinc, and Echinacea shall be in Category 3.

^2 Upon the presence of E. coli, Section 7.3.7 is to be followed to determine whether the colonies are enterovirulent. There is a zero tolerance for the presence of enterovirulent E. coli.

^3 ND = Not detected. Not detected requires that no colonies shall be present in 10 g of sample when tested under the conditions of the USP Method cited in Section 7.3. The detection level for this testing is 10 CFU/g for the period of time tested.
Table 5.1
Acceptable limits for microbiological contaminants in dietary ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Aerobic</th>
<th>Yeast / mold</th>
<th>Enterobacteriaceae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-extract botanical ingredient (i.e., crude or minimally processed botanical)</td>
<td>$1 \times 10^7$ CFU/g</td>
<td>$1 \times 10^5$ CFU/g</td>
<td>$1 \times 10^4$ CFU/g</td>
</tr>
<tr>
<td>Botanical extract ingredient or other dietary ingredient</td>
<td>$1 \times 10^4$ CFU/g</td>
<td>$1 \times 10^3$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
</tr>
<tr>
<td>Vitamin and/or mineral ingredient</td>
<td>$1 \times 10^3$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
</tr>
</tbody>
</table>

Table 5.2
Specifications for pathogenic microbiological contaminants in dietary ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Salmonella maximum level(^1)</th>
<th>E. coli trigger level(^2)</th>
<th>Enterovirulent E. coli maximum level</th>
<th>S. aureus trigger level(^3)</th>
<th>Coagulase positive S. aureus maximum level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-extract botanical ingredient (i.e., crude or minimally processed botanical)</td>
<td>ND</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Botanical extract ingredient or other dietary ingredient</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Vitamin or mineral ingredient</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

\(^1\) ND = Not detected. Not detected means that no colonies are present in 10 g of sample when tested under the conditions of the USP Method cited in Section 7.3. No detectable level of Salmonella is allowed; ingredient containing Salmonella at any level fails the test.

\(^2\) ND = Not detected. Not detected means that no colonies are present in 10 g of sample when tested under the conditions of the USP Method cited in Section 7.3. If E. coli is detected above the applicable trigger level of ND or $10^2$ CFU/g, Section 7.3.7.2 is to be followed to determine whether the observed colonies are enterovirulent. If for some reason the observed colonies are not available to be tested, additional sample portions shall be tested for E. coli and enterovirulent E. coli. No detectable level of enterovirulent E. coli is allowed; ingredient containing enterovirulent E. coli at any level fails the test.

\(^3\) ND = Not detected. Not detected means that no colonies are present in 10 g of sample when tested under the conditions of an appropriate S. aureus test per Section 7.3. If S. aureus is detected, the sample must be further tested to determine whether the observed colonies are coagulase positive. If for some reason the observed colonies are not available to be tested, additional sample portions shall be tested for S. aureus and coagulase positive S. aureus. No detectable level of coagulase positive S. aureus is allowed; ingredient containing coagulase positive S. aureus at any level fails the test.
### Table 5.3
Acceptable limits for microbiological contaminants in finished products

<table>
<thead>
<tr>
<th>Finished products</th>
<th>Aerobic</th>
<th>Yeast / mold</th>
<th>Enterobacteriaceae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 3 Finished products containing non-extract botanical ingredients (i.e., containing crude or minimally processed botanicals)</td>
<td>$1 \times 10^7$ CFU/g</td>
<td>$1 \times 10^5$ CFU/g</td>
<td>$1 \times 10^4$ CFU/g</td>
</tr>
<tr>
<td>Category 2 Finished products containing botanical extract ingredients or other dietary ingredients</td>
<td>$1 \times 10^4$ CFU/g</td>
<td>$1 \times 10^3$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
</tr>
<tr>
<td>Category 1 Finished products containing vitamin and/or mineral ingredients</td>
<td>$1 \times 10^3$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>$1 \times 10^2$ CFU/g</td>
</tr>
</tbody>
</table>

1 The category designation for the product to be certified shall be based on those ingredients present at 1% or more by weight in the formula as provided in the full product formulation. For a product containing ingredients from more than one category, the finished product category will be assigned based on the ingredient with the highest category number, i.e. the most relaxed standard applicable to the ingredients in the product.

Examples:
- a) A product containing only vitamin C and zinc shall be in Category 1.
- b) A product containing vitamin C, zinc, and green tea leaf extract shall be in Category 2.
- c) A product containing vitamin C, zinc, and echinacea root shall be in Category 3.

### Table 5.4
Acceptable limits for pathogenic microbiological contaminants in finished products

<table>
<thead>
<tr>
<th>Finished products</th>
<th>Salmonella maximum level</th>
<th>E. coli trigger level</th>
<th>Enterovirulent E. coli maximum level</th>
<th>S. aureus trigger level</th>
<th>Coagulase positive S. aureus maximum level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 3 Finished products containing non-extract botanical ingredients (i.e., containing crude or minimally processed botanicals)</td>
<td>ND</td>
<td>$1 \times 10^2$ CFU/g</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Category</th>
<th>Finished products containing botanical extract ingredients or other dietary ingredients</th>
<th>ND</th>
<th>ND</th>
<th>ND</th>
<th>ND</th>
<th>ND</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category 2</td>
<td>Finished products containing vitamin and/or mineral ingredients</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

1 The category designation for the product to be certified shall be based on those ingredients present at 1% or more by weight in the formula as provided in the full product formulation. For a product containing ingredients from more than one category, the finished product category will be assigned based on the ingredient with the highest category number, i.e. the most relaxed standard applicable to the ingredients in the product.

Examples:

a) A product containing only vitamin C and zinc shall be in Category 1.
b) A product containing vitamin C, zinc, and green tea leaf extract shall be in Category 2.
c) A product containing vitamin C, zinc, and echinacea root shall be in Category 3.

2 ND = Not detected. Not detected means that no colonies are present in 10 g of sample when tested under the conditions of the USP Method cited in Section 7.3. No detectable level of Salmonella is allowed; product containing Salmonella at any level fails the test.

3 ND = Not detected. Not detected means that no colonies are present in 10 g of sample when tested under the conditions of the USP Method cited in Section 7.3. If *E. coli* is detected above the applicable trigger level of ND or $10^2$ cfu/g, Section 7.3.7.2 is to be followed to determine whether the observed colonies are enterovirulent. If for some reason the observed colonies are not available to be tested, additional sample portions shall be tested for *E. coli* and enterovirulent *E. coli*. No detectable level of enterovirulent *E. coli* is allowed; product containing enterovirulent *E. coli* at any level fails the test.

4 ND = Not detected. Not detected means that no colonies are present in 10 g of sample when tested under the conditions of an appropriate *S. aureus* test per Section 7.3. If *S. aureus* is detected, the sample must be further tested to determine whether the observed colonies are coagulase positive. If for some reason the observed colonies are not available to be tested, additional sample portions shall be tested for *S. aureus* and coagulase positive *S. aureus*. No detectable level of coagulase positive *S. aureus* is allowed; product containing coagulase positive *S. aureus* at any level fails the test.
BSR/UL 1349, Standard for Safety for LP-Gas Vaporizers

The following is being recirculated:

1. Revisions to new joint standard, UL/ULC 1349, Standard for LP-Gas Vaporizers

PROPOSAL

CONSTRUCTION

5 Direct Fired Vaporizers

5.2 The relief valve shall not be subjected to temperatures in excess of 140°F (60°C).

5.5 If the pilot flow exceeds 2000Btu/hr (2 MJ/hr), the safety control shall also shut off the flow of gas to the pilot.

PERFORMANCE

11 Seat Leakage Tests

11.1 General

11.1.1 A valve or similar device that is used to comply with 4.3, following the Deformation Test, Section 9 and External Leakage test, Section 10, as applicable, shall be subjected to this test.

11.1.2 A valve exposed only to LP-Gas liquid shall be subjected to the method described in 11.2. A capacity control valve exposed to LP-Gas vapor shall be subjected to the method described in 11.3.

11.1.3 All seat leakage tests employing a gas as the test medium shall be maintained for at least 1 min. All seat leakage tests employing a liquid as the test medium shall be maintained for at least 5 min.

11.2 Liquid test
11.2.1 A valve for liquids shall not leak past the seat in excess of that indicated in Table 11.1 when subjected to a pressure of 1.5 times rated pressure of the valve or pipe section.

11.2.2 To verify compliance with 11.2.1, the inlet of the test valve shall be connected to a system utilizing the appropriate test medium. This test shall be conducted with the valve in its intended position of installation. The valve shall be in the closed position assumed as the result of intended operation. The pressure shall be increased gradually from zero and then maintained at 1.5 times rated pressure of the valve or pipe section.

11.3 Gas test

11.3.2 To verify compliance with 11.3.1, the inlet of the test valve shall be connected to a system capable of supplying clean air or other test gas at the test pressures. A tight connection shall be made to the valve outlet, terminating in tubing. The open end of this outlet shall be located within an inverted graduated cylinder which is calibrated in cubic centimeters. The inverted cylinder shall be closed by a water seal. The apparatus shall be adjusted so that:

a) The end of the outlet tube is located approximately 12.7 mm (0.5 in) above the water level within the inverted graduated cylinder; and

b) The water within and exterior to the graduated cylinder is at the same level.

With these adjustments made, the water level within the graduated cylinder shall be recorded. With the valve in the closed position assumed as the result of intended operation, the test medium at the specified test pressure shall be applied to the valve inlet for a minimum test period of 2 min. During this time, the vertical position of the graduated cylinder shall be adjusted, when required, to maintain the same water level within and exterior to it. At the end of the test period and with the water within and exterior to the graduated cylinder at the same level, the level of water within the graduated cylinder is again recorded. From the change of volume within the graduated cylinder, the leakage rate shall be calculated according to the following formula:

\[
R = V \times \frac{60}{m} \left( \frac{520}{460 + t} \times \frac{P}{30} \right)
\]

In which:

R is the leakage rate in cubic centimeters per hour,

V is the increase in volume within graduated cylinder during test,
\[ m \] is the time of test in minutes,
\[ t \] is the ambient temperature during test in degrees F \([1.8 \times \text{degrees} \ C + 32]\),
\[ P \] is the barometric pressure during test in inches of mercury \((\text{kPa} \times 0.3)\)

12 Operation Test

12.2 One sample of each type of vaporizer shall be subjected to this test. If a vaporizer model series is identical to each other, except for size and capacity, one model may be chosen as representative for this test, if engineering calculations and judgment can be used to show that the other sizes in the model series will not exceed rated limits. Each sample under test shall be connected as intended in service (electrical and mechanical, etc.) to a liquid LP-Gas supply system of adequate flow capacity in accordance with manufacturer’s instructions and ratings. The outlet shall be connected to a vapor piping system that includes a metering and shutoff valve. The sample and piping system shall be monitored for pressure and temperature. The vaporizer sample shall be operated to provide the highest and lowest vapor flow rates. The test shall continue until pressure, temperature and flow rates have stabilized, or their limits known. This test may be conducted outdoors at local ambient conditions. Local ambient conditions shall be recorded.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustion</td>
<td>No or some yellow flame, flare ups, rollout soot or smell of unburnt fuel. The flame was consistent and even.</td>
</tr>
<tr>
<td>Light Off</td>
<td>Pilot flame ignited without delayed ignition</td>
</tr>
<tr>
<td>Delayed Ignition</td>
<td>No flare up or rollout</td>
</tr>
<tr>
<td>Flame Failure</td>
<td>Pilot did not reignite, main burner shut off.</td>
</tr>
<tr>
<td>Pilot Operation</td>
<td>Pilot reignited and did not contribute to heating.</td>
</tr>
</tbody>
</table>

13 Endurance Tests

13.1 A valve or similar device that is used to comply with 4.3, following the Deformation Test, Section 9, External Leakage test, Section 10, and Seat Leakage Tests, Section 11 as applicable, shall be subjected to this test. The device shall perform in its intended manner and there shall be no sticking of the valve member, nor shall the valve become inoperative.
18 Accelerated Aging Test

18.2 Elastomeric parts shall be exposed for at least 70 h at 100°C (212°F) in an air-circulating oven. A polymeric part shall be conditioned for 7 days in an air-circulating oven at a temperature of 87°C (189°F).

MARKINGS

24 General

24.1 Each vaporizer shall be marked with the following:

a) The manufacturer's or private labeler's name or identifying symbol;

b) A distinctive catalog number or the equivalent;

c) The markings required by the ASME Code, CSA B51 Boiler, Pressure Vessel, and Pressure Piping Code for the container as applicable;

d) The electrical ratings of all electrical equipment and connections, if appropriate.

e) LP Gas

   Type de gaz à employer •

f) Certification body’s listing mark (Delete item f)

g) Reference to the Standard

24.2 In addition to 24.1, direct fired vaporizers shall be marked with the following:

a) The maximum vaporizing capacity in gallons per hour (Capacité maximale de vaporization – indiqué gal/hr ou l/hr);

b) The maximum allowable working pressure, if in excess of 250 psig (1.7 MPa gauge) Pression de service maximale admissible (si >1,725 MPA/250 psig;

d) Purge time * Temps de purge *, if applicable;
f) Only for outdoor shelter installations * Uniquement pour les installations d’abris extérieur *

g) Burner inlet pressure minimum (-- “wc) and maximum (-- “wc) et maximum (-- “wc) *

INSTRUCTIONS

25 Installation and Operating

25.1 A copy of the installation and operating instructions shall be provided with each vaporizer.
BSR/UL 746A, Standard for Safety for Polymeric Materials – Short Term Property Evaluations

1. Inclusion of Requirements for Chemically Recycled Plastics in Table 9.1

PROPOSAL

4.1.1 CHEMICALLY RECYCLED PLASTICS – The process in which traditional polymerization starting ingredients (e.g., fossil-based “pre-cracker” hydrocarbons or polymerization monomers) are sourced by compounds derived from the chemical or thermal decomposition of plastics (reconstituted).

NOTE: For the purpose of this Standard, starting ingredients sourced from plant-based matter or other non-traditional inputs for the polymerization of plastics can be identified as chemically recycled.

9.10 Chemically recycled plastics

9.10.1 Initial plastics evaluations utilizing polymerization monomer(s) in part or whole derived from chemical recycling shall be evaluated analogous to virgin materials.

Note from the STP Project Manager: The version of Table 9.1 shown in this proposal does not represent the complete version of the Table. The version of Table 9.1 shown in this proposal only includes the proposed changes to Table 9.1.

Table 9.1
Test considerations based upon compound variations

<table>
<thead>
<tr>
<th>Additive/Variation</th>
<th>Addition</th>
<th>Deletion</th>
<th>Replacement</th>
<th>Change in Level[^1]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(absolute %)</td>
<td>(absolute %)</td>
<td>(absolute %)</td>
<td>(normalized %)</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Table 9.2</td>
<td>Table 9.2</td>
<td>Table 9.2</td>
<td>Table 9.2</td>
</tr>
<tr>
<td></td>
<td>(absolute %)</td>
<td>(absolute %)</td>
<td>(absolute %)</td>
<td>(normalized %)</td>
</tr>
<tr>
<td>Variations that result in a change in level of branching and/or cross-linking, See AD.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variations that do not result in a change in the level of branching and/or cross-linking, See A.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monomers in Base Polymer/Resin</td>
<td>Replacement of polymerization monomer(s) with chemically recycled monomer(s) in part or whole, that is chemically identical to the original monomer(s), no testing is required.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Replacement of the polymerization monomer(s) with chemically recycled monomer(s) in part or whole, that is not chemically identical to the original monomer(s), where the final compound:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Does not meet the criteria as determined in Appendix A, Appendix B and Appendix C, See CDE or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Does meet the criteria as determined in Appendix A, Appendix B and Appendix C, no further testing is required.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
BSR/UL 746C, Standard for Safety for Polymeric Materials – Use in Electrical Equipment Evaluations

1. Inclusion of Deformation Resistance as an Alternate Test Method for the Tensile Impact Test Described in Paragraphs 25.3 and 26.1.3

PROPOSAL

25.3 When the material is not suitable for impact testing options (mentioned in Table 25.1) due to has a thickness less than 0.25 mm (0.01 inch) or it is a vulcanized rubber or is a thermoplastic elastomer (typically used as non-enclosure or part of the enclosure), impact testing mentioned in Table 25.1 shall be waived and, alternatively, testing has to shall be performed for deformation resistance.

Exception No. 1: Where it is not practical to conduct the Tensile, Izod, or Charpy impact test using the standard specimens, the procedure of 57.2.7 – 57.2.11 and the impact equipment of Figure 57.1 and Figure 57.2 may be used on representative sections of the equipment’s enclosure.

Exception No. 2: If the impact value for a material that has been tested in accordance with the requirements in this section has exhibited less than 70 percent retention but at least 25 percent retention of the impact property, it is considered acceptable provided that all of the following results are obtained:

a) An unconditioned plaque specimen in the thinnest part thickness complies with the resistance to impact requirement levels shown in Table 25.2, and

b) The standard specimens exposed to the 1000 hour xenon-arc UV conditioning have retained at least 80 percent of the 500 hour xenon-arc UV conditioning impact level. As an alternative, this UV conditioning may be conducted for a longer period of time in 500 hour increments providing the final exposure impact level is not less than 80 percent of the previous increment’s impact level.

26.1.3 When the material is not suitable for impact testing options (mentioned in Table 25.1) due to has a thickness less than 0.25 mm (0.01 inch) or it is a vulcanized rubber or is a thermoplastic elastomer (typically used as non-enclosure or part of the enclosure), impact testing mentioned in Table 25.1 shall be waived and, alternatively, testing has to shall be performed for deformation resistance.
BSR/UL 1083, Standard for Household Electric Coffee Makers and Brewing-Type Appliances

1. Addition of UL 969A as an Alternative to Existing Permanency of Marking Requirements for Cord Tags

PROPOSAL

SB8.1 The cord tag of 54.8 and SB 11.1 shall be a flag-type tag with an adhesive back. The tag is to be wrapped tightly once around and is to adhere to the power supply cord. The ends of the tag are to adhere to each other and project as a flag. The required markings are to be positioned on the projecting flag portion of the tag. To determine compliance with SB11.1, representative samples shall be subjected to the tests specified in SB8.2 - SB8.7 and the cord tag shall comply with the following requirements:

a) The Standard for Marking and Labeling Systems – Flag Labels, Flag Tags, Wrap-Around Labels and Related Products, UL 969A, for the cord type it is applied to and to the environmental conditions consistent with the intended use of the product (e.g. indoor use or outdoor use); or

b) The tests specified in SB8.2 - SB8.7 and:

   a) 1) The tag shall resist tearing for longer than 1/16 inch (1.6 mm) at any point;

   b) 2) The tag shall not separate from the power supply cord;

   c) 3) There shall be no permanent shrinkage, deformation, cracking, or any other condition that will render the marking on the tag illegible; and

   d) 4) Overlamination shall remain in place and not be torn or otherwise damaged. The printing shall remain legible.

SB8.7 Each sample is to consist of a length of power supply cord to which the tag has been applied. The power supply cord, with the attachment plug pointing up, is to be held tautly in a vertical plane. A force of 5 lbf (22.2 N) is to be applied to the upper-most corner of the tag farthest from the power supply cord, within 1/4 inch (6.4 mm) of the vertical edge of the tag. The force is to be applied vertically downward in a direction parallel to the major axis of the cord. In determining compliance with SB8.1(c) (b)(3), manipulation is permissible, such as straightening of the tag by hand. To determine compliance with SB8.1(d) (b)(4), each sample is to be scraped 10 times across printed areas and edges, with a force of approximately 2 lbf (8.9 N), using the edge of a 5/64 inch (2.0 mm) thick steel blade held at a right angle to the test surface.