CONTENTS

American National Standards

Project Initiation Notification System (PINS) ................................................................. 2
Call for Comment on Standards Proposals ................................................................. 5
Final Actions - (Approved ANS) ............................................................................... 13
Call for Members (ANS Consensus Bodies) ............................................................ 16
American National Standards (ANS) Announcements ............................................ 19
American National Standards (ANS) Process ....................................................... 20
Meeting Notices (Standards Developers) ............................................................... 21
ANS Under Continuous Maintenance ................................................................. 23
ANSI-Accredited Standards Developer Contacts .............................................. 24

International Standards

ISO and IEC Draft Standards .................................................................................. 26
ISO and IEC Newly Published Standards ............................................................. 30
International Organization for Standardization (ISO) .......................................... 34
Call for Members (USNC) ....................................................................................... 35

Information Concerning

Registration of Organization Names in the United States ........................................ 36
Proposed Foreign Government Regulations ....................................................... 37
Standards Action Publishing Calendar ................................................................. 38
Project Initiation Notification System (PINS)

Section 2.5.1 of the ANSI Essential Requirements 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.

ACP (American Clean Power Association)
Duane Brown <dbrown@cleanpower.org> | 1501 M Street NW, Suite 1000 | Washington, DC 22205 www.cleanpower.org

New Standard
BSR/ACP 111-2-202x, Photovoltaic Solar and/or Battery Energy Storage System Sound Modeling Standard (new standard)
Stakeholders: Clean power stakeholders, operators, owners, developers, OEMs, contractors, subcontractors, independent service providers, and all other impacted stakeholders.
Project Need: To identify the typical project and equipment information required (e.g., modeled sound source dimensions, equipment sound power levels, topography, etc.) as well as establish modeling parameters for use in the ISO 9613 outdoor sound propagation algorithm to ensure a reasonably uniform and comparable computational basis.
Interest Categories: General, Consultant, Producer, Owner/Operator, Technical

Modeling of photovoltaic solar (PV solar), battery energy storage systems (BESS), and combined PV solar and BESS sound levels at far field positions (e.g., residences) may be conducted to support pre-construction permitting analyses for noise impacts and assess conformance with noise limits. PV solar and BESS projects both typically utilize equipment such as inverters to convert the direct current (DC) to alternating current (AC) and vice-versa, transformers to adjust the voltage, cooling equipment (e.g., fans, air conditioners). The purpose of this standard is to identify the typical project and equipment information required (e.g., modeled sound source dimensions, equipment sound power levels, topography, etc.) as well as establish modeling parameters for use in the ISO 9613 outdoor sound propagation algorithm to ensure a reasonably uniform and comparable computational basis. The establishment of these modeling parameters does not imply that work conducted prior to the establishment of this standard is incorrect. Rather, the intent of this standard is to avoid potential future confusion by providing consistency of predicted sound levels published in research or permitting documentation given the potential for different modeling approaches to yield dissimilar results.
**ADA (Organization) (American Dental Association)**

Paul Bralower <bralowerp@ada.org>  | 211 East Chicago Avenue  |  Chicago, IL  60611-2678  | www.ada.org

**New Standard**

BSR/ADA Standard No. 1059-202x, Functional Requirements for Digital Cephalometric Radiographs and Digital Cephalometric Analysis (new standard)

Stakeholders: Software vendors and orthodontics practitioners with experience in cephalograms and cephalometric tracings.

Project Need: The orthodontic profession is currently lacking definitions of DICOM tags and functional requirements for cephalometric radiographs. Such functional requirements will be useful in developing DICOM Correction Packages or Supplements and IHE Profiles for cephalometric radiographs.

Interest Categories: Consumer, General Interest, Producer

This document defines functional requirements for saving, storing, and exchanging cephalometric radiographs and cephalometric analyses (anatomical landmarks with distance and angle measurements). An approved list of required terms and their SNOMED codes is included.

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**ADA (Organization) (American Dental Association)**

Paul Bralower <bralowerp@ada.org>  | 211 East Chicago Avenue  |  Chicago, IL  60611-2678  | www.ada.org

**New Standard**

BSR/ADA Standard No. 1114-202x, Implementation Requirements for the Effective Use of DICOM in Dentistry (new standard)

Stakeholders: Vendors of dental practice management system software and dental clinicians

Project Need: The intent of this project is to meet the need of dental practices for interoperability to enable the exchange of digital dental images between all types of systems in the dental profession, including providers, payers, and specialists.

Interest Categories: Consumer, General Interest, Producer

This standard will provide guidelines for implementation and effective usage of the DICOM standard in dental practice systems for the exchange of digital dental images.

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**CSA (CSA America Standards Inc.)**

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

**Addenda**

BSR Z21.58a-202x, Outdoor cooking gas appliances (same as CSA 1.6a) (addenda to ANSI Z21.58-2022/CSA 1.6-2022)

Stakeholders: Manufacturers, installers, consumers

Project Need: To prepare an amendment of the current standard to take into account changes in the industry in order to address safety issues associated with new technologies and manufactured configurations

Interest Categories: General Interest, Producer Interest, Regulatory Authority, User Interest

This Standard applies to newly produced outdoor cooking gas appliances constructed entirely of new, unused parts and materials. Outdoor cooking gas appliances submitted for examination under this Standard are classified as portable, stationary, or built-in.
**CSA (CSA America Standards Inc.)**  
Debbie Chesnik <ansi.contact@csagroup.org> | 8501 East Pleasant Valley Road | Cleveland, OH 44131-5575 www.csagroup.org

**Addenda**

BSR Z21.89a-202x, Outdoor cooking specialty gas appliances (same as CSA 1.18a) (addenda to ANSI Z21.89-2023)

Stakeholders: Manufacturers, installers, consumers, regulatory authorities

Project Need: To prepare an amendment of the current standard to take into account changes in the industry in order to address safety issues associated with new technologies and manufactured configurations

Interest Categories: General Interest, Producer Interest, Regulatory Authority, User Interest

This Standard applies to newly produced, outdoor cooking specialty gas appliances, hereinafter referred to as appliances, constructed entirely of new, unused parts and materials. Appliances submitted for examination under this Standard are classified as portable or stationary. These products are not intended for commercial use.

**IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)**

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

**Revision**

BSR/ASSE 1010-202x, Performance Requirements for Water Hammer Arresters (revision of ANSI/ASSE 1010-2021)

Stakeholders: Construction and maintenance personnel, plumbing and construction contractors, regulatory authorities, plumbers, manufacturers.

Project Need: Water hammer arresters are installed on water distribution system piping to prevent detrimental surge pressures within water distribution systems. This standard is referenced in several Jurisdictional plumbing codes in Canada. However, it is not a National Standard of Canada. This would make for general acceptance of the performance criteria of this standard across Canada.

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

This standard applies only to those devices classified as water hammer arresters having a permanently sealed cushion of gas isolated from the waterway, and designed to provide continuous protection, without maintenance, against detrimental surge pressures within the water distribution system.

**NEMA (ASC C136) (National Electrical Manufacturers Association)**

David Richmond <David.Richmond@nema.org> | 1300 North 17th Street, Suite 900 | Rosslyn, VA 22209 www.nema.org

**Revision**


Stakeholders: Luminaire Manufacturers, Utilities, End Users

Project Need: This document needs to be revised in order to align with other solid state lighting standards.

Interest Categories: Producer Luminaire, Producer Other, Producer Poles, User, and General Interest

This Standard defines interchangeability of, and some requirements for, solid-state light (SSL) source fixtures, also referred to as luminaires and/or LED (light-emitting diode) fixtures. These are used in roadway and area lighting applications that are within the scope of various ANSI C136 Standards. This Standard does not address replacement or interchangeability of lamps/light sources.
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: January 21, 2024

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

This addendum updates the title, purpose, and scope of Standard 209.
Click here to view these changes in full
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

This addendum expands focus on expanding the applicability of Informative Appendix C and renames the appendix to “Modeling Input for Simple Box and Other Cycles”. The change reflects the use cases of the default assumptions presented into the appendix beyond simple box modeling.
Click here to view these changes in full
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: January 21, 2024

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 addendum makes changes to Section 6.1, clarifying the purpose and analysis of Modeling Cycle #1. The Purpose is updated to include consideration of sensitivity in addition to distribution.
Click here to view these changes in full
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

This addendum makes changes to Section 6.7, which in the existing standard is called Modeling Cycle #7—Energy Simulation-Aided Value Engineering. The changes expand the cycle to have broader applicability and purpose so that it can be used to responsively evaluate any proposed changes to the design that arise during the design process rather than confining the analysis to value engineering proposals that are likely to have negative consequences.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

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

Revision

BSR/NSF 49-202x (i193r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022)
This standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to Biosafety Levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this standard.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Allan Rose <arose@nsf.org>

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

Revision

BSR/NSF 55-202x (i66r1), Ultraviolet Microbiological Water Treatment Systems (revision of ANSI/NSF 55-2022)
This standard covers UV microbiological water treatment systems and components for point-of-use (POU) and point-of-entry (POE) applications. This standard covers systems which use UV radiation within the range of 240 nm to 300 nm inclusive.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Monica Milla <mmilla@nsf.org>
Comment Deadline: January 21, 2024

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

**Revision**
BSR/NSF 173-202x (i110r1), Dietary Supplements (revision of ANSI/NSF 173-2022)
This standard contains requirements for dietary supplements that contain one or more of the following dietary ingredients: a vitamin, a mineral, an herb or other botanical, an amino acid, a dietary substance for use by humans to supplement the diet by increasing the total dietary intake, or a concentrate, metabolite, constituent, extract, or combinations of these ingredients.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Rachel Brooker <rbrooker@nsf.org>

**ULE (UL Standards & Engagement)**
12 Laboratory Drive, Research Triangle Park, NC  27709-3995  | griff.edwards@ul.org, https://ulse.org/

**Revision**
BSR/UL 19-202x, Standard for Lined Fire Hose and Hose Assemblies (revision of ANSI/UL 19-2018)
(1) Additional fire hose trade sizes, internal and outside diameter requirements, additional hose pressure options, product specification sheet requirements, and other clarifications/corrections
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://csds.ul.com/ProposalAvailable

Comment Deadline: February 5, 2024

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

**National Adoption**
BSR/AAMI/ISO 17665-202x, Sterilization of health care products - Moist heat - Requirements for the development, validation and routine control of a sterilization process for medical devices (identical national adoption of ISO 17665:202X, Ed. 2)
Provides requirements for the development, validation, and routine control of moist heat sterilization processes for medical devices. It also contains guidance which is intended to explain the requirements set forth in the normative sections. The guidance given is intended to promote good practice related to moist heat sterilization processes according to this document. The application within industrial and health care settings is considered.
Single copy price: Free
Obtain an electronic copy from: Mike Miskell: mmiskell@aami.org
Send comments (copy psa@ansi.org) to: Mike Miskell: mmiskell@aami.org
Comment Deadline: February 5, 2024

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

National Adoption


Provides requirements for the development, validation, and routine control of moist heat sterilization processes for medical devices. It also contains guidance which is intended to explain the requirements set forth in the normative sections. The guidance given is intended to promote good practice related to moist heat sterilization processes according to this document. The application within industrial and health care settings is considered.

Single copy price: Free
Obtain an electronic copy from: Mike Miskell: mmiskell@aami.org
Send comments (copy psa@ansi.org) to: Mike Miskell: mmiskell@aami.org

AHAM (Association of Home Appliance Manufacturers)
1111 19th Street NW, Suite 1150, Washington, DC  20036  | jpark@aham.org, www.aham.org

Revision

BSR/AHAM AC-5-202x, Method for Assessing the Reduction Rate of Key Bioaerosols by Portable Air Cleaners Using an Aerobiology Test Chamber (revision of ANSI/AHAM AC-5-2022)

This document specifies a method to evaluate the capability of portable household air cleaners to reduce the concentration and viability of key experimentally generated bioaerosols 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. If the air cleaner does not claim to have the function of reducing microorganisms, this standard may not be applicable unless it is being used to simply evaluate the performance.

Single copy price: $300.00
Obtain an electronic copy from: https://www.aham.org/AHAM/AuxStore
Send comments (copy psa@ansi.org) to: John Park -- jpark@aham.org

API (American Petroleum Institute)
200 Massachusetts Avenue NW, Washington, DC  20001  | burklek@api.org, www.api.org

Revision

BSR/API Recommended Practice 100-3-202x, Community Engagement Guidelines (revision of ANSI/API Bulletin 100-3-2014)

This document is designed to provide guidance to U.S.-based upstream operators on how to assess, plan, and implement effective and meaningful stakeholder engagement strategies that are aligned with community values and priorities. The recommended strategies encourage constructive conversation between operators and stakeholders to address concerns and develop mutually agreeable solutions.

Single copy price: Free
Obtain an electronic copy from: burklek@api.org
Send comments (copy psa@ansi.org) to: Katie Burkle <burklek@api.org>
Comment Deadline: February 5, 2024

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
This addendum adds a new appendix. Informative Appendix G, Predictive Energy Modeling is a discussion on the differences between the typical comparative energy modeling used for code compliance and determine performance beyond code, and a more outcomes-based modeling when a team wants to determine the likely performance of a building. The appendix is informative and is not required for compliance with the standard, but it provides context and things that may require additional attention in performance-based modeling.
Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research-technology/public-review-drafts
Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research-technology/public-review-drafts

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

Revision
BSR/ASTM F3312/F3312M-202x, Practice for Liquefied Natural Gas (LNG) Bunkering Hose Transfer Assembly (revision of ANSI/ASTM F3312-2018)
https://www.astm.org/get-involved/technical-committees/ansi-review
Single copy price: Free
Obtain an electronic copy from: accreditation@astm.org
Send comments (copy psa@ansi.org) to: Same

AWWA (American Water Works Association)
6666 W. Quincy Avenue, Denver, CO  80235  | polson@awwa.org, www.awwa.org

Revision
BSR/AWWA B701-202x, Sodium Fluoride (revision of ANSI/AWWA B701-2018)
This standard describes sodium fluoride for use in the treatment of potable water, wastewater, and reclaimed water.
Single copy price: Free
Obtain an electronic copy from: ETSsupport@awwa.org
Send comments (copy psa@ansi.org) to: Same

AWWA (American Water Works Association)
6666 W. Quincy Avenue, Denver, CO  80235  | polson@awwa.org, www.awwa.org

Revision
BSR/AWWA B702-202x, Sodium Fluorosilicate (revision of ANSI/AWWA B702-2018)
This standard describes sodium fluorosilicate for use in the treatment of water, wastewater, and reclaimed water.
Single copy price: Free
Obtain an electronic copy from: ETSsupport@awwa.org
Send comments (copy psa@ansi.org) to: Paul Olson <polson@awwa.org>
Comment Deadline: February 5, 2024

FM (FM Approvals)
One Technology Way, Norwood, MA 02062 | josephine.mahnken@fmapprovals.com, www.fmapprovals.com

Revision
This revision adds requirements for doors manufactured with the same facers and core as wall panels included in the scope, used to access partition or enclosure assemblies made with wall panels included in the scope.
Single copy price: Free
Obtain an electronic copy from: josephine.mahnken@fmapprovals.com
Send comments (copy psa@ansi.org) to: Same

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

New Standard
BSR/ASSE 1379-202x, Proportional Flow Controller, with Protection from Cross Contamination, for use in Drinking Water Installations (new standard)
Proportional Flow Control Devices are commonly found in European hydronic systems. Typically, these product are installed as a part of an integrated system to balance flow into both sides of a double-wall heat exchanger. One side increases the cold water supply temperature to supply domestic hot water, the other side receives hydronic hot water that is cooled to supply the hydronic loop. The device controls the flow of water of both the cold water supply and the hydronic loop based on the temperature and flow requirements of the hydronic loop. This helps minimize dead legs in the hot water distribution system to supply fittings. It is also important that these device be adequately equipped with a means to prevent contamination of the water supply. This standard adapts translated requirements from DVGW VP 201 Testing Specification for Flow-rate control devices with double diaphragm and safety valve and ASSE 1012 for Backflow Preventers with intermediated Atmospheric Vent to provide adequate protection of the potable water system.
Single copy price: Free
Obtain an electronic copy from: standards@iapmostandards.org
Send comments (copy psa@ansi.org) to: Same

NEMA (ASC C8) (National Electrical Manufacturers Association)
1300 North 17th Street, Suite 900, Arlington, VA 22209 | Khaled.Masri@nema.org, www.nema.org

Reaffirmation
BSR ICEA S-103-701-2018 (R202x), Riser Cables Technical Requirements (reaffirmation of ANSI ICEA S-103-701 -2018)
This Standard covers mechanical, electrical, and flammability requirements for riser cables. Depending upon the application and system requirements, this Standard provides choices for materials and transmission characteristics. For those characteristics where no differentiation is made, the performance requirements are applicable to all cables. Selection of the applicable type shall be at the discretion of the user and shall be designated in the product specification.
Single copy price: $120.00
Obtain an electronic copy from: communication@nema.org
Send comments (copy psa@ansi.org) to: Same
Reaffirmation
BSR/SCTE 24-22-2018 (R202x), iLBCv2.0 Speech Codec Specification for Voice over IP Applications in Cable Telephony (reaffirmation of ANSI/SCTE 24-22-2018)
This document specifies a speech codec suitable for robust voice communication over IP. It is designed for narrow band speech and results in a payload bit rate of 13.33 kbit/s for 30-ms frames and 15.20 kbit/s for 20-ms frames. The codec enables graceful speech quality degradation in the case of lost frames, which occurs in connection with lost or delayed IP packets.
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (copy psa@ansi.org) to: standards@scte.org

SCTE (Society of Cable Telecommunications Engineers)
140 Philips Road, Exton, PA  19341-1318  | naden@scte.org, www.scte.org

Revision
BSR/SCTE 35-202x, Digital Program Insertion Cueing Message (revision of ANSI/SCTE 35-2022)
This standard, “Digital Program Insertion Cueing Message for Cable” (SCTE 35), is the core signaling standard for advertising, program, and distribution control (e.g., blackouts) of content for content providers and content distributors. SCTE 35 is being applied to QAM/IP, Title VI/TVE (TV Everywhere), and live/time-shifted (DVR, VOD, etc.) delivery. SCTE 35 signals can be used to identify advertising breaks, advertising content, and programming content (e.g., specific programs and chapters within a program).
Single copy price: $50.00
Obtain an electronic copy from: standards@scte.org
Send comments (copy psa@ansi.org) to: standards@scte.org
Comment Deadline: February 5, 2024

**SCTE (Society of Cable Telecommunications Engineers)**
140 Philips Road, Exton, PA 19341-1318 | naden@scte.org, www.scte.org

**Revision**

BSR/SCTE 104 202x, Automation System to Compression System Communications Applications Program Interface (API) (revision of ANSI/SCTE 104-2022)

This standard is part of a suite documenting digital control and delivery of advertising, Program and distribution control (e.g., blackouts) of content between content providers and content distributors. The reader is referred to the block diagrams in Section 6, namely block diagrams (Figure 6-1 and Figure 6-2) as well as the discussion of system architectures in SCTE 67 [SCTE67]. This standard defines the Communications API between an Automation System and the associated Compression System that will insert SCTE 35 [SCTE35] private sections into the outgoing Transport Stream. This standard serves as a companion to both SCTE 35 [SCTE35] and SCTE 30 [SCTE30].

Single copy price: $50.00

Obtain an electronic copy from: standards@scte.org

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

**ULSE (UL Standards & Engagement)**

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

**Revision**


The proposed adoption of IEC 62841-4-2 Amendment 1 revisions to UL 62841-4-2 Edition 1.

Single copy price: Free

Obtain an electronic copy 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.

**Project Withdrawn**

In accordance with clause 4.2.1.3.3 Discontinuance of a standards project of the ANSI Essential Requirements, an accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

**DSI (Dental Standards Institute, Inc.)**

109 Bushaway Road, Suite 100, Wayzata, MN 55391 | bryan@toothapps.com, https://dentalstandardsinstitute.com/

BSR/DSI RCST1.1-202x, Systemization of Notifications Regarding Dental Patient Recall (DPR) (new standard)

Send comments (copy psa@ansi.org) to: Bryan Laskin <bryan@toothapps.com>

**ICC (International Code Council)**

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


Send comments (copy psa@ansi.org) to: Karl Altaniemi <kaittaniemi@iccsafe.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.

AHRI (Air-Conditioning, Heating, and Refrigeration Institute)
2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 | kbest@ahrinet.org, www.ahrinet.org

ANSI/AHRI Standard 1210-2023 (SI/I-P), Performance Rating of Variable Frequency Drives (new standard) Final Action Date: 12/14/2023 | New Standard

AISI (American Iron and Steel Institute)
25 Massachusetts Avenue, NW, Suite 800, Washington, DC 20001 | jlarson@steel.org, www.steel.org


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


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

ANSI/ASA S3.55-2014/Part 5/IEC 60318-5:2006 (MOD) (R2019)) Final Action Date: 12/14/2023 | Reaffirmation

ASABE (American Society of Agricultural and Biological Engineers)
2950 Niles Road, St. Joseph, MI 49085 | walsh@asabe.org, https://www.asabe.org/


ANSI/ASAE S289.2 FEB1998 (R2023), Concrete Slip-Form Canal Linings (reaffirmation of ANSI/ASAE S289.2 FEB1998 (R2018)) Final Action Date: 12/12/2023 | Reaffirmation

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


ANSI/ASTM E2688-2023, Practice for Specimen Preparation and Mounting of Tapes to Assess Surface Burning Characteristics (revision of ANSI/ASTM E2688-2018) Final Action Date: 12/15/2023 | Revision

EOS/ESD (ESD Association, Inc.)
218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, https://www.esda.org

ANSI/ESD SP5.0-2023, ESD Association Standard Practice for Electrostatic Discharge Sensitivity Testing - Reporting ESD Withstand Levels on Datasheets (revision of ANSI/ESD SP5.0-2018) Final Action Date: 12/18/2023 | Revision
ESTA (Entertainment Services and Technology Association)
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 |
standards@esta.org, www.esta.org

ANSI/E1.71-2023, Powered Curtain Machines (new standard) Final Action Date: 12/12/2023 |
New Standard

ANSI/E1.76-2023, Tension Wire Grids (new standard) Final Action Date: 12/12/2023 |
New Standard

Revision

Revision

ITSDF (Industrial Truck Standards Development Foundation, Inc.)
1750 K Street NW, Suite 460, Washington, DC 20006 |
chris.merther@itsdf.org, www.indtrk.org

ANSI/ITSDF B56.11.4-2023, Hook-Type Forks and Fork Carriers for Powered Industrial Forklift Trucks (revision of ANSI/ITSDF B56.11.4-2013 (R2018)) Final Action Date: 12/12/2023 |
Revision

NEMA (ASC Z535) (National Electrical Manufacturers Association)
1300 17th St N #900., Arlington, VA 22209 |
Paul.Crampton@nema.org, www.nema.org

ANSI Z535.2 2023, Standard for Environmental and Facility Safety Signs (revision of ANSI Z535.2-2011 (R2017)) Final Action Date: 12/14/2023 |
Revision

ANSI Z535.4 2023-2023, Product Safety Signs and Labels (revision of ANSI Z535.4-2011 (R2017)) Final Action Date: 12/14/2023 |
Revision

ANSI Z535.6 2023-2023, Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials (revision of ANSI Z535.6-2011 (R2017)) Final Action Date: 12/14/2023 |
Revision

TVC (ASC Z80) (The Vision Council)
225 Reinekers Lane, Suite 700, Alexandria, VA 22314 |
ascz80@thevisioncouncil.org, www.z80asc.com

ANSI Z80.3-2018 (R2023), Ophthalmics - Nonprescription Sunglass And Fashion Eyewear Requirements (reaffirmation of ANSI Z80.3-2018) Final Action Date: 12/14/2023 |
Reaffirmation

ANSI Z80.7-2013 (R2023), Ophthalmic Optics - Intraocular Lenses (reaffirmation of ANSI Z80.7-2013 (R2018)) Final Action Date: 12/14/2023 |
Reaffirmation

ANSI Z80.10-2018 (R2023), Ophthalmics - Ophthalmic Instruments - Tonometers (reaffirmation of ANSI Z80.10-2018) Final Action Date: 12/14/2023 |
Reaffirmation

ANSI Z80.30-2018 (R2023), Ophthalmics - Toric Intraocular Lenses (reaffirmation of ANSI Z80.30-2018) Final Action Date: 12/14/2023 |
Reaffirmation

ULSE (UL Standards & Engagement)
47173 Benicia Street, Fremont, CA 94538 |
Marcia.M.Kawate@ul.org, https://ulse.org/

ANSI/UL 25-2023a, Standard for Safety for Meters for Flammable and Combustible Liquids and LP-Gas (revision of ANSI/UL 25-2023) Final Action Date: 12/12/2023 |
Revision

ANSI/UL 104-2023, Standard for Safety for Elevator Door Locking Devices and Door or Gate Closed Detection Means (revision of ANSI/UL 104-2016 (R2020)) Final Action Date: 11/30/2023 |
Revision
ANSI/UL 2351-2023, Standard for Spray Nozzles for Fire-Protection Service (revision of ANSI/UL 2351-2014 (R2018))
Final Action Date: 12/13/2023 | 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.

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ANSI Accredited Standards Developer

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

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

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

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

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

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

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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**

**AGSC - Auto Glass Safety Council**

ANSI/AGSC/AGRSS 005-2022, Auto Glass Safety Council/Automotive Glass Replacement Safety Standard
Interest Categories: Request additional participation from Auto Glass Manufacturers, Insurance (companies that insure or provide services to companies that insure automobiles)

Interest Categories: Request additional participation from Auto Glass Manufacturer, Insurance Company/Claims Administrator

For inquiries please contact: Kathy Bimber, Auto Glass Safety Council (AGSC) | PO Box 569, Garrisonville, VA 22463 | (540) 720-7484, kbimber@glass.com - [www.agsc.org](http://www.agsc.org) - [www.nwrassn.org](http://www.nwrassn.org)

**AAMI (Association for the Advancement of Medical Instrumentation)**

901 N. Glebe Road, Arlington, VA 22203 | mmiskell@aami.org, www.aami.org

BSR/AAMI/ISO 17665-202x, Sterilization of health care products - Moist heat - Requirements for the development, validation and routine control of a sterilization process for medical devices (identical national adoption of ISO 17665:202X, Ed. 2)

**AAMI (Association for the Advancement of Medical Instrumentation)**

901 N. Glebe Road, Arlington, VA 22203 | mmiskell@aami.org, www.aami.org


**ACP (American Clean Power Association)**

1501 M Street NW, Suite 1000, Washington, DC 22205 | dbrown@cleanpower.org, www.cleanpower.org

BSR/ACP 111-2-202x, Photovoltaic Solar and/or Battery Energy Storage System Sound Modeling Standard (new standard)

**API (American Petroleum Institute)**

200 Massachusetts Avenue NW, Washington, DC 20001 | burklek@api.org, www.api.org

BSR/API Recommended Practice 100-3-202x, Community Engagement Guidelines (revision of ANSI/API Bulletin 100-3-2014)

Interest Categories: We are specifically seeking participants from local/state/federal/tribal governments involved with regulations related to onshore drilling operations or that have jurisdiction over onshore drilling operations with the objective of achieving balance on the consensus body for this activity. In addition, we are looking for general interest members of a tribe or the public that reside in an area that has onshore drilling operations.

**FM (FM Approvals)**

One Technology Way, Norwood, MA 02062 | josephine.mahnken@fmapprovals.com, www.fmapprovals.com

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | arose@nsf.org, www.nsf.org
BSR/NSF 49-202x (i193r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105 | mmilla@nsf.org, www.nsf.org
BSR/NSF 55-202x (i66r1), Ultraviolet Microbiological Water Treatment Systems (revision of ANSI/NSF 55-2022)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | rbrooker@nsf.org, www.nsf.org
BSR/NSF 173-202x (i110r1), Dietary Supplements (revision of ANSI/NSF 173-2022)
American National Standards (ANS) Announcements

Corrections

NEMA (ASC C29) - National Electrical Manufacturers Association
Insulators for Electric Power Lines
ANSI/NEMA C29.7-2015 (R2023)

Please note that ANSI/NEMA C29.7-2015 (R2023) is and remains an approved American National Standard as a reaffirmation. Prior publication listed this approval as a revision. For questions, please contact NEMA (Paul.Crampton@nema.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 links is www.ansi.org/asd and here are some direct links as well as highlights of information that is available:

Where to find Procedures, Guidance, Interpretations and More...

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

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

ANSI Accredited Standards Developer

A3 - Association for Advancing Automation
February - March 2024

ANSI-Accredited Standards Committee: R15.06, Industrial Robot Safety
Meeting Series: R15.06 Drafting Subcommittee – First quarter 2024 meetings
Meeting Format & Location: Remote via Teams or Hybrid (as specified below)
Meeting Sponsor/Host: A3, the Association for Advancing Automation (remote meetings) and Universal Robots (hybrid meeting)
Purpose: Updating R15.06 to reflect changes to ISO 10218-1 and 10218-2 (for which R15.06 is a national adoption) and to include an additional third part addressing user responsibilities.

Day/Date/Time:
Monday, February 12, 2024; 1:00 PM – 4:00 PM (Eastern Time) – Remote meeting via Teams
Wednesday, February 14, 2024; 1:00 PM – 4:00 PM (Eastern Time) – Remote meeting via Teams
Monday, March 18, 2024; 8:30 AM through Tuesday, March 19, 2024; 11:30 AM (Eastern Time) – Hybrid meeting, with face-to-face participants meeting at Teradyne, Inc. in North Reading, Massachusetts

For More Information: Contact Maren Roush, mroush@automate.org

ANSI Accredited Standards Developer

AGSC - Auto Glass Safety Council
January 2024

Committee Meeting:
AGSC/NWRD ROLAGS 2 (Repair of Laminated Automotive Glass Standard 2) Standards Committee
Tuesday, January 23, 2024 1:00 – 3:00 p.m.
Rosen Plaza Hotel, Orlando, Florida

Committee Meeting
AGSC AGRSS (Auto Glass Replacement Safety Standard) Standards Committee
Wednesday, January 24, 2024 10:00 a.m. – 1:00 p.m.
Rosen Plaza Hotel, Orlando, Florida

For inquiries please contact: Kathy Bimber, Auto Glass Safety Council (AGSC) | PO Box 569, Garrisonville, VA 22463 | (540) 720-7484, kbimber@glass.com
Meeting Notices (Standards Developers)

ANSI Accredited Standards Developer

B11 - B11 Standards, Inc.
Meeting Time: January 2024

B11 Standards Development Committee
The ANSI B11 Standards Development Committee, administered by the Secretariat (B11 Standards, Inc.), will hold its semi-annual meeting on 16-17 January 2024 at Amazon in Nashville, TN.

The B11 SDC is an ANSI-accredited standards committee on the broad topic of machinery safety, and the purpose of this meeting is to discuss ongoing issues and the business of the B11 SDC. This meeting is open to anyone with an interest in safety and the safe use of machines, however, any voting will be restricted to full members of this Committee. If you have an interest in participating in this meeting as an observer or would like more information, please contact David Felinski at (dfelinski@b11standards.org).

B11.26
The B11.26 Subcommittee (Functional Safety for Equipment / Machine Control Systems) will hold its third revision meeting on 18-19 January 2024 at Amazon in Nashville, TN.

If you have an interest in participating in this meeting as an observer or would like more information, please contact David Felinski at (dfelinski@b11standards.org).
The ANSI Essential Requirements: Due Process Requirements for American National Standards provides two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.7.1) and continuous maintenance (see clause 4.7.2). Continuous maintenance is defined as follows:

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements. The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option.

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

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at www.ansi.org/asd, select “American National Standards Maintained Under Continuous Maintenance.” Questions? psa@ansi.org.
# ANSI-Accredited Standards Developers (ASD) Contacts

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

<table>
<thead>
<tr>
<th>ANSI-Accredited Standards Developers</th>
<th>Address Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AAMI</strong></td>
<td>Association for the Advancement of Medical Instrumentation 901 N. Glebe Road Arlington, VA 22203 <a href="http://www.aami.org">www.aami.org</a> Mike Miskell <a href="mailto:mmiskell@aami.org">mmiskell@aami.org</a></td>
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<tr>
<td><strong>ACP</strong></td>
<td>American Clean Power Association 1501 M Street NW, Suite 1000 Washington, DC 22205 <a href="http://www.cleanpower.org">www.cleanpower.org</a> Duane Brown <a href="mailto:dbrown@cleanpower.org">dbrown@cleanpower.org</a></td>
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<tr>
<td><strong>ADA (Organization)</strong></td>
<td>American Dental Association 211 East Chicago Avenue Chicago, IL 60611 <a href="http://www.ada.org">www.ada.org</a> Paul Bralower <a href="mailto:bralowerp@ada.org">bralowerp@ada.org</a></td>
</tr>
<tr>
<td><strong>AHAM</strong></td>
<td>Association of Home Appliance Manufacturers 1111 19th Street NW, Suite 1150 Washington, DC 20036 <a href="http://www.aham.org">www.aham.org</a> John Park <a href="mailto:jpark@aham.org">jpark@aham.org</a></td>
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<tr>
<td><strong>AHRI</strong></td>
<td>Air-Conditioning, Heating, and Refrigeration Institute 2311 Wilson Boulevard, Suite 400 Arlington, VA 22201 <a href="http://www.ahrinet.org">www.ahrinet.org</a> Karl Best <a href="mailto:kbest@ahrinet.org">kbest@ahrinet.org</a></td>
</tr>
<tr>
<td><strong>ASI</strong></td>
<td>American Iron and Steel Institute 25 Massachusetts Avenue, NW, Suite 800 Washington, DC 20001 <a href="http://www.steel.org">www.steel.org</a> Jay Larson <a href="mailto:jlarson@steel.org">jlarson@steel.org</a></td>
</tr>
<tr>
<td><strong>API</strong></td>
<td>American Petroleum Institute 200 Massachusetts Avenue NW Washington, DC 20001 <a href="http://www.api.org">www.api.org</a> Katie Burkle <a href="mailto:burklek@api.org">burklek@api.org</a></td>
</tr>
<tr>
<td><strong>ASA (ASC S12)</strong></td>
<td>Acoustical Society of America 1305 Walt Whitman Road, Suite 300 Melville, NY 11747 <a href="http://www.acousticalsociety.org">www.acousticalsociety.org</a> Raegan Ripley <a href="mailto:standards@acousticalsociety.org">standards@acousticalsociety.org</a></td>
</tr>
<tr>
<td><strong>ASA (ASC S3)</strong></td>
<td>Acoustical Society of America 1305 Walt Whitman Road, Suite 300 Melville, NY 11747 <a href="http://www.acousticalsociety.org">www.acousticalsociety.org</a> Raegan Ripley <a href="mailto:standards@acousticalsociety.org">standards@acousticalsociety.org</a></td>
</tr>
<tr>
<td><strong>ASABE</strong></td>
<td>American Society of Agricultural and Biological Engineers 2950 Niles Road Saint Joseph, MI 49085 <a href="https://www.asabe.org/">https://www.asabe.org/</a> Jean Walsh <a href="mailto:walsh@asabe.org">walsh@asabe.org</a></td>
</tr>
<tr>
<td><strong>ASHRAE</strong></td>
<td>American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 180 Technology Parkway Peachtree Corners, GA 30092 <a href="http://www.ashrae.org">www.ashrae.org</a> Carmen King <a href="mailto:cking@ashrae.org">cking@ashrae.org</a></td>
</tr>
<tr>
<td><strong>ASTM</strong></td>
<td>ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428 <a href="http://www.astm.org">www.astm.org</a> Laura Klineburger <a href="mailto:accreditation@astm.org">accreditation@astm.org</a></td>
</tr>
<tr>
<td><strong>AWWA</strong></td>
<td>American Water Works Association 6666 W. Quincy Avenue Denver, CO 80235 <a href="http://www.awwa.org">www.awwa.org</a> Paul Olson <a href="mailto:polson@awwa.org">polson@awwa.org</a></td>
</tr>
<tr>
<td><strong>CSA</strong></td>
<td>CSA America Standards Inc. 8501 East Pleasant Valley Road Cleveland, OH 44131 <a href="http://www.csagroup.org">www.csagroup.org</a> Debbie Chesnik <a href="mailto:ansi.contact@csagroup.org">ansi.contact@csagroup.org</a></td>
</tr>
<tr>
<td><strong>EOS/ESD</strong></td>
<td>ESD Association, Inc. 218 W. Court Street Rome, NY 13440 <a href="https://www.esda.org">https://www.esda.org</a> Jennifer Kirk <a href="mailto:jkirk@esda.org">jkirk@esda.org</a></td>
</tr>
<tr>
<td><strong>ESTA</strong></td>
<td>Entertainment Services and Technology Association 271 Cadman Plaza, P.O. Box 23200 Brooklyn, NY 11202 <a href="http://www.esta.org">www.esta.org</a> Karl Ruling <a href="mailto:standards@esta.org">standards@esta.org</a> Richard Nix <a href="mailto:standards@esta.org">standards@esta.org</a></td>
</tr>
<tr>
<td><strong>FM</strong></td>
<td>FM Approvals One Technology Way Norwood, MA 02062 <a href="http://www.fmapprovals.com">www.fmapprovals.com</a> Josephine Mahnken <a href="mailto:josephine.mahnken@fmapprovals.com">josephine.mahnken@fmapprovals.com</a></td>
</tr>
<tr>
<td><strong>IAPMO (ASSE Chapter)</strong></td>
<td>ASSE International Chapter of IAPMO 18927 Hickory Creek Drive, Suite 220 Mokena, IL 60448 <a href="http://www.asse-plumbing.org">www.asse-plumbing.org</a> Terry Burger <a href="mailto:terry.burger@asse-plumbing.org">terry.burger@asse-plumbing.org</a></td>
</tr>
</tbody>
</table>
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Industrial Truck Standards Development Foundation, Inc.
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www.nema.org
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National Electrical Manufacturers Association
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www.z80asc.com
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Marcia Kawate
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ISO & IEC Draft International Standards

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

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

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

ISO Standards

Agricultural food products (TC 34)
ISO/DIS 16677-1, Biobanking - Germplasm - Part 1: Agricultural animal species - 3/7/2024, $58.00

Cleaning equipment for air and other gases (TC 142)
ISO/DIS 29461-4, Air intake filter systems for rotary machinery - Part 4: Test methods for static filter systems in coastal and offshore environments - 3/2/2024, $82.00

Concrete, reinforced concrete and pre-stressed concrete (TC 71)
ISO/DIS 19044, Test methods for fibre-reinforced cementitious composites - Load-displacement curve using notched specimen - 3/1/2024, $53.00

Documents and data elements in administration, commerce and industry (TC 154)

Implants for surgery (TC 150)
ISO 5840-1:2021/DAmd 1, - Amendment 1: Cardiovascular implants - Cardiac valve prostheses - Part 1: General requirements - Amendment 1 - 3/2/2024, $40.00

ISO 5840-2:2021/DAmd 1, - Amendment 1: Cardiovascular implants - Cardiac valve prostheses - Part 2: Surgically implanted heart valve substitutes - Amendment 1 - 3/2/2024, $29.00

Industrial automation systems and integration (TC 184)
ISO/DIS 15926-6, Industrial automation systems and integration - Integration of life-cycle data for process plants including oil and gas production facilities - Part 6: Rules for the development and validation of reference data of ISO/TS 15926-4 - 3/3/2024, $102.00

Light metals and their alloys (TC 79)
ISO/DIS 2135, Anodizing of aluminium and its alloys - Accelerated test of light fastness of coloured anodic oxidation coatings using artificial light - 3/2/2024, $46.00

ISO/DIS 10216, Anodizing of aluminium and its alloys - Instrumental determination of image clarity of anodic oxidation coatings - Instrumental method - 3/2/2024, $53.00

ISO/DIS 6362-6, Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 6: Tolerances on form and dimensions for round, square, rectangular and hexagonal tubes - 3/2/2024, $71.00

Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)
ISO/DIS 6338-2, Calculations of greenhouse gas (GHG) emissions throughout the liquefied natural gas (LNG) chain - Part 2: Natural gas production and transport to LNG plant - 3/7/2024, $58.00

Packaging (TC 122)
ISO/DIS 7683, Design guidelines and test methods for removable shrink labels applied to PET bottles - 3/7/2024, $46.00

Petroleum products and lubricants (TC 28)
ISO/DIS 3170, Hydrocarbon Liquids - Manual Sampling - 3/2/2024, $134.00
Photography (TC 42)
ISO/DIS 12233, Digital Cameras - Resolution and spatial frequency responses - 3/4/2024, $146.00

Plastics (TC 61)
ISO/DIS 16636, Plastics - Disintegration field test of plastics under water environmental conditions - 3/7/2024, $67.00
ISO/DIS 3451-5, Plastics - Determination of ash - Part 5: Poly(vinyl chloride) - 2/29/2024, $53.00
ISO/DIS 11357-6, Plastics - Differential scanning calorimetry (DSC) - Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) - 3/2/2024, $58.00

Plastics pipes, fittings and valves for the transport of fluids (TC 138)
ISO/DIS 18553, Method for the assessment of the degree of pigment or carbon black dispersion in polyolefin pipes, fittings and compounds - 3/7/2024, $82.00

Solid Recovered Fuels (TC 300)
ISO/DIS 3884, Solid recovered fuels - Methods for the determination of the content of elements (Al, Ca, Fe, K, Mg, Na, P, S, Si, Ti, As, Ba, Be, Cd, Co, Cr, Cu, Hg, Mo, Mn, Ni, Pb, Sb, Se, Sn, Ti, V, Zn) - 3/7/2024, $146.00

Thermal insulation (TC 163)
ISO/DIS 15099, Thermal performance of windows, doors and shading devices - Detailed calculations - 3/2/2024, $146.00
ISO/DIS 16685, Thermal insulating products for industrial installations - Mechanical properties testing at sub-ambient temperatures - 3/1/2024, $40.00

Tourism and related services (TC 228)
ISO/DIS 25639-1, Exhibitions, shows, fairs and conventions - Part 1: Vocabulary - 3/7/2024, $67.00

Tractors and machinery for agriculture and forestry (TC 23)
ISO/DIS 5700, Tractors for agriculture and forestry - Roll-over protective structures - Static test method and acceptance conditions - 3/4/2024, $112.00

ISO/IEC JTC 1, Information Technology
ISO/IEC DIS 19762, Information technology - Automatic identification and data capture (AIDC) techniques - Harmonized vocabulary - 3/3/2024, $175.00

IEC Standards

Alarm systems (TC 79)
79/701/CD, IEC 62676-4 ED2: Video surveillance systems for use in security applications - Part 4: Application guidelines, 03/08/2024

Audio, video and multimedia systems and equipment (TC 100)
100/4091/DTS, IEC TS 63499 ED1: Encoding guidelines for interoperable master format - application #6, 02/09/2024

Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)
46/966(F)/FDIS, IEC 60966-2-1 ED4: Radio frequency and coaxial cable assemblies - Part 2-1: Sectional specification for flexible coaxial cable assemblies, 12/29/2023
46/967(F)/FDIS, IEC 60966-2-2 ED3: Radio frequency and coaxial cable assemblies - Part 2-2: Blank detail specification for flexible coaxial cable assemblies, 12/29/2023
46F/657(F)/FDIS, IEC 61169-70 Ed 1.0: Radio-frequency connectors - Part 70: Sectional specification for series HD-BNC radio-frequency coaxial connectors - Characteristic Impedance 75, 01/05/2024
46A/1661/FDIS, IEC 61196-1-127 ED1: Coaxial communication cables - Part 1-127: Electrical test methods - Link loss of radiating cable, 01/26/2024
46C/1284/CD, IEC 62783-2 ED2: Twinax cables for digital communications - Part 2: Family specification - Cable for Ethernet-over-twinax physical interfaces, 03/08/2024
46C/1286/CD, IEC 62807-2 ED1: Hybrid telecommunication cables - Part 2: Indoor hybrid cables - Sectional specification, 03/08/2024

Capacitors and resistors for electronic equipment (TC 40)
40/3102(F)/FDIS, IEC 60939-3 ED2: Passive filter units for electromagnetic interference suppression - Part 3: Passive filter units for which safety tests are appropriate, 12/29/2023

Electric traction equipment (TC 9)
9/3041/FDIS, IEC 62973-3 ED1: Railway applications - Rolling stock - Batteries for auxiliary power supply systems - Part 3: Lead acid batteries, 01/26/2024

Electrical accessories (TC 23)
23B/1486(F)/FDIS, IEC 60669-2-2 ED4: Switches for household and similar fixed electrical installations - Part 2-2: Particular requirements - Electromagnetic remote-control switches (RCS), 01/12/2024
Electromechanical components and mechanical structures for electronic equipments (TC 48)

48B/3080(F)/FDIS, IEC 60352-9 ED1: Solderless connections - Part 9: Ultrasonically welded connections - General requirements, test methods and practical guidance, 01/05/2024

48B/3074/CDV, IEC 61076-8-111 ED1: Connectors for electrical and electronic equipment - Product requirements Part 8-111: Power connectors - Detail specification for 3-pole snap locking waterproof rectangular connectors with plastic housing for rated current of 20A, 03/08/2024

48B/3073/CDV, IEC 61076-8-112 ED1: Connectors for electrical and electronic equipment - Product requirements Part 8-112: Power connectors - Detail specification for 2-pole snap locking waterproof rectangular connectors with plastic housing for rated current of 50A, 03/08/2024

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

13/1916/FDIS, IEC 62057-3 ED1: Electrical energy meters - Test equipment, techniques and procedures - Part 3: Automatic meter testing system (AMTS), 01/26/2024

Fibre optics (TC 86)

86A/2407/CD, IEC 60794-1-130 ED1: Optical fibre cables - Part 1-130: Generic specification - Basic optical cable test procedures - Mechanical tests methods - Coefficient of dynamic friction between cables, Methods E30, 03/08/2024

86C/1905/CD, IEC TR 62150-7 ED1: Fibre optic active components and devices - Test and measurement procedures - Part 7: Calculation methodology of laser safety class for optical transceivers and transmitters, 03/08/2024

Flat Panel Display Devices (TC 110)

110/1596/CD, IEC TR 63145-40-20 ED1: EYEWEAR DISPLAY - Part 40-20: 3D sensing, 02/09/2024

110/1598/NP, PNW 110-1598 ED1: EYEWEAR DISPLAY - Part 30: Durability test methods, 02/09/2024

Industrial electroheating equipment (TC 27)

27/1181/FDIS, IEC 60676 ED4: Industrial electroheating equipment - Test methods for direct arc furnaces, 01/26/2024

Electrical equipment in medical practice (TC 62)

62/495/CD, IEC 60050-880 ED1: International Electrotechnical Vocabulary (IEV) - Part 880: Electrical equipment, electrical systems and software used in healthcare, 03/08/2024

62A/1539/NP, PNW 62A-1539 ED1: Packaging for non-sterile medical devices - Requirements for packaging systems, 03/08/2024

Electroacoustics (TC 29)


Industrial-process measurement and control (TC 65)
65C/1284(F)/FDIS, IEC 61784-3/AMD1 ED4: Amendment 1 - Industrial communication networks - Profiles - Part 3: Functional safety fieldbuses - General rules and profile definitions, 01/05/2024

Lamps and related equipment (TC 34)
34A/2382/CD, IEC 62554/AMD2 ED1: Amendment 2 - Sample preparation for measurement of mercury level in fluorescent lamps and low-pressure mercury UV radiation sources, 03/08/2024

Lightning protection (TC 81)
81/757/CD, IEC 62561-8 ED1: Lightning protection system components (LPSC) - Part 8: Requirements for components for isolated LPS, 03/08/2024

Marine energy - Wave, tidal and other water current converters (TC 114)
114/510/DTS, IEC TS 62600-103 ED2: Marine energy - Wave, tidal and other water current converters - Part 103: Guidelines for the early stage development of wave energy converters - Best practices and recommended procedures for the testing of pre-prototype devices, 02/09/2024

Maritime navigation and radiocommunication equipment and systems (TC 80)
80/1104/FDIS, IEC 61108-7 ED1: Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 7: Satellite based augmentation system (SBAS) L1 - Receiver equipment - Performance standards, methods of testing and required test results, 01/26/2024

Nuclear instrumentation (TC 45)
45/965/CD, IEC 63507 ED1: 200 MeV to 400 MeV superconducting proton cyclotron - General requirements and test methods, 03/08/2024

Performance of household electrical appliances (TC 59)
59K/381(F)/CDV, IEC 60705 ED5: Household microwave ovens - Methods for measuring performance, 02/16/2024

Piezoelectric and dielectric devices for frequency control and selection (TC 49)
49/1451/CD, IEC 60122-2 ED3: Quartz crystal units of assessed quality - Part 2: Guidelines for the use, 03/08/2024

Power system control and associated communications (TC 57)
57/2637/NP, PNW PAS 57-2637 ED1: Power system IED communication and associated data models for interoperability - Role Based Access Control (RBAC) with IEC 61850, 03/08/2024

Rotating machinery (TC 2)
2/2174/CD, IEC 60034-15 ED4: Rotating electrical machines - Part 15: Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines, 03/08/2024

Safety of household and similar electrical appliances (TC 61)
61D/518/NP, PNW 61D-518 ED1: Household and similar electrical appliances - Safety - Part 2-XXX: Particular requirements for parking air-conditioner, 03/08/2024

Semiconductor devices (TC 47)
47F/457/NP, PNW 47F-457 ED1: Semiconductor Devices - Microsystems - Part 52: Biaxial tensile testing method for stretchable MEMS, 03/08/2024

Solar thermal electric plants (TC 117)
117/194/NP, PNW 117-194 ED1: Solar thermal electric plants - Part 3-7: Criteria for design, installation and performance verification of flexible pipe connectors in parabolic trough collector technology, 03/08/2024

Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)
121A/586A/CD, IEC 60947-1 ED7: Low-voltage switchgear and controlgear - Part 1: General rules, 03/01/2024

ISO/IEC JTC 1, Information Technology

(JTC1)
JTC1-SC41/394/NP, PNW JTC1-SC41-394 ED1: Internet of Things (IoT) - Edge computing gateway interoperability framework, 03/08/2024

JTC1-SC41/395/NP, PNW JTC1-SC41-395 ED1: Internet of Things (IoT) - Multi-modal underwater wireless communication technologies - Part 1: Overview and requirements, 03/08/2024

JTC1-SC41/397/NP, PNW JTC1-SC41-397 ED1: Internet of things - Interoperability for IoT systems - Part 5: Behavioural and policy interoperability, 03/08/2024
Newly Published ISO & IEC Standards

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

ISO Standards

**Acoustics (TC 43)**

ISO 15665:2023, Acoustics - Acoustic insulation for pipes, valves and flanges, $210.00

**Air quality (TC 146)**

ISO 16000-44:2023, Indoor air - Part 44: Test method for measuring perceived indoor air quality for use in testing the performance of gas phase air cleaners, $116.00

**Aircraft and space vehicles (TC 20)**

ISO 14300-1:2023, Space systems - Programme management - Part 1: Structuring of a project, $183.00

**Building construction machinery and equipment (TC 195)**

ISO 24147:2023, Road operation machinery and associated equipment - Sweepers - Commercial specifications, $157.00

**Cork (TC 87)**

ISO 20752:2023, Cork stoppers - Determination of releasable 2,4,6-trichloroanisol (TCA), $51.00

**Corrosion of metals and alloys (TC 156)**

ISO 19735:2023, Corrosion of metals and alloys - Corrosivity of atmospheres - Mapping areas of increased risk of corrosion, $77.00

**Dimensional and Geometrical Product Specifications and Verification (TC 213)**

ISO 4351:2023, Geometrical product specifications (GPS) - Association, $116.00

**Geographic information/Geomatics (TC 211)**

ISO 19144-2:2023, Geographic information - Classification systems - Part 2: Land Cover Meta Language (LCML), $263.00

**Industrial furnaces and associated processing equipment (TC 244)**

ISO 13577-2:2023, Industrial furnaces and associated processing equipment - Safety - Part 2: Combustion and fuel handling systems, $263.00

**Mechanical testing of metals (TC 164)**

ISO 6508-1:2023, Metallic materials - Rockwell hardness test - Part 1: Test method, $183.00


**Medical devices for injections (TC 84)**

ISO 10555-7:2023, Intravascular catheters - Sterile and single-use catheters - Part 7: Peripherally inserted central catheters, $51.00

**Natural gas (TC 193)**

ISO 2612:2023, Analysis of natural gas - Biomethane - Determination of ammonia content by tuneable diode laser absorption spectroscopy, $77.00

**Paper, board and pulps (TC 6)**

ISO 9795:2023, Lignins - Determination of inorganics content in kraft lignin, soda lignin and hydrolysis lignin, $77.00

**Plastics (TC 61)**

ISO 14900:2023, Plastics - Polyols for use in the production of polyurethanes - Determination of hydroxyl number, $77.00

**Robots and robotic devices (TC 299)**

IEC 80601-2-77:2019/Amd 1:2023, $22.00

**Ships and marine technology (TC 8)**

ISO 24060-2:2023, Ships and marine technology - Ship software logging system for operational technology - Part 2: Electronic service reports, $51.00

**Terminology (principles and coordination) (TC 37)**

ISO 20539:2023, Translation, interpreting and related technology - Vocabulary, $116.00

**Timber structures (TC 165)**

ISO 5257:2023, Bamboo structures - Engineered bamboo products - Test methods for determination of mechanical properties using small size specimens, $116.00

**Tractors and machinery for agriculture and forestry (TC 23)**

ISO 6881:2023, Radio-frequency identification of animals - Code structure ultra high frequency transponders, $116.00
ISO Technical Reports

Road vehicles (TC 22)

ISO/TR 17326:2023, Fuel cell road vehicles - Cold start performances under sub-zero temperature - Vehicles fuelled with compressed hydrogen, $77.00

ISO Technical Specifications

Health Informatics (TC 215)

ISO/TS 8376:2023, Genomics informatics - Requirements for interoperable systems for genomic surveillance, $116.00

Healthcare organization management (TC 304)


ISO/IEC JTC 1, Information Technology

ISO/IEC 18974:2023, Information technology - OpenChain security assurance specification, $77.00
ISO/IEC 42001:2023, Information technology - Artificial intelligence - Management system, $237.00
ISO/IEC 18041-5:2023, Computer graphics, image processing and environmental data representation - Environmental Data Coding Specification (EDCS) language bindings - Part 5: C++, $237.00
ISO/IEC 23090-20:2023, Information technology - Coded representation of immersive media - Part 20: Conformance testing for visual volumetric video-based coding (V3C) with video-based point cloud compression (V-PCC), $183.00
ISO/IEC TS 22237-31:2023, Information technology - Data centre facilities and infrastructures - Part 31: Key performance indicators for resilience, $210.00

IEC Standards

Capacitors and resistors for electronic equipment (TC 40)

IEC 60115-4-10 Ed. 1.0 b:2023, Fixed resistors for use in electronic equipment - Part 4-10: Blank detail specification: Power resistors with axial leads for through-hole assembly on circuit boards (THT), for general electronic equipment, classification level G, $329.00

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

IEC 62321-11 Ed. 1.0 b:2023, Determination of certain substances in electrotechnical products - Part 11: Tris(2-chloroethyl) phosphate (TCEP) in plastics by gas chromatography-mass spectrometry (GC-MS) and liquid chromatography-mass spectrometry (LC-MS), $278.00

Fibre optics (TC 86)

IEC 62343-1 Amd.1 Ed. 2.0 b:2023, Amendment 1 - Dynamic modules - Part 1: Performance standards - General conditions, $13.00
IEC 62343-1 Ed. 2.1 b:2023, Dynamic modules - Part 1: Performance standards - General conditions, $82.00
IEC 62343-2-1 Amd.1 Ed. 1.0 b:2023, Amendment 1 - Dynamic modules - Part 2-1: Reliability qualification - Test template, $13.00
IEC 62343-2-1 Ed. 1.1 b:2023, Dynamic modules - Part 2-1: Reliability qualification - Test template, $139.00

Industrial-process measurement and control (TC 65)

IEC 63278-1 Ed. 1.0 b:2023, Asset Administration Shell for industrial applications - Part 1: Asset Administration Shell structure, $417.00
IEC 62443-2-4 Ed. 2.0 b:2023, Security for industrial automation and control systems - Part 2-4: Security program requirements for IACS service providers, $455.00

Insulators (TC 36)

IEC 60437 Ed. 3.0 b:2023, Radio interference test on high-voltage insulators, $95.00
IEC 60437 Ed. 3.0 en:2023 CMV, Radio interference test on high-voltage insulators, $162.00

Measuring equipment for electromagnetic quantities (TC 85)

IEC 61557-9 Ed. 4.0 b:2023, Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 9: Equipment for insulation fault location in IT systems, $278.00
IEC 61557-9 Ed. 4.0 en:2023 CMV, Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 9: Equipment for insulation fault location in IT systems, $474.00

Other

IEC SRD 63320-1 Ed. 1.0 en:2023, Smart city use case collection and analysis - Smart urban planning for smart cities - Part 1: High-level analysis, $417.00
## Performance of household electrical appliances (TC 59)

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<tr>
<td>IEC 60740-2-2 Ed. 3.0 b:2023</td>
<td>Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-2: Particular requirements for fan heaters</td>
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<td>S+ IEC 60740-2-2 Ed. 3.0 en:2023 (Redline version)</td>
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## Power capacitors (TC 33)

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<td>IEC 60143-4 Ed. 2.0 b:2023</td>
<td>Series capacitors for power systems - Part 4: Thyristor controlled series capacitors</td>
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## Safety of household and similar electrical appliances (TC 61)

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<td>IEC 60335-2-51 Ed. 5.0 b:2023</td>
<td>Household and similar electrical appliances - Safety - Part 2-51: Particular requirements for stationary circulation pumps for heating and service water installations</td>
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IEC 60335-2-103 Ed. 4.0 b:2023, Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows, $417.00

IEC 60335-2-103 Ed. 4.0 en:2023 CMV, Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows, $710.00

IEC 60335-2-103 Ed. 4.0 en:2023 EXV, Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows, $835.00

IEC 60335-2-103-EXV-CMV Ed. 4.0 en:2023 CMV, Household and similar electrical appliances - Safety - Part 2-103: Particular requirements for drives for gates, doors and windows, $1389.00

**IEC Technical Reports**

*Standard voltages, current ratings and frequencies (TC 8)*

IEC/TR 63401-3 Ed. 1.0 en:2023, Dynamic characteristics of inverter-based resources in bulk power systems - Part 3: Fast frequency response and frequency ride-through from inverter-based resources during severe frequency disturbances, $417.00

**IEC Technical Specifications**

*High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV (TC 115)*

IEC/TS 63471 Ed. 1.0 en:2023, DC voltages for HVDC grids, $25.00
Call for International (ISO) Secretariat

ISO/TC 6 – Paper, board and pulps

Reply Deadline: January 31, 2024

ANSI has been informed by the ISO Technical Management Board (ISO/TMB) that Canada (SCC), the ISO delegated Secretariat of ISO/TC 6 – Paper, board and pulps, wishes to relinquish the role of the Secretariat.

ISO/TC 6 operates under the following scope:

*Standardization in the field of paper, board pulps cellulosic nanomaterials, and lignins, including terminology, sampling procedures, test methods, product and quality specifications, and the establishment and maintenance of appropriate calibration systems. This includes all types of paper, pulps and board as well as products thereof containing any portion of recycled material or material intended for recycling. Excluded: Matters falling within the scopes of particular technical committees (e.g. ISO / TC 42, 46, 122, 130, 154) with which liaison should be maintained.*

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 6. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

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

Information concerning the United States acquiring the role of international Secretariat may be obtained by contacting ANSI’s ISO Team ([isot@ansi.org](mailto:isot@ansi.org)).
Call for Members (USNC)

USNC Participants and USNC TAG Administrator Needed

IEC SyC Bio-digital convergence (BDC)

Comment Deadline: January 19, 2024

Individuals who are interested in becoming a USNC Technical Advisory Group (TAG) participant or the USNC TAG Administrator for the USNC TAG to SyC BDC are invited to contact Betty Barro at bbarro@ansi.org by Friday, 19 January 2024.

Please see the scope for SyC BDC below:

Scope

Systems level standardization activities in the domain of bio-digital convergence for the IEC, including ISO/IEC JTC 1.

- Facilitate outreach and influence the work on bio-digital convergence with ISO, other SDOs, and industry consortia, in collaboration with relevant IEC entities and thus facilitate the advancement and coordination of bio-digital convergence standardization.

- Identify and assess potential new forthcoming bio-digital convergence topics and problematics that may become relevant to IEC activities and recommend to the SMB an appropriate course of action to meet the needs of the global community.
Registration of Organization Names in the United States

The Procedures for Registration of Organization Names in the United States of America (document ISSB 989) require that alphanumeric organization names be subject to a 90-day Public Review period prior to registration. For further information, please contact the Registration Coordinator at (212) 642-4975.

When organization names are submitted to ANSI for registration, they will be listed here alphanumerically. Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

Public Review

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

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

Call for Comment

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

Online Resources:
WTO’s ePing SPS&TBT platform: https://epingalert.org/
Register for ePing: https://epingalert.org/en/Account/Registration
WTO committee on Agriculture, Sanitary and Phytosanitary (SPS) measures:
https://www.wto.org/english/tratop_e/spse/spse_e.htm
WTO Committee on Technical Barriers to Trade (TBT): https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm
USA TBT Enquiry Point: https://www.nist.gov/standardsgov/usa-wto-tbt-enquiry-point
Comment guidance:
NIST: https://www.nist.gov/
Examples of TBTs: https://tcc.export.gov/report_a_barrier/trade_barrier_examples/index.asp
USDA FAS: https://www.fas.usda.gov/about-fas
FAS contribution to free trade agreements: https://www.fas.usda.gov/topics/trade-policy/trade-agreements
Tracking regulatory changes: https://www.fas.usda.gov/tracking-regulatory-changes-wto-members
USTR WAMA: https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/technical-barriers-trade
Contact the USA TBT Enquiry Point at (301) 975-2918; E usatbtep@nist.gov or notifyus@nist.gov.
2024 Standards Action Publishing | Volume No. 55

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The last three columns display the 30, 45 & 60-DAY PR (Public Review) END dates

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BSR/ASHRAE Addendum b to
ANSI/ASHRAE Standard 209-2018

First Public Review Draft


First Public Review Draft (December 2023)
(Draft shows Proposed Changes to Current Standard)

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ASHRAE, 180 Technology Parkway, Peachtree Corners, GA 30092
First Public Review Draft

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**Foreword**

This proposed addendum updates the title, purpose, and scope of Standard 209. The title was simplified, removing the low-rise residential building exception. It now more closely aligns with Standard 202 (Commissioning Process for Buildings and Systems) and 230P (Commissioning Process for Existing Buildings and Systems). We reviewed the use of the terms “energy modeling” and “energy simulation” in standards, manuals, and guides. Both terms are used but we felt that “energy modeling” was more commonly used and understood in the industry, as such it is now used in the standards scope. Performance has replaced energy in the title to reflect the many possible metrics that a design team may consider. In addition, the change reflects the aspirations of the standard committee to define the process for more building simulations.

[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.]

**Title:**


1. **Purpose**
   To establish Define minimum requirements for the process of using providing energy design assistance using building energy simulation to evaluate building performance and inform decision making and analysis.

2. **Scope**
   This standard applies to the use of building performance simulation, including energy modeling, during the design, construction and operation of new buildings or major renovations of, or additions to, existing buildings using energy simulation during the design process. This standard does not apply to single-family houses, multifamily structures of three stories or fewer above grade, manufactured houses (mobile homes), or modular homes.
BSR/ASHRAE Addendum d to
ANSI/ASHRAE Standard 209-2018

First Public Review Draft

Proposed Addendum d to Standard

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**Forward:** The addendum expands focus on expanding the applicability of Informative Appendix C and renames the appendix to “Modeling Input for Simple Box and Other Cycles”. The change reflects the use cases of the default assumptions presented into the appendix beyond simple box modeling. Additional changes have been made to clarify the language and standardize how each clause is introduced. The importance of using the assumption only if specific information is not known is now clear in the standard. To expand the usefulness of Appendix C further, Section 3, General Information Resources, has been added. The updates in this addendum to Appendix C will help with the adoption of Standard 209 by adding more resources for modelers looking to complete daily tasks.

**INFORMATIVE APPENDIX C**  
**MODELING INPUT FOR SIMPLE BOX MODELING AND OTHER CYCLES**

1. Create a simple box model of the project using an energy *simulation program*. Some programs use preprocessor or expert (“wizard”) systems *workflows* to help create these models. For the simple box models, the energy *simulation program* may use monthly design day hourly information (288 hour in lieu of 8760 hour simulation).

2. **Initial input parameters** Where design parameters or targets of the building are known, those should be used otherwise when creating the model. Design targets can be found in the OPR if available. Otherwise, the following should be used as the assumptions to set input parameters of the model.

2.12 **Building type** (e.g., assembly, healthcare, hotel/motel, light manufacturing, office, restaurant, retail, school, warehouse, laboratory, etc.). The building type infers information about building program area allocations and locations (core or perimeter space) as well as occupancy and internal load information by program area.

2.23 **Building form.** If the rough building form has not been otherwise prescribed, follow the parameters given in Table 13 of NREL/TP-5500-46861 “U.S. Department of Energy Commercial Reference Building Models of the National Building Stock.” Aspect ratio is defined as the overall length in the east-west direction divided by the overall length in the north-south direction. If the building type is not one given in Table 13, and no other information is known, use a rectangle with an aspect ratio of 1.62, floor-to-floor height 12.5 ft (3.81 m), flat roof, glazing fraction 30%. **Note:** The table found in NREL/TP-5500-46861 “U.S. Department of Energy Commercial Reference Building Models of the National Building Stock” is equivalent to the PNNL/DOE prototype buildings.

2.24 **Site location by weather file location.** See Appendix A Section 5.6 for types and sources of weather files.
2.45 **Total conditioned square footage.** The accuracy of this parameter should be order of magnitude for simple box models.

2.56 **Number of floors, if known.** If not known, use the number of floors given in Table 13 of NREL/TP-5500-46861 referenced above. Unless known otherwise and each of multiple floors shall have the same footprint.

2.62 **Glazing Fenestration amount.** Use if not known, use Table 13 of NREL/TP-5500-46861 or the applicable local energy code or ASHRAE/IES Standard 90.1, Table G3.1.1-1, to define default WWR percent for various according to building types if actual WWR is not known. Allocate percent window-to-wall ratio, by orientation if known, evenly distributed on all faces if not.

2.78 **Internal loads (people lighting, equipment, and lighting people).** If not known, allocate by program area. If unknown, distribute evenly over the conditioned area. Lighting lighting power densities should be the maximum allowed by applicable local energy code. If unknown, use applicable local energy code or Equipment power and occupant densities can be found in ASHRAE/IES Standard 90.1 User’s Manual section C and Appendix G tables, for schedules, equipment power, and occupant densities. Additional information on internal loads and schedules may be found in NREL/TP-5500-46861 Appendices A and B.

2.8 **Schedules,** if not known, ASHRAE/IES Standard 90.1 User’s Manual section C and Appendix G tables, should be used. Additional information on schedules may be found in NREL/TP-5500-46861 Appendices A and B.

2.9 **Ventilation** shall, if not known, should be in accordance with applicable local building codes. Ventilation rates shall be determined according to ASHRAE Standard 62.1 Ventilation Rate Procedure for commercial buildings, ASHRAE Standard 62.2 for residential buildings outside air rate per occupant, or, and ASHRAE/ASHE Standard 170 for healthcare and laboratory buildings air change rate by usage, whichever is largest.

2.10 **Perimeter/core zoning.** If not known, perimeter zone depth shall should be no greater than 1.5 times floor to floor height.

2.11 **Building envelope assemblies** shall, if not known, should be in accordance with the applicable local building codes or the baseline performance of ASHRAE/IES Standard 90.1, Table G3.1.5.

2.12 **HVAC System,** if not known, should be determined according to ASHRAE/IES Standard 90.1, Appendix G, baseline HVAC system type is only to be used when sufficient information on the HVAC system has not been provided to the energy modeler. Refer to Appendix C, Section 2.4.

2.13 **Infiltration,** if not known, should be in accordance with applicable local building codes, ASHRAE Handbook - Fundamentals Chapter 16, Table 11, ASHRAE/IES Standard 90.1, Table G3.1.5.b, or established project goals.
### 3. General Information Resources

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![Table 13 Reference Building Form Assignments](image)
BSR/ASHRAE Addendum e to ANSI/ASHRAE Standard 209-2018

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**Foreword:** The addendum makes changes to Section 6.1, clarifying the purpose and analysis of Modeling Cycle #1. The Purpose is updated to include consideration of sensitivity in addition to distribution. The Applicability is unchanged in this addendum. The Analysis is expanded to include internal occupancy and equipment-based loads. To make the modeling cycling more enforceable, an action to develop a list of options and share it with the design team has been added. The informative note has also been expanded; this moves the definition of Simple Box Modeling into the modeling cycle and out of Appendix C, making the definition easier for users of the standard to find.

### 6.1 Modeling Cycle #1—Simple Box Modeling

#### 6.1.1 Purpose.
Identify the distribution and sensitivity of energy consumption by end use. Evaluate energy end uses and demand characteristics for building characteristics that affect building conceptual design.

#### 6.1.2 Applicability.
This modeling cycle applies before the building’s geometry and site orientation have been set in the design process. This must be completed before or during the energy charrette described in Section 5.5.

#### 6.1.3 Analysis.
Create energy models to calculate understand annual building energy consumption by end use and peak heating and cooling loads with identical HVAC systems and internal occupancy and equipment-based loads. Perform a sensitivity analysis by varying the following building characteristics as applicable based on project considerations:

a. Building geometry
b. Window-to-wall ratio, by orientation, and shading options (if applicable)
c. Orientation
d. Thermal performance of the envelope and structure

#### 6.1.3.1 Develop a list of conceptual design options and the relative energy consumption and peak loads, and share with the design team at energy charrette.

**Informative Note:** The term “Simple Box Modeling” came from simple energy models made when geometry was entered using a text editor, and not a 3D modeling tool. Some simple box modeling may still be a simple rectangular building, but it doesn’t have to be limited to that. Design teams can use nonrectangular geometry for this modeling cycle. See Informative Appendix C for guidance.
BSR/ASHRAE Addendum f to
ANSI/ASHRAE Standard 209-2018

First Public Review Draft

Proposed Addendum f to Standard
209-2018, Energy Simulation Aided
Design for Buildings except Low-
Rise Residential Buildings

First Public Review Draft (December 2023)
(Draft shows Proposed Changes to Current Standard)

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**Forward:** The addendum makes changes to Section 6.7, which in the existing standard is called Modeling Cycle #7—Energy Simulation-Aided Value Engineering. The changes expand the cycle to have broader applicability and purpose so that it can be used to responsively evaluate any proposed changes to the design that arise during the design process rather than confining the analysis to value engineering proposals that are likely to have negative consequences. In addition, the changes expand the focus beyond just the cost implications of design alternatives to be inclusive of the many goals and different scenarios for which modeling is being conducted. Informative notes were added with comments regarding typical practice related to analyzing first and operating cost differences and a tip to improve responsiveness by keeping the model up to date as the design changes during the design process. Lastly, Section 6.7 and Section 4.2.1 were revised to change the name of the modeling cycle to Modeling Cycle #7—Responsive Design Alternative Modeling.

### 4.2 Compliance

#### 4.2.1 The building design process shall meet the requirements of

a. Section 5,

b. Section 6.3, “Modeling Cycle #3—Load Reduction Modeling,” and
c. at least one of the following sections:
1. Section 6.1, “Modeling Cycle #1—Simple Box Modeling”
2. Section 6.2, “Modeling Cycle #2—Conceptual Design Modeling”
4. Section 6.5, “Modeling Cycle #5—Design Refinement”
5. Section 6.6, “Modeling Cycle #6—Design Integration and Optimization”

### 6.7 Modeling Cycle #7—Energy Simulation-Aided Value Engineering—Responsive Design Alternative Modeling

#### 6.7.1 Purpose.

To responsively provide information on the holistic implications of *project alternatives* as they arise such as *value engineering* measures and/or other proposed design changes on project performance goals to ensure more informed design decisions.

#### 6.7.2 Applicability

6.7.2.1 This *modeling cycle* shall be used as *project alternatives* arise only if first costs have been identified for each *project alternative* to be evaluated. The *project alternative* is likely to affect project performance.

**Informative Note:** This cycle is commonly performed during the construction documents design phase but can also be used at other design phases. In addition, first and operating cost differences are typically an
important consideration in balancing the impact of the alternative on project goals and the cost savings benefits. These may include both direct and indirect costs.

6.7.2.2 This modeling cycle shall be used only if the project alternative negatively affects project performance goals.

6.7.3 Analysis

6.7.3.1 Update the energy model to reflect the current design for parameters that interact with the project alternatives and/or have implications for meeting performance goals. Identify project alternatives arising from at least one value engineering proposal.

Informative Note: To accommodate rapid turnaround times to meet project deadlines, update and maintain the energy model to reflect the current design as changes arise during the design process so that when project alternatives arise for evaluation during this modeling cycle, these updates have already been completed.

6.7.3.2 Use energy modeling to evaluate project alternatives arising from at least one value engineering or design change proposal. Identify first-cost and operating-cost consequences to building systems directly and indirectly affected by the value engineering proposal.

6.7.3.3 Use energy modeling to evaluate each project alternative.
Normative Annex 1
(formerly Annex A)

Performance tests

N-1.10.4.2 Sash retention test

The visible aerosol or mist shall show smooth downward flow with no dead spots or reflux. No visible aerosol or mist shall escape from the cabinet billow over or penetrate onto the work surface and shall not escape from the cabinet.

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

Normative Annex 5
(formerly Annex F)

Field tests

N-5.4.4.2 Sash retention test

The visible aerosol or mist shall show smooth downward flow with no dead spots or reflux. No visible aerosol or mist shall escape from the cabinet billow over or penetrate onto the work surface and shall not escape from the cabinet.

Rationale: If the intent of this test is to show that the airflow is flowing smoothly downwards, being captured by the front intake grill and not allowed to billow over the work surface, then the proposed wording should be considered. The revised language removes ambiguity of what the purpose of this test is, assuming if the intent is for the air to flow directly into the front intake grill.
**Normative Annex 1**

Ultraviolet water treatment systems microbial reduction – MS-2 and T1 procedures

**N-1.8 Culture of challenge organisms**

**N-1.8.1 MS-2 coliphage**

**N-1.8.1.1 Stock culture preparation of MS-2 coliphage**

NOTE — This section describes the propagation and harvesting methods for stock suspensions of MS-2 coliphage for use as a challenge suspension for low flow (< 1 GPM) water treatment units. If units possessing a flow rate > 1 GPM are to be tested, the stock preparation procedure may have to be repeated multiple times to achieve the required volume of MS-2 coliphage. This method should also be repeated when cryogenic stocks are low.

a) One or two days prior to preparation of MS-2 Coliphage stock, a cryogenically frozen *E. coli* ATCC #15597 host strain shall be thawed. One TSB tube shall be inoculated with 0.1 mL of the stock suspension. The stock suspension shall be incubated at 35 ± 1°C (95 ± 1.8 °F) for 46 ± 2 h or 48 ± 2 h.

b) On the day of preparing MS-2 coliphage stock, 1% TSA shall be liquefied, and the media shall be tempered in a 45 ± 1 °C (113 ± 1 °F) water bath. 1.5% TSA plates shall be room temperature prior to use.

c) Serial dilutions of MS-2 coliphage suspension shall be made using sterile PBS or SBDW. Dilute as needed in triplicate on 1.5% TSA plates. In a sterile tube, 1 mL of diluted MS-2 coliphage shall be transferred. Then 0.1 mL of *E. coli* ATCC #15597 host shall be added to the tube containing *E. coli* and vortex to mate the bacteriophage and *E. coli*. After vortexing, add about 5 mL of melted TSB + 1%. Immediately pour onto the 1.5% TSA plates. After the 1% TSA layer has solidified, the plates shall be inverted and incubated at 35 ± 1 °C (95 ± 1.8 °F) for 18 ± 2 h.

d) Plates shall be selected that show complete lysis of host cells by the MS-2 coliphage. The surface of each plate shall be flooded with 3 mL of TSB. The 1% TSA layer shall be gently removed using a cell scraper. The contents shall be poured into two sterile 50 mL centrifuge tubes and the total volume brought to 40 mL with TSB. 0.2 g EDTA and 0.026 g lysozyme shall be added to each tube. The centrifuge tubes shall be incubated at room temperature for 2 h, mixing every 15 min.

e) After the 2 h incubation, the tubes shall be centrifuged at 9280 × g for 5 min, or 2320 × g for
20 min, at 20 ± 1 °C (68 ± 1.8 °F). The supernatant shall be filtered. The resulting supernatant shall be transferred to a new container for filtration, while avoiding disturbing the pellet. First, a sterile 47 mm filtration assembly shall be aseptically constructed using a 0.45 μm polycarbonate filter. The filter shall be pretreated with 10 mL of TSB just prior to the filtration to minimize MS-2 coliphage adsorption to the filter. The supernatant shall be filtered. This step is needed to filter any agar or large debris from the supernatant. Lastly, a sterile 47 mm filtration assembly shall be aseptically constructed using a 0.22-μm polycarbonate filter. The filter shall be pretreated with 10 mL of TSB just prior to the filtration to minimize MS-2 coliphage adsorption to the filter.

f) Working stocks of bacteriophage (large volume stocks used for challenge preparation) shall be stored in the dark at 2 to 8 °C (36 to 46 °F) for up to 5 y. Propagation freezer stocks (small volume stocks used to produce working stock) of bacteriophage shall be stored in a 1/10 volume of sterile glycerol added to the suspension and dispensed into between 1-mL and 3-mL aliquots in cryovials, and stored at -70 ± 1 °C (-94 ± 2 °F). When those storage conditions are applied, there is no expiration date to follow as long as QC on the propagation stock is performed and acceptable.

g) The MS-2 coliphage suspension shall be titrated as in Section N-1.8.2.2. The concentration of MS-2 coliphage shall be 10¹⁰ to 10¹² PFU/mL.

N-1.8.1.2 Enumeration of MS-2 Coliphage plaques

a) A cryogenically frozen *E. coli* ATCC #15597 host strain shall be thawed. One TSB tube shall be inoculated with 0.1 mL of the stock suspension. The TSB tube shall be incubated at 35 ± 1 °C (95 ± 1 °F) for 48 ± 2 h to 16 to 48 h.

b) 1% TSA shall be liquefied, and the media shall be tempered in a 45 ± 1 °C (113 ± 1 °F) water bath. 1.5% TSA plates shall be room temperature prior to use.

c) Serial dilutions of MS-2 coliphage suspension shall be made using sterile PBS or SBDW. Dilute as needed in triplicate on 1.5% TSA plates. In a sterile tube, 1 mL of diluted MS-2 coliphage shall be transferred. Then 0.1 mL of *E. coli* ATCC #15597 host shall be added to the tube containing *E. coli* and vortex to mate the bacteriophage and *E. coli*. After vortexing, add about 5 mL of melted TSB + 1%. Immediately pour onto the 1.5% TSA plates. After the 1% TSA layer has solidified, the plates shall be inverted and incubated at 35 ± 1 °C (95 ± 1.8 °F) for 18 ± 2 h.

d) After incubation, plates containing 20 to 200 distinct PFU shall be enumerated using a colony counter. The MS-2 Coliphage suspension titer shall be calculated by multiplying the number of PFU obtained by the inverse of the dilution factor. The concentration of MS-2 coliphage shall be 10¹⁰ to 10¹² PFU/mL.

Normative Annex 2

Ultraviolet water treatment systems microbial reduction – Qβ procedures

N-2.7 Culture of challenge organisms

N-2.7.1 Qβ coliphage

N-2.7.1.1 Stock culture preparation of Qβ coliphage
NOTE — This section describes the propagation and harvesting methods for stock suspensions of Qβ coliphage for use as a challenge suspension for low flow (< 1 GPM) water treatment units. If units possessing a flow rate > 1 GPM are to be tested, the stock preparation procedure may have to be repeated multiple times to achieve the required volume of Qβ coliphage. This method should also be repeated when cryogenic stocks are low.

a) One or two days prior to preparation of Qβ Coliphage stock, a cryogenically frozen E. coli ATCC #23631 host strain shall be thawed. One TSB tube shall be inoculated with 0.1 mL of the stock suspension. The stock suspension shall be incubated at 35 ± 1 °C (95 ± 1.8 °F) for 18 ± 2 h or 46 ± 2 h 16 to 48 h.

b) On the day of preparing Qβ coliphage stock, 1% TSA shall be liquefied, and the media shall be tempered in a 45 ± 1 °C (113 ± 2 °F) water bath. 1.5% TSA plates shall be room temperature prior to use.

c) Serial dilutions of Qβ coliphage suspension shall be made using sterile PBS or SBDW. Dilute as needed in triplicate on 1.5% TSA plates. In a sterile tube, 1 mL of diluted Qβ coliphage shall be transferred. Then 0.1 mL of E. coli ATCC #23631 host shall be added to the tube containing E. coli and vortex to mate the bacteriophage and E. coli. After vortexing, add about 5 mL of melted TSB + 1%. Immediately pour onto the 1.5% TSA plates. After the 1% TSA layer has solidified, the plates shall be inverted and incubated at 35 ± 1 °C (95 ± 1.8 °F) for 18 ± 2 h.

d) Plates shall be selected that show complete lysis of host cells by the Qβ coliphage. The surface of each plate shall be flooded with 3 mL of TSB. The 1% TSA layer shall be gently removed using a cell scraper. The contents shall be poured into two sterile 50 mL centrifuge tubes and the total volume brought to 40 mL with TSB. 0.2 g EDTA and 0.026 g lysozyme shall be added to each tube. The centrifuge tubes shall be incubated at room temperature for 2 h, mixing every 15 min.

e) After the 2-h incubation, the tubes shall be centrifuged at 9280 × g for 5 min, or 2320 × g for 20 min, at 20 ± 1 °C (68 ± 1.8 °F). The resulting supernatant shall be transferred to a new container for filtration, while avoiding disturbing the pellet. First, a sterile 47 mm filtration assembly shall be aseptically constructed using a 0.45 μm polycarbonate filter. The filter shall be pretreated with 10 mL of TSB just prior to the filtration to minimize Qβ coliphage adsorption to the filter. The supernatant shall be filtered. This step is needed to filter any agar or large debris from the supernatant. Lastly, a sterile 47 mm filtration assembly shall be aseptically constructed using a 0.22 μm polycarbonate filter. The filter shall be pretreated with 10 mL of TSB just prior to the filtration to minimize Qβ coliphage adsorption to the filter.

f) Working stocks of bacteriophage (large volume stocks used for challenge preparation) shall be stored in the dark at 2 to 8 °C (36 to 46 °F) for up to 5 y. Propagation freezer stocks (small volume stocks used to produce working stock) of bacteriophage shall be stored in a 1/10 volume of sterile glycerol added to the suspension and dispensed into between 1-mL and 3-mL aliquots in cryovials, and stored at -70 ± 1 °C (-94 ± 2 °F). When those storage conditions are applied, there is no expiration date to follow as long as QC on the propagation stock is performed and acceptable.

g) The Qβ coliphage suspension shall be titrated as in Section N-1.8.2.2. The concentration of Qβ coliphage shall be 10^{10} to 10^{12} PFU/mL.

### N-2.7.1.2 Enumeration of Qβ Coliphage plaques

a) A cryogenically frozen E. coli ATCC #23631 host strain shall be thawed. One
TSB tube shall be inoculated with 0.1 mL of the stock suspension. The TSB tube shall be incubated at 35 ± 1 °C (95 ± 2 °F) for 48 ± 2 h – 16 to 48 h.

b) 1% TSA shall be liquefied, and the media shall be tempered in a 45 ± 1 °C (113 ± 2 °F) water bath. 1.5% TSA plates shall be room temperature prior to use.

c) Serial dilutions of Qβ coliphage suspension shall be made using sterile PBS or SBDW. Dilute as needed in triplicate on 1.5% TSA plates. In a sterile tube, 1 mL of diluted Qβ coliphage shall be transferred. Then 0.1 mL of E. coli ATCC # 23631 host shall be added to the tube containing E. coli and vortex to mate the bacteriophage and E. coli. After vortexing, add about 5 mL of melted TSB + 1%. Immediately pour onto the 1.5% TSA plates. After the 1% TSA layer has solidified, the plates shall be inverted and incubated at 35 ± 1 °C (95 ± 1.8 °F) for 18 ± 2 h.

d) After incubation, plates containing 30 to 300 distinct PFU shall be enumerated using a colony counter. The Qβ Coliphage suspension titer shall be calculated by multiplying the number of PFU obtained by the inverse of the dilution factor. The concentration of Qβ coliphage shall be 10^{10} to 10^{12} PFU/mL.

Rationale:

For consistency and streamlining testing, these changes:

- Simplify the time range (Sections N-1.8.1.1 and N-2.7.1.1)
- Update the time range (Sections N-1.8.1.2 and N-2.7.1.2)
NSF/ANSI Standard for Health Sciences –

Dietary Supplements

4 Labeling and Literature Requirements

4.2 Probiotics

For products and ingredients containing probiotics, the following information must be present on the label:

— colony forming units (CFU) **viable cell count** of each strain of live microorganism at the time of the product or ingredient’s expiration;

— total CFU **viable cell** count for a blend of live microorganisms at the time of the product or ingredient’s expiration is acceptable;

— storage directions that guarantee the CFU **viable cell** count(s) at the time of expiration; and

— identification of the bacteria including genus, species, and strain based on widely accepted nomenclature. If a trademarked name is used to identify the bacteria, the genus, species, and strain should also be included on the label.
UL 19, Standard for Safety for Lined Fire Hose and Hose Assemblies

1. Additional Fire Hose Trade Sizes, Internal and Outside Diameter Requirements, Additional Hose Pressure Options, Product Specification Sheet Requirements, and Other Clarifications/Corrections

PROPOSAL

11.1.1 Hose shall comply with items (a) – (k) and hose assemblies shall comply with items (a) – (l) when subjected for at least 15 seconds to a hydrostatic proof-pressure of two times the service test pressure. The pressure may be maintained for up to 1 minute if necessary, to determine compliance with the requirements. See 11.4.5.

... 

b) The elongation of multiple-jacketed hose shall not exceed 8 percent of the length measured at 10 psig for sizes of 1-1/2 through 2-3/4-2-1/2 inches (38 - 70.65 mm nominal ID). See 11.4.6.

c) The elongation of multiple-jacketed hose shall not exceed 10 percent of the length measured at 10 psig for sizes of 2-3/4 inches through 3 inches (70 - 76 mm nominal ID). See 11.4.6. See 11.4.6.

... 

14.1.1 A coupled sample of hose in each size between 1-1/2 through 3-1/2 inches (38 through 89 mm nominal ID) shall withstand 100,000 cycles of repeated bending to the radius specified in Table 14.1, while filled with water, without breakdown. Upon completion of the repeated bending, the sample, while lying straight, shall comply with the requirements of the Hydrostatic Strength Test, Section 13.

Table 14.2

<table>
<thead>
<tr>
<th>Trade size of hose,</th>
<th>Length of test sample for repeated bending test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches</td>
<td>Length of test sample,(mm)feet(m)</td>
</tr>
<tr>
<td>1-1/2 (38)</td>
<td>14 (4.3)</td>
</tr>
<tr>
<td>1-3/4 (45)</td>
<td>14 (4.3)</td>
</tr>
<tr>
<td>2 (51)</td>
<td>15 (4.6)</td>
</tr>
<tr>
<td>2-1/4 (57)</td>
<td>15 (4.6)</td>
</tr>
<tr>
<td>2-1/2 (65)</td>
<td>15 (4.6)</td>
</tr>
<tr>
<td>2-3/4 (70)</td>
<td>15 (4.6)</td>
</tr>
<tr>
<td>3 (76)</td>
<td>16 (4.9)</td>
</tr>
<tr>
<td>3-1/2 (89)</td>
<td>16 (4.9)</td>
</tr>
</tbody>
</table>