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CONTENTS

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Project Initiation Notification System (PINS)

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

ASNT (American Society for Nondestructive Testing)

Michelle Thomas <mthomas@asnt.org> | 1201 Dublin Road, Suite G04 | Columbus, OH 43215 www.asnt.org

Revision

BSR/ASNT CP-105-202x, Standard Topical Outlines for Qualification of Nondestructive Testing Personnel (revision of ANSI/ASNT CP-105-2024)

Stakeholders: NDT Industry providers, users, equipment purchasers, equipment manufacturers and general interest

Project Need: The standard is used by industry to qualify and certify NDT personnel and continues to be used and is relevant.

Interest Categories: The following Interest Categories are listed within consensus body:
- NDT Provider: Test labs, consultants or other organizations providing third-party NDT services;
- NDT User: Purchaser of NDT services;
- NDT Equipment purchaser: Purchaser of NDT goods or equipment;
- NDT Equipment manufacturer or distributor; and
- General Interest: All others.

An essential element in the effectiveness of nondestructive testing (NDT) is the qualification of the personnel who are responsible for and who perform nondestructive testing. Formal training is an important and necessary element in acquiring the skills necessary to effectively perform nondestructive tests. The American Society for Nondestructive Testing Inc. (ASNT) has, therefore, undertaken the preparation and publication of this standard, which specifies the body of knowledge to be used as part of a training program qualifying and certifying NDT personnel.

ASNT (American Society for Nondestructive Testing)

Michelle Thomas <mthomas@asnt.org> | 1201 Dublin Road, Suite G04 | Columbus, OH 43215 www.asnt.org

Revision

BSR/ASNT CP-189-202x, Qualification and Certification of Nondestructive Testing Personnel (revision of ANSI/ASNT CP -189-2024)
Stakeholders: NDT Industry providers, users, equipment purchasers, equipment manufacturers, and general interest

Project Need: The standard is used by industry to qualify and certify NDT personnel and continues to be used and is relevant.

Interest Categories: The following Interest Categories are listed within consensus body:
- NDT Provider: Test labs, consultants or other organizations providing third-party NDT services;
- NDT User: Purchaser of NDT services;
- NDT Equipment purchaser: Purchaser of NDT goods or equipment;
- NDT Equipment manufacturer or distributor; and
- General Interest: All others.

This standard applies to personnel whose specific tasks or jobs require appropriate knowledge of the technical principles underlying nondestructive testing (NDT) methods for which they have responsibilities within the scope of their employment. These specific tasks or jobs include, but are not limited to, performing, specifying, reviewing, monitoring, supervising, and evaluating NDT work.

ASNT (American Society for Nondestructive Testing)

Michelle Thomas <mthomas@asnt.org> | 1201 Dublin Road, Suite G04 | Columbus, OH 43215 www.asnt.org

Revision

BSR/ASNT ILI-PQ-202x, In-Line Inspection Personnel Qualification and Certification Standard (revision of ANSI/ASNT ILI-PQ-2023)
Stakeholders: Industries performing In-Line inspections using NDT

Project Need: The standard is used by industry to qualify and certify NDT personnel and continues to be used and is relevant.

Interest Categories: The following Interest Categories are listed within consensus body:
- NDT Provider: Test labs, consultants or other organizations providing third-party NDT services;
- NDT User: Purchaser of NDT services;
- NDT Equipment purchaser: Purchaser of NDT goods or equipment;
- NDT Equipment manufacturer or distributor; and
- General Interest: All others.

Provides a standard means for employers to qualify and certify NDT personnel using In-Line inspection technologies on oil and gas pipelines to include levels of qualification, education, training, experience requirements, examinations, certifications,and re-certifications.

CSA (CSA America Standards Inc.)

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

Revision

BSR/CSA C22.2 No. 298-202x, High Voltage Couplers (revision of ANSI/CSA C22.2 No. 298-2023)
Stakeholders: Certification agencies, high voltage couplers industry

Project Need: To provide industry with the latest safety requirements for high voltage couplers.

Interest Categories: Regulatory, user, producer and general interest categories

To issue a new edition of the standard.

ECIA (Electronic Components Industry Association)

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

New Standard

BSR/EIA 198-3-6-F-202x, Ceramic Dielectric Capacitors Classes I, II, III, and IV, Part III: Section 6: Axial-Leaded Capacitors, Conformally Coated and Molded Types (new standard)
Stakeholders: Electronics, electrical and telecommunications industries

Project Need: Create new American National Standard.

Interest Categories: User, Producer, General Interest

Provides means to characterize ceramic capacitors electrically and mechanically by use of type designators.

FCI (Fluid Controls Institute)

Leslie Schraff <fci@fluidcontrolsinstitute.org> | 1300 Sumner Avenue | Cleveland, OH 44115 www.fluidcontrolsinstitute.org

Revision

BSR/FCI 15-1-202x, Standard for Production Testing of Pressure Regulators (revision of ANSI/FCI 15-1-2020)
Stakeholders: Manufacturers, specifiers, inspectors and users of pressure regulators

Project Need: This standard establishes minimum guidelines for production testing of pressure regulators for use by manufacturers, specifiers, inspectors, and users to ensure testing of atmospheric leak tightness and seat leakage are completed at the factory before shipment.

Interest Categories: General Interest, Producers, Users

This standard provides guidelines for documenting minimum production tests and determining pass/fail criteria for pressure regulators undergoing production tests in a manufacturing facility. It applies to most designs including self- and pilot-operated pressure-reducing regulators, differential pressure regulators, pressure-loaded regulators, and regulators with or without internal relief valves.

VITA (VMEbus International Trade Association (VITA))

Jing Kwok <jing.kwok@vita.com> | 929 W. Portobello Avenue | Mesa, AZ 85210 www.vita.com

Revision

BSR/VITA 47.2-202x, Class 2 Requirements for Environments, Design and Construction, Safety, and Quality for VITA 47 Plug-In Modules Dot Standard (revision of ANSI/VITA 47.2-2019)
Stakeholders: Manufacturers, suppliers, and users of modular embedded computers

Project Need: Develop a standard for standardizing class 2 environmental factors for embedded computers.

Interest Categories: Producers, Users, General Interest

The VITA 47 group of standards defines Environments, Design and Construction, Safety, Quality Systems, and ESS (Environmental Stress Screening) requirements for commercial-off-the-shelf (COTS) Plug-In Modules intended for commercial, ground, naval, and aerospace applications. VITA 47.2 addresses requirements specific to dedicated-service electronic products. This revision enables a broader use of this standard across the COTS supplier market with added flexibility in environmental class options. It also corrects typographical errors, adds additional requirements for conformance to improve interoperability and maintainability, and rugged design for tactical applications. Modules aligned to ANSI/VITA 47.1-2019, primarily Table 3.2-1, will not be aligned to the released ANSI/VITA 47.1 -2025. To become compliant with this new update, a supplier should revise their module datasheet with the new ANSI/VITA 47.1-2025, Figure 3.2-1 Environmental Class Code.

VITA (VMEbus International Trade Association (VITA))

Jing Kwok <jing.kwok@vita.com> | 929 W. Portobello Avenue | Mesa, AZ 85210 www.vita.com

Revision

BSR/VITA 47.3-202x, Class 3 Requirements for Environments, Design and Construction, Safety, and Quality for VITA 47 Plug-In Modules Dot Standard (revision of ANSI/VITA 47.3-2019)
Stakeholders: Manufacturers, suppliers, and users of modular embedded computers

Project Need: Develop a standard for standardizing Class 3 environmental factors for embedded computers.

Interest Categories: Producers, Users, General Interest

The VITA 47 group of standards defines Environments, Design and Construction, Safety, Quality Systems, and ESS (Environmental Stress Screening) requirements for commercial-off-the-shelf (COTS) Plug-In Modules intended for commercial, ground, naval, and aerospace applications. VITA 47.3 addresses requirements specific to high-performance electronic products. This revision enables a broader use of this standard across the COTS supplier market with added flexibility in environmental class options. It also corrects typographical errors, adds additional requirements for conformance to improve interoperability and maintainability, and rugged design for tactical applications. Modules aligned to ANSI/VITA 47.1-2019, primarily Table 3.2-1, will not be aligned to the released ANSI/VITA 47.1-2025. To become compliant with this new update a supplier should revise their module datasheet with the new ANSI/VITA 47.1-2025, Figure 3.2-1 Environmental Class Code.

Call for Comment on Standards Proposals

American National Standards

This section solicits public comments on proposed draft new American National Standards, including the national adoption of ISO and IEC standards as American National Standards, and on proposals to revise, reaffirm or withdraw approval of existing American National Standards. A draft standard is listed in this section under the ANSI-accredited standards developer (ASD) that sponsors it and from whom a copy may be obtained. Comments in connection with a draft American National Standard must be submitted in writing to the ASD no later than the last day of the comment period specified herein. Such comments shall be specific to the section (s) of the standard under review and include sufficient detail so as to enable the reader to understand the commenter's position, concerns and suggested alternative language, if appropriate. Please note that the ANSI Executive Standards Council (ExSC) has determined that an ASD has the right to require that interested parties submit public review comments electronically, in accordance with the developer's procedures.

Ordering Instructions for "Call-for-Comment" Listings

1. Order from the organization indicated for the specific proposal.
2. Use the full identification in your order, including the BSR prefix; for example, Electric Fuses BSR/SAE J554.
3. Include remittance with all orders.
4. BSR proposals will not be available after the deadline of call for comment.

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. e-mail: psa@ansi.org
* Standard for consumer products

Comment Deadline: May 18, 2025

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

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

Addenda

BSR/ASHRAE Addendum d to ANSI/ASHRAE Standard 90.4-2022, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4-2022)
The current ASHRAE 90.4 MLCs, primarily developed in 2018, are based on air-cooled racks served by CHW CRAH units, served by an air-cooled chiller system. It is not a particularly efficient data center today, or when it was adopted, but it was a significant improvement over the previous MLCs and it was not particularly controversial, as most new data centers have little trouble meeting these MLCs.Much has happened since the 90.4 MLCs were last updated in 2018, most notably the explosion of AI data centers with high-density liquid-cooled racks. This addendum was developed by modeling several typical data center systems across different climate baselines and then a combination of air-cooled and liquid-cooled equipment to meet the MLC. Other systems that are expected to meet the proposed MLCs include: air-cooled racks with direct evaporative cooling, liquid-cooled racks with immersion cooling, and several proprietary systems including ones using liquid cooling refrigerant and phase change. Lastly, this section makes changes to both the previous standard and published Addendum g to Standard 90.4-2022.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: standards.section@ashrae.org

Comment Deadline: May 18, 2025

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

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

Addenda

BSR/ASHRAE/ACCA Addendum b to ANSI/ASHRAE/ACCA Standard 211- (RA-x), Standard for Commercial Building Energy Audits and Decarbonization Assessments (addenda to ANSI/ASHRAE/ACCA Standard 211-2018 (R2023))
This addendum adds definitions for energy audit, decarbonization assessment, and retrocommissioning.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

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

Addenda

BSR/ASHRAE/ASHE Addendum 170u-202x, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021)
The glossary changes in this proposed addendum are coordinated with changes that the FGI editions are incorporating as evolving guidance on the planning and programing of these various treatment settings is prescribed by FGI. The space ventilation tables have been updated with the addition of new FGI spaces that will be detailed in their upcoming editions.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

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

Addenda

BSR/ASHRAE/ASHE Addendum 170v-202x, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021)
This proposed addendum follows up on action earlier this year when the committee expanded the minimum definition of a HEPA filter to include those filters classified under test methods more commonly used outside the United States. The reason behind this was to offer better guidance to international users of Standard 170 and to follow through on ASHRAE's desire to be a more global organization. For general ventilation air filters, there are two primary classification test standards: the MERV rating system, based on ASHRAE 52.2, and the ISO 16890 standard, which replaced the European Norm (EN 779) a few years ago. This proposed addendum provides equivalencies between ASHRAE 52.2 and ISO 16890 with regard to minimum filtration required by Standard 170
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

Comment Deadline: May 18, 2025

NSF (NSF International)

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

Revision

BSR/NSF 49-202x (r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2024)
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>

RESNET (Residential Energy Services Network, Inc.)

P.O. Box 4561, Oceanside, CA 92052 | rick.dixon@resnet.us, www.resnet.us.com

Addenda

BSR/RESNET/ICC 301 Addendum G-202x, Integrated Heat Pump Water Heaters (addenda to ANSI/RESNET/ICC 301-2022)
Proposed addendum RESNET/ICC 301-2022 Addendum G-202x amends the 2022 edition of Standard 301 to define terms, provide clarifications, and enhance the assessment of integrated Heat Pump Water Heaters.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: RESNET using the online comment form at https://www.resnet.us/about/standards/standards-currently-out-for-public-comment/, under link “ANSI Standards Amendments Out For Public Comment”

ULSE (UL Standards & Engagement)

1603 Orrington Ave, Evanston, Il 60201 | cynthia.byrne@ul.org, https://ulse.org/

National Adoption

BSR/UL 61010-2-030-202x, Standard for Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular Requirements for Equipment Having Testing or Measuring Circuits (national adoption of IEC 61010-2-30 with modifications and revision of ANSI/UL 61010-2-030-2018 (R2023))
Revisions to the proposal document dated December 6, 2024 per responses to comments received. These revisions include adding new National Differences to Clauses 9.101.2.1, 9.101.2.3A, and 101.3.4.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 555-202x, Standard for Fire Dampers (revision of ANSI/UL 555-2020)
(1) Expanded referenced documents; (2) Formatting and typo corrections; (3) Exceeding maximum rigid joints; (4) Salt spray samples sizes; (5) Expanded cautionary statement; (6) Vertically and horizontally mounted fire dampers; (7) Concrete cure time (8) Out-of-Wall fire damper installation; (9) Compliance criteria clarification.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

Comment Deadline: May 18, 2025

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 555C-202x, Standard for Ceiling Dampers (revision of ANSI/UL 555C-2021)
(1) Volume control ceiling damper closing reliability test options; (2) Hydrostatic strength test for pneumatic actuators; (3) Spring closing force test.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 555S-202x, Standard for Smoke Dampers (revision of ANSI/UL 555S-2020)
(1) Expanded referenced documents; (2) Formatting and typo corrections.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)

47173 Benicia Street, Fremont, CA 94538 | Derrick.L.Martin@ul.org, https://ulse.org/

Revision

BSR/UL 746C-202X, Standard for Safety for Polymeric Materials - Use in Electrical Equipment Evaluations (revision of ANSI/UL 746C-2025)
This form covers the following proposed revisions of UL 746C: (1) Addition of exposure and evaluation requirements for polymeric materials exposed to UVC for UV Germicidal Irradiation (UVGI) Purposes to Paragraphs 25.1, 25.2, 25.3, Table 25.1, Paragraphs 57.1.1, 57.2.1 and 57.2.2, and (2) Revision of the Flammability Classification Criteria in Table 25.1.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://csds.ul.com/ProposalAvailable

ULSE (UL Standards & Engagement)

47173 Benicia Street, Fremont, CA 94538 | Linda.L.Phinney@ul.org, https://ulse.org/

Revision

BSR/UL 1277-202X, Standard for Safety for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members (revision of ANSI/UL 1277-2023)
Criteria for Joist Pull Test, Revised 26.1, 26.5, and 26.9.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://csds.ul.com/ProposalAvailable

Comment Deadline: May 18, 2025

ULSE (UL Standards & Engagement)

1603 Orrington Avenue, Suite 2000, Evanston, IL 60201 | lauren.valentino@ul.org, https://ulse.org/

Revision

BSR/UL 1478A-202x, Standard for Pressure Relief Valves for Sprinkler Systems (revision of ANSI/UL 1478A -2013 (R2022))
These requirements cover pressure relief valves intended for use in sprinkler systems for fire-protection service to relieve excessive pressures caused by thermal expansion, downstream of a pressure-reducing valve or in valve trim. Requirements for installation of these valves are included in the Standard for the Installation of Sprinkler Systems, NFPA 13.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Lauren Valentino, lauren.valentino@ul.org, https://csds.ul.com/ProposalAvailable

Comment Deadline: June 2, 2025

ABYC (American Boat and Yacht Council)

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

Revision

BSR/ABYC P-1-202x, Installation of Exhaust Systems for Propulsion and Auxiliary Engines (revision of ANSI/ABYC P-1-2019)
This standard addresses the design and installation of exhaust systems on boats equipped with internal combustion inboard or sterndrive engines, or permanently installed auxiliary engines, from the exhaust outlet of the engine or the turbocharger, if used, through the terminus where the exhaust gases are discharged.
Single copy price: $50.00
Obtain an electronic copy from: abycinc.org
Send comments (copy psa@ansi.org) to: comments@abycinc.org

AHRI (Air-Conditioning, Heating, and Refrigeration Institute)

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 | jyeh2@ahrinet.org, www.ahrinet.org

Revision

BSR/AHRI Standard 1250-202x (I-P), Performance Rating of Walk-in Coolers and Freezers (revision of ANSI/AHRI Standard 1250 (I-P)-2014)
This standard applies to mechanical refrigeration equipment consisting of an integrated single package refrigeration unit, or separate unit cooler and condensing unit sections, where the condensing section can be located either outdoor or indoor. Controls can be integral or can be provided by a separate party as long as the control's performance is tested and certified with the listed mechanical equipment accordingly.
Single copy price: Free
Obtain an electronic copy from: https://connect.ahrinet.org/standards-public-review/stdsunderpublicreview
Send comments (copy psa@ansi.org) to: AHRI_Standards@ahrinet.org

Comment Deadline: June 2, 2025

AHRI (Air-Conditioning, Heating, and Refrigeration Institute)

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 | jyeh2@ahrinet.org, www.ahrinet.org

Revision

BSR/AHRI Standard 1251-202x (SI), Performance Rating of Walk-in Coolers and Freezers (revision of ANSI/AHRI Standard 1251 (SI)-2014)
This standard applies to mechanical refrigeration equipment consisting of an integrated single-package refrigeration unit, or separate unit cooler and condensing unit sections, where the condensing section can be located either outdoor or indoor. Controls can be integral or can be provided by a separate party as long as the control's performance is tested and certified with the listed mechanical equipment accordingly.
Single copy price: Free
Obtain an electronic copy from: https://connect.ahrinet.org/standards-public-review/stdsunderpublicreview
Send comments (copy psa@ansi.org) to: AHRI_Standards@ahrinet.org

ANS (American Nuclear Society)

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

Reaffirmation

BSR/ANS 57.8-2020 (R202x), Fuel Assembly Identification (reaffirmation of ANSI/ANS 57.8-2020)
This standard provides requirements and detailed information for uniquely identifying nuclear fuel assemblies/elements, and the corresponding fuel plates or rods inside the assemblies. Detailed recommendations and requirements are provided for the numbering of the geometric orientation for the fuel plates, or fuel rods, inside the fuel assemblies. This standard is a detailed revision of ANSI/ANS-57.8-1995 (R2017).
Single copy price: $138.00
Obtain an electronic copy from: orders@ans.org
Send comments (copy psa@ansi.org) to: standards@ans.org

ASA (ASC S12) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S12.65-2006 (R202x), Rating Noise with Respect to Speech Interference (reaffirmation of ANSI/ASA S12.65-2006 (R2020))
This standard defines a simple numerical method for rating the expected speech-interfering aspects of noise using acoustical measurements of the noise.
Single copy price: $99.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

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

Reaffirmation

BSR/ASA S12.67-2008 (R202x), Pre-Installation Airborne Sound Measurements and Acceptance Criteria of Shipboard Equipment (reaffirmation of ANSI/ASA S12.67-2008 (R2020))
This standard describes instrumentation and procedures for the pre-installation measurement and analysis of airborne noise generated by shipboard equipment. Maximum noise level criteria are presented for several types of equipment. This standard may be used in the achievement of shipboard noise goals through the timely and affordable airborne noise testing of shipboard equipment before it is delivered and installed.
Single copy price: $126.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

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

Reaffirmation

BSR/ASA S12.68-2007 (R202x), Methods of Estimating Effective A-Weighted Sound Pressure Levels When Hearing Protectors Are Worn (reaffirmation of ANSI/ASA S12.68-2007 (R2020))
This standard specifies three methods, in ascending order of complexity of use and potential accuracy, for the estimation of the sound pressure levels that are effective when a hearing protector is worn. The application of the procedures in turn requires an estimate of the real-ear attenuation of the device for groups of users and an estimate of the noise levels to which the users are exposed. The simplest method is the Noise Level Reduction Statistic for use with A-weighting (NRSA) that can be directly subtracted from an A-weighted sound level or sound exposure estimate. A more accurate procedure is the Noise Level Reduction Statistic, Graphical (NRSG) that requires measurements of both the A- and C-weighted sound levels or exposures, and the application of a set of graphical data. Potentially the most accurate approach is the octave-band method utilizing the octave-band real-ear attenuation and noise measurement data. Each of the simplified ratings, the NRSA and NRSG, is to be computed at both the 80th and 20th percentiles to reflect the range of performance to be expected based on the variation in the attenuation data.
Single copy price: $147.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

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

Reaffirmation

BSR/ASA S12.69-2010 (R202x), Procedure for Testing Railroad Horns ex situ (reaffirmation of ANSI/ASA S12.69 -2010 (R2020))
Federal regulations require the testing of sound emissions from horns located on railroad locomotives. This Standard specifies an alternate method for compliance with the Federal requirements in metropolitan areas where tests cannot be conducted in an outdoor space free of obstructions. The data that result from this procedure are equivalent to those that derive from the procedure promulgated by the Federal Railroad Administration as described in 49 CFR Part 229.129.
Single copy price: $99.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

ASA (ASC S12) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S12.70-2016 (R202x), Criteria for Evaluating Speech Privacy in Healthcare Facilities (reaffirmation of ANSI/ASA S12.70-2016 (R2020))
This standard provides acoustical performance criteria, design requirements, and design guidelines to meet the speech privacy needs for both new design and retrofits of healthcare facilities. This document provides (a) a method for selecting speech privacy goals based on occupant needs, by type of space and use, (b) design requirements and guidelines for developing a strategy for the architectural design and acoustical materials selection, and (c) a method for verifying and analyzing speech privacy design.
Single copy price: $126.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S12) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S12.76-2017 (R202x), Methods for Measurement of Supersonic Jet Noise from Uninstalled Military Aircraft Engines (reaffirmation of ANSI/ASA S12.76-2017 (R2020))
This standard describes procedures to measure jet noise from uninstalled military aircraft engines with supersonic exhaust flows. The methods pertain to propulsion systems mounted on outdoor test stands with appropriate inlets and representative nozzles. Detailed measurement procedures are described for near-field acoustical characterization. These data can be used to establish baseline noise levels, assess effectiveness of noise reduction technologies, estimate personnel noise exposure, and provide full-scale data for refinement of engine noise models. Far-field measurement procedures are described to provide data for estimates of community noise. This standard describes required measurement instrumentation, signal processing, data formatting, and measurement uncertainty. This standard does not apply to commercial engines, dual-use engines, or other engines covered by FAA/ICAO noise certification requirements.
Single copy price: $147.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S2.46-1989 (R202x), Characteristics to be Specified for Seismic Transducers (reaffirmation of ANSI/ASA S2.46-1989 (R2020))
This standard specifies the characteristics of a seismic transducer (pick-up) which can serve as an adequate description of the capabilities of the pickup to perform a shock or vibration measurement in various environments. It is intended as a guide to instrument manufacturers for indicating the characteristics of their transducers that are critical in specifying, selecting, or preparing performance description by users. This standard is the national counterpart of ISO 8042-1988, Shock and Vibration Measurements - Characteristics to be Specified for Seismic Pick-ups.
Single copy price: $99.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S2.61-1989 (R202x), Guide to the Mechanical Mounting of Accelerometers (reaffirmation of ANSI/ASA S2.61-1989 (R2020))
This standard specifies methods for mounting contact accelerometers and delineates the limitations of the recommended methods such as frequency range of interest, amplitude, and phase management accuracy. Characteristics of the mounting arrangements used by specific accelerometers, which should be specified by the manufacturer, are established and guidance is provided to the user to optimize performance of a recommended mounting method.
Single copy price: $99.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S2.70-2006 (R202x), Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand (reaffirmation of ANSI/ASA S2.70-2006 (R2020))
This standard specifies the recommended method for the measurement, data analysis, vibration and health risk assessments, and reporting of human exposure to hand-transmitted vibration. A standard format is established for measurement, data analysis, vibration and health risk assessments, and reporting of hand-transmitted vibration, periodic or random, in three orthogonal axes, in the frequency range from 5.6 Hz to 1,400 Hz. Three normative annexes provide guidance for vibration and health risk assessments, mitigating health risks, training, and medical surveillance related to hand-transmitted vibration.
Single copy price: $126.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S2.71-1983 (R202x), Guide to the Evaluation of Human Exposure to Vibration in Buildings (reaffirmation of ANSI/ASA S2.71-1983 (R2020))
Reactions of humans to vibrations of 1 to 80 Hz inside buildings are assessed in this Standard by use of degrees of perception and associated vibration levels and durations. Accelerations or velocities inside buildings may be measured to assess perceptibility and possible adverse reactions from those inside. A variety of building types and situations are covered by the use of multiplying factors applied to the basic curves. Responses are related to the event durations, frequencies of vibration, and body orientation with respect to the vibration. Adherence to the vibration magnitudes corresponding to the perceptibility threshold will insure minimum discomfort and annoyance. The "acceptability" of a given magnitude of vibration above the perception threshold will be influenced by the interference of the vibrations in the activities of individuals and by the various social, economic, and legal relationships between the source of the vibrations and the receivers.
Single copy price: $99.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S2.75-2017/Part 1 (R202x), Shaft Alignment Methodology, Part 1: General Principles, Methods, Practices, and Tolerances (reaffirmation of ANSI/ASA S2.75-2017/Part 1 (R2020))
This standard establishes methodology consistent with industry best practices for the measurement, analysis, and correction of alignment of shafts on rotating machinery coupled by means of a flexible coupling where such shafts are supported by two bearings in independent, horizontally mounted machine cases. Electric motors driving a pump, fan, or similar machine are examples of this type of machinery. Rigidly coupled machines are outside of the scope of Part 1 of this standard. The methodology addresses conditions for machinery mounting which directly affects shaft alignment, methods for measuring the amount of shaft misalignment, and practices for relocating machine cases to achieve proper shaft alignment. Tolerances are provided in a system of Alignment Quality Grades. Ancillary information for shaft alignment is provided in eight Annexes.
Single copy price: $155.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S2.75-2017/Part 2 (R202x), Shaft Alignment Methodology, Part 2: Vocabulary (reaffirmation of ANSI/ASA S2.75-2017/Part 2 (R2020))
The purpose of this standard is to define terminology unique to the alignment of machinery that has been in common use among engineers and technicians working in the field. Words and phrases are presented in alphabetical order. This vocabulary is intended to be used with the ANSI/ASA S2.75 series, Shaft Alignment Methodology.
Single copy price: $126.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

ASA (ASC S2) (Acoustical Society of America)

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

Reaffirmation

BSR/ASA S12.75-2012 (R202x), Methods for the Measurement of Noise Emissions from High Performance Military Jet Aircraft (reaffirmation of ANSI/ASA S12.75-2012 (R2020))
This standard describes noise measurement procedures to characterize the noise emissions from high-performance (supersonic jet flow) military aircraft. Specific detailed noise measurement procedures are described for characterizing noise for environmental documents such as environmental impact statements and environmental assessments, and for quantifying aircraft noise emissions. This standard describes test procedures for ground run-up and flyover tests for conventional take-off and landing, short/vertical take-off and landing operations. The standard also describes signal processing, data formatting, and measurement uncertainty.
Single copy price: $169.00
Obtain an electronic copy from: standards@acousticalsociety.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

ASABE (American Society of Agricultural and Biological Engineers)

2950 Niles Road, Saint Joseph, MI 49085 | walsh@asabe.org, https://www.asabe.org/

New Standard

BSR/ASABE S652 MONYEAR-202x, Wind Loads on Circular Grain Bins (new standard)
This standard presents methods to estimate loads produced by wind pressures on walls and roofs of individual corrugated metal grain bins.
Single copy price: Free
Obtain an electronic copy from: walsh@asabe.org
Send comments (copy psa@ansi.org) to: Same

ASC X9 (Accredited Standards Committee X9, Incorporated)

275 West Street, Suite 107, Annapolis, MD 21401 | ambria.frazier@x9.org, www.x9.org

Revision

BSR X9.100-111-202x, Check Endorsement (revision of ANSI X9.100-111-2018)
X9.100-111 is the standard for check endorsements on original paper check items. It supports Regulation CC in that it defines placements of payee and bank endorsements on physical checks. The standard also governs placement of any other data on the back side of checks and provides all specifications for image-friendly printing (e.g., reflectance and PCS for elements and backgrounds). Included are informative annexes to clarify the importance of the standard.
Single copy price: $60.00
Obtain an electronic copy from: ambria.calloway@x9.org
Send comments (copy psa@ansi.org) to: ambria.calloway@x9.org

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

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

New Standard

BSR/ASHRAE Standard 185.5P-202x, Method of Testing HVAC-duct mounted Devices and Systems and In-Room devices for Particle and Microorganism Removal or Inactivation in a Chamber with a Recirculating Duct System (new standard)
Many test methods exist for single pass testing of HVAC-mounted devices that remove contaminants in the unit. There are also tests (AHAM, ASHRAE) for many in-room air cleaners. However, there were no standard test methods for air cleaners that are mounted in a duct but perform most or all of their functions in the occupied spaces in a building. To address this issue, ASHRAE convened SPC 185.5 to develop tests for bioaerosol and for particle challenges in a chamber with recirculating duct test facility as Standard 185.5P.
Single copy price: $35.00
Obtain an electronic copy from: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts
Send comments (copy psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

Comment Deadline: June 2, 2025

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

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

Revision

BSR/ASHRAE Standard 41.9-202xR, Standard Methods for Refrigerant Mass Flow Measurements Using Calorimeters (revision of ANSI/ASHRAE Standard 41.9-2021)
This revision of ANSI/ASHRAE Standard 41.9-2021 prescribes methods for measuring mass flow rates for refrigerants and refrigerant/lubricant mixtures using calorimeters. The revision also makes it easier for the higher-tier ASHRAE standards to adopt this standard by reference, updates the steady-state criteria sections.
Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
Send comments (copy psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

ATIS (Alliance for Telecommunications Industry Solutions)

1200 G Street NW, Suite 500, Washington, DC 20005 | akarditzas@atis.org, www.atis.org

Withdrawal

ATIS 0100036.2013 (R2018), Media Plane Performance Security Impairments Standard for Evolving VoIP/Multimedia Networks (withdrawal of ANSI ATIS 0100036-2013 (R2018))
This ATIS Standard is intended to provide awareness and information regarding the use of security mechanisms in support of Next Generation Network (NGN) National Security and Emergency Preparedness (NS/EP) Services. When introducing network security mechanisms (e.g., IPSec) into Evolving Voice over Internet Protocol (VoIP) /Multimedia Networks, one may encounter impairments introduced or exacerbated by those network security mechanisms. One may need to explore tradeoffs between security and QoS to achieve the necessary communication channel during NS/EP conditions.
Single copy price: $200.00
Obtain an electronic copy from: akarditzas@atis.org
Send comments (copy psa@ansi.org) to: Same

AWS (American Welding Society)

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

Revision

BSR/AWS A5.2/A5.2M-202x, Specification for Carbon and Low Alloy Steel Rods for Oxyfuel Gas Welding (revision of ANSI/AWS A5.2/A5.2M-2018)
This specification prescribes the requirements for classification of carbon and low-alloy steel rods for oxyfuel gas welding. The classification requirements include the mechanical properties of the weld metal. Additional requirements are included for chemical composition of the rod and for manufacture, sizes, lengths, and packaging. A guide is appended to the specification as a source of information concerning the classification system employed and the intended use of the rods. This specification makes use of both U.S. Customary Units and the International System of Units (SI). Since these are not equivalent, each system must be used independently of the other.
Single copy price: $42.00 (non-member); $32.00 (member)
Obtain an electronic copy from: kbulger@aws.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

CSA (CSA America Standards Inc.)

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

New Standard

BSR/ANS CSA C22.2 No. 343-202x, Electric vehicle energy management systems (new standard)
The purpose of this binational document is to introduce minimum set of requirements on Electric Vehicle Management Systems (EVEMS), new terms, certification/listing test methods, documentation, labeling, and guide stakeholders to understand the intended use of such EVEMS when permitted to use a demand factor for the calculated load of electric vehicle power transfer system within the electric vehicle (EV) ecosystem.
Single copy price: Free
Obtain an electronic copy from: ansi.contact@csagroup.org
Send comments (copy psa@ansi.org) to: ansi.contact@csagroup.org

ICC (International Code Council)

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

New Standard

BSR/ICC 1500-202x, Standard for Existing Building Safety Inspection (new standard)
ICC is developing a new standard to provide the framework for the regular inspection of structural elements, egress components, active and passive fire protection systems, the building envelope (including the roof), electrical, plumbing, mechanical and fuel gas equipment and systems in order to assess whether an unsafe condition exists.
Single copy price: Free
Obtain an electronic copy from: https://www.iccsafe.org/committees/is-ebsi/
Send comments (copy psa@ansi.org) to: kmcosker@iccsafe.org

IEST (Institute of Environmental Sciences and Technology)

1827 Walden Office Square, Suite 400, Schaumburg, IL 60173 | kconradi@iest.org, www.iest.org

National Adoption

BSR/IEST/ISO 14644-5-202x, Cleanrooms and associated controlled environments - Part 5: Operations (national adoption of ISO 14644-5 with modifications and revision of ANSI/IEST/ISO 14644-5-2004)
This document specifies requirements for the establishment of an operations control program (OCP) to ensure efficient cleanroom operation within specified cleanliness levels. The OCP includes management of personnel, entry and exit of personnel and materials, cleaning, maintenance, and monitoring. This document does not specifically address biocontamination control. For details on this topic, see ISO 14698-1 and ISO 14698-2. This will be an identical National adoption of ISO 14644-5.
Single copy price: $65.00
Obtain an electronic copy from: https://www.iest.org/Bookstore
Send comments (copy psa@ansi.org) to: technicaldept@iest.org

Comment Deadline: June 2, 2025

NEMA (ASC C136) (National Electrical Manufacturers Association)

1300 North 17th Street Suite 900, Rosslyn, VA 22209 | Zijun.Tong@nema.org, www.nema.org

Revision

BSR C136.35-202X, Locking-Type Power Taps (LTPT) (revision of ANSI C136.35-2020)
This Standard covers the electrical and mechanical compatibility of electrical devices mounted into a locking-type photocontrol receptacle for the purpose of providing ancillary power to an external device. This Standard does not cover the device being powered.
Single copy price: $76.00
Obtain an electronic copy from: Zijun.Tong@nema.org
Send comments (copy psa@ansi.org) to: Same

NEMA (ASC C82) (National Electrical Manufacturers Association)

1812 N Moore Street, Arlington, VA 22209 | Connor.Grubbs@nema.org, www.nema.org

Reaffirmation

BSR C82.13-2020 (R202x), Standard for Lamp Ballasts - Definitions for Fluorescent Lamps and Ballasts (reaffirmation of ANSI C82.13-2020)
This standard provides definitions of terms used in ANSI C78 and C82 series standards for fluorescent lamps and ballasts. Individual standards may also include additional definitions specific to that standard.
Single copy price: $65.00
Obtain an electronic copy from: michael.erbesfeld@nema.org
Send comments (copy psa@ansi.org) to: Same

NEMA (ASC C82) (National Electrical Manufacturers Association)

1812 N Moore Street, Arlington, VA 22209 | Connor.Grubbs@nema.org, www.nema.org

Stabilized Maintenance

BSR C82.6-2015 (S202x), Standard for Lamp Ballasts - Ballasts for High-Intensity Discharge Lamps - Methods of Measurement (stabilized maintenance of ANSI C82.6-2015 (R2020))
This standard describes the procedures to be followed and the precautions to be taken in measuring performance of low-frequency ballasts (electromagnetic and electronic ballasts that operate at less than 400 Hz) for high-intensity discharge (HID) lamps. Deviations from the procedures given in this standard are permissible for production or other testing provided that the methods used give the results in substantial agreement with the method given herein. In case of doubt, reference shall be made to the specified methods to establish the validity of the results obtained by any alternate procedure.
Single copy price: $300.00
Obtain an electronic copy from: michael.erbesfeld@nema.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: June 2, 2025

NSF (NSF International)

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

Revision

BSR/NSF/CAN 61-202x (i195r1), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 61-2024)
This standard is intended to cover specific materials or products that come into contact with: drinking water, drinking water treatment chemicals, or both. The focus of the standard is evaluation of contaminants or impurities imparted indirectly to drinking water.
Single copy price: Free
Obtain an electronic copy from: https://standards.nsf.org/higherlogic/ws/public/download/79135/61i195r1%20-%20JC%20Memo%20%26%20Ballot.pdf
Send comments (copy psa@ansi.org) to: Amy Jump <ajump@nsf.org>

PMI (Project Management Institute)

18 Campus Boulevard, Suite 150, Newtown Square, PA 19073 | lorna.scheel@pmi.org, www.pmi.org

Revision

BSR/PMI 99-001-202X, The Standard for Project Management (revision of ANSI/PMI 99-001-2021)
The current edition of The Standard for Project Management needs to be updated to reflect the full value delivery landscape reflecting the view that projects are executed to deliver value and project teams can use a broad range of methods and approaches from traditional to cutting edge and innovative. The speed of change in the practice of project management necessitates the need to reflect the rapidly evolving practice of project management in all its current and future forms. The Standard needs to be updated to meet this maturation. A cover-to-cover revision is planned for continuous improvement and to address needed modifications.
Single copy price: Free
Obtain an electronic copy from: https://publiccomment.pmi.org
Send comments (copy psa@ansi.org) to: Lorna Scheel <lorna.scheel@pmi.org>

ULSE (UL Standards & Engagement)

1603 Orrington Ave, Suite 2000, Evanston, IL 60201 | Leslie.Malaki@ul.org, https://ulse.org/

New Standard

BSR/UL 3601-202x, Standard for Measuring and Reporting Circularity of Li-ion and Other Secondary Batteries (new standard)
The following topic for Proposed First Edition of the Standard for Measuring and Reporting Circularity of Li-ion and Other Secondary Batteries, UL 3601, is being recirculated.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Leslie Malaki <Leslie.Malaki@ul.org>

Comment Deadline: June 2, 2025

ULSE (UL Standards & Engagement)

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

Reaffirmation

BSR/UL 60745-2-17-2011 (R202x), UL Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-17: Particular Requirements for Routers and Trimmers (reaffirmation of ANSI/UL 60745-2-17-2011 (R2020))
Reaffirmation and continuance of the 3rd Edition of the Standard for Safety for Hand-Held Motor-Operated Electric Tools – Safety – Part 2-17: Particular Requirements for Routers and Trimmers, UL 60745-2-17. as an American National Standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: https://csds.ul.com/Home/ProposalsDefault.aspx.

ULSE (UL Standards & Engagement)

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

Reaffirmation

BSR/UL 60745-2-23-2015 (R202x), UL Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-23: Particular Requirements for Die Grinders and Small Rotary Tools (reaffirmation of ANSI/UL 60745-2-23 -2015 (R2020))
Reaffirmation and continuance of the 1st Edition of the Standard for Safety for Hand-Held Motor-Operated Electric Tools – Safety – Part 2-23: Particular Requirements for Die Grinders and Small Rotary Tools, UL 60745-2 -23, as an American National Standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: https://csds.ul.com/Home/ProposalsDefault.aspx.

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 109-202x, Standard for Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service, and Marine Use (revision of ANSI/UL 109-2020)
The following changes in requirements are being proposed: (1) Addition of requirement for fitting testing with all tube types; (2) Revise standard, where applicable, with respect to coverage of refrigerant fittings; (3) Updates to Standard to align with ULSE Style Manual.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable or 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/ProposalsAvailable

Comment Deadline: June 2, 2025

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 263-202x, Standard for Fire Tests of Building Construction and Materials (revision of ANSI/UL 263-2022)
1.1 These fire tests are applicable to assemblies of masonry units and to composite assemblies of structural materials for buildings, including bearing and other walls and partitions, columns, girders, beams, slabs, and composite slab and beam assemblies for floors and roofs. They are also applicable to other assemblies and structural units that constitute permanent integral parts of a finished building.
1.2 The classifications for building construction and materials are intended to register performance during the period of fire exposure and are not intended to be interpreted as having determined their acceptability for use after fire exposure.
1.3 These requirements are intended to evaluate the length of time that the types of assemblies specified in 1.1 will contain a fire or retain their structural integrity, or both, dependent upon the type of assembly involved, during a predetermined test exposure. The test evaluates the assembly's resistance to heat, and in some instances to a hose stream, while carrying an applied load, if the assembly is load bearing.
Single copy price: Free
Obtain an electronic copy from: Follow the instructions in the following website to create an account for access to CSDS: https://csds.ul.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/ProposalsAvailable

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 1283-202x, Standard for Safety for Electromagnetic Interference Filters (revision of ANSI/UL 1283-2020 (R2024))
(1) The Proposed Eighth Edition of UL 1283, the Standard for Electromagnetic Interference Filters, which includes new requirements for Open-type Facility Filters.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/ProposalAvailable
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalsAvailable

Comment Deadline: June 17, 2025

ULSE (UL Standards & Engagement)

12 Laboratory Drive, RTP, NC 27709 | sean.mcalister@ul.org, https://ulse.org/

Revision

BSR/UL 746F-202x, Standard for safety for Polymeric Materials - Flexible Dielectric Film Materials for Use in Printed Wiring Boards and Flexible Materials Interconnect Constructions (revision of ANSI/UL 746F-2023)
(1) Proposal to clarify UL 94 VTM test method in UL 746F.
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalsAvailable

Comment Deadline: June 17, 2025

ULSE (UL Standards & Engagement)

12 Laboratory Drive, RTP, NC 27709 | sean.mcalister@ul.org, https://ulse.org/

Revision

BSR/UL 746E-2023 (R202x), Standard for Safety for Polymeric Materials - Industrial Laminates, Filament Wound Tubing, Vulcanized Fibre, and Materials Used In Printed Wiring Boards (revision of ANSI/UL 746E-2023)
(1) Proposal to clarify UL 94 VTM test method in UL 746E
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalsAvailable

ULSE (UL Standards & Engagement)

12 Laboratory Drive, RTP, NC 27709 | sean.mcalister@ul.org, https://ulse.org/

Revision

BSR/UL 796-202x, Safety Standard for Printed Wiring Boards (revision of ANSI/UL 796-2023)
(1) Report from Task Group for Update Testing Coupon, UL 796 (Task Group #7); (2) Proposal to update multiple terms and definitions in Glossary, Section 2, of UL 796; (3) Proposal to update Bond Strength Testing at Nominal Thicknesses in Base Materials, Section 9, of UL 796; (4) Proposal to add missing sample thickness tolerance for UL/ANSI Type materials in Table 9.1 of UL 796; (5) Proposal to update alternate metal-clad base materials in Section 9.2 of UL 796; (6) Proposal to clarify conductor requirements in Section 10 of UL 796; (7) Proposal to clarify conductive coin size determination in Section 10.15 of UL 796; (8) Proposal to clarify sample fabrication process requirements in Section 12 of UL 796; (9) Proposal to clarify HDI PWB requirements in Section 17.4 and Table 19.2 of UL 796; (10) Proposal to clarify metal base PWB requirements in Section 20 of UL 796; (11) Proposal to clarify the test program for adding alternate manufacturing locations for UL 796; (12) Proposal to clarify requirements for embedded components in Table 22.9 of UL 796.
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalsAvailable

Comment Deadline: June 17, 2025

ULSE (UL Standards & Engagement)

12 Laboratory Drive, RTP, NC 27709 | sean.mcalister@ul.org, https://ulse.org/

Revision

BSR/UL 796F-202x, Standard for Safety Flexible Materials Interconnect Constructions (revision of ANSI/UL 796F -2023)
(1) Proposal to clarify FMIC construction type versus sub-category application in UL 796F; (2) Proposal to update multiple terms and definitions in Glossary, Section 6, of UL 796F; (3) Proposal to clarify UL 94 VTM test method in UL 796F; (4) Proposal to clarify Polyimide ANSI-like flammability program requirements in 8.2 in UL 796F; (5) Proposal to clarify metal requirements for conductors in UL 796F; (6) Proposal to clarify multilayer constructions and silver conductors requirements in 8.4 of UL 796F; (7) Proposal to clarify conductive coin size determination in 8.4.22A of UL 796F; (8) Proposal to clarify flammability testing for cover material, solder resist, and plugged hole materials clarification in Sections 8.6, 8.7, and 8.8 of UL 796F; (9) Proposal to clarify HDI material in 8.9.2 in UL 796F to include reference to build-up materials; (10) Proposal to clarify alternate stiffener requirements in Section 8.10 of UL 796F; (11) Proposal to clarify construction type and sub-category application in FMIC Constructions, Parameter Profile Indices and Tests in Sections 9, 11, and 12 of UL 796F.
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions at the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalsAvailable

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 1709-202x, Standard for Rapid Rise Fire Tests of Protection Materials for Structural Steel (revision of ANSI/UL 1709-2024)
1.1 This Standard describes a full-scale test method for measuring the thermal resistance of protective materials, systems, or constructions to rapid-temperature-rise fires.
1.2 Part 1 of this Standard describes the furnace calibration and furnace control requirements.
Single copy price: Free
Order from: Follow the instructions in the following website to create an account for access to CSDS: https://csds.ul.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/ProposalsAvailable

Comment Deadline: June 17, 2025

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 1971-202x, Standard for Tactile Signaling Devices for Emergency and Fire Alarm Signaling Systems (revision of ANSI/UL 1971-2018 (R2024))
1.1 This Standard covers tactile signaling devices for emergency and fire protective signaling systems. The devices and/or systems covered by this standard are suitable for indoor use in a controlled environment as indicated in the product marking. These devices are to be used in accordance with the requirements of: (a) In Canada, in accordance with CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations; and with ULC-S524, Standard for Installation of Fire Alarm Systems; (b) In the United States, in accordance with the National Electrical Code, NFPA 70, and the National Fire Alarm and Signaling Code, NFPA 72. 1.2 These requirements are to evaluate tactile signaling devices. These appliances are designed to alert occupants or inhabitants within the protected area. 1.3 This standard does not apply to: (a) Visual signaling devices intended for public or private mode fire alarm signaling. These devices are covered by UL 1638/ULC 526, Visible Signaling Devices for Fire Alarm and Signaling Systems, Including Accessories; (b) Emergency lighting, electric signs, or EXIT signs; (c) Luminous Egress Path Marking Systems; (d) Equipment intended for installation in Classified (hazardous) Locations, as defined in NFPA 70.
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalsAvailable

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 2684-202x, Standard for Video and Thermal Image Detectors for Fire Alarm Systems (revision of ANSI/UL 2684-2024)
This Standard sets forth requirements for video and thermal image fire detectors and accessories for non-dwelling units, including mechanical guards to be employed in indoor locations (for video and thermal) and outdoor (for thermal) in accordance with the following:
(a) In the United States:
(1) National Fire Alarm and Signaling Code, NFPA 72;
(2) National Electrical Code, NFPA 70.
(b) In Canada:
(1) Standard for the Installation of Fire Alarm Systems, ULCS S524;
(2) National Building Code of Canada; and
(3) National Fire Code of Canada.
Single copy price: Free
Order from: csds.ul.com
Send comments (copy psa@ansi.org) to: Same

Project Withdrawn

ISEA (ASC Z87) (International Safety Equipment Association)

1101 Wilson Blvd, Suite 1425, Arlington, VA 22209 | ajarrell@safetyequipment.org, www.safetyequipment.org

BSR Z87.62-202x, Standard for Occupational and Educational Eye and Face Protection Devices for Preventing Exposures Caused by Sprays or Spurts of Blood or Body Fluids (revision of ANSI ISEA Z87.62-2021)
Send comments (copy psa@ansi.org) to: Hillary Woehrle <hwoehrle@safetyequipment.org>

Project Withdrawn

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

ISEA (International Safety Equipment Association)

1101 Wilson Blvd, Suite 1425, Arlington, VA 22209 | ajarrell@safetyequipment.org, www.safetyequipment.org

BSR/ISEA 102-1990 (R1998), Gas Detector Tube Units - Short Term Type for Toxic Gases and Vapors in Working Environments (revision of ANSI/ISEA 102-1990,)
Send comments (copy psa@ansi.org) to: Aimee Jarrell <ajarrell@safetyequipment.org>

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:

ISEA (International Safety Equipment Association)

1101 Wilson Blvd, Suite 1425, Arlington, VA 22209 | ajarrell@safetyequipment.org, www.safetyequipment.org

BSR/ISEA 103-202x, Classification and Performance Requirements for Chemical Protection Clothing (revision of ANSI/ISEA 103-2010)
Send comments (copy psa@ansi.org) to: Aimee Jarrell <ajarrell@safetyequipment.org>

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:

ISEA (International Safety Equipment Association)

1101 Wilson Blvd, Suite 1425, Arlington, VA 22209 | ajarrell@safetyequipment.org, www.safetyequipment.org

BSR/ISEA 212-202x, Occupational Source Control Face Coverings (new standard)
Send comments (copy psa@ansi.org) to: Diana Jones <djones@safetyequipment.org; tbrosnan@safetyequipment.org>

Final Actions on American National Standards

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

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

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

ANSI/ASHRAE Standard 41.4-2015 (R2025), Standard Method for Measuring the Proportion of Lubricant (reaffirmation of ANSI/ASHRAE Standard 41.4-2015) Final Action Date: 4/8/2025 | *Reaffirmation*

ASME (American Society of Mechanical Engineers)

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

ANSI/ASME B16.5-2025, Pipe Flanges and Flanged Fittings NPS 1/2 through NPS 24 Metric/Inch Standard (revision of ANSI/ASME B16.5-2021) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME B30.3-2025, Tower Cranes (revision of ANSI/ASME B30.3-2019) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME B30.14-2025, Side Boom and Rotating Pipelayers (revision of ANSI/ASME B30.14-2015 (R2021)) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME B30.27-2025, Material Placement Systems (revision of ANSI/ASME B30.27-2019) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME B31.8-2025, Gas Transmission and Distribution Piping Systems (revision of ANSI/ASME B31.8-2022) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME BPVC Section VIII-2025, Rules for Construction of Pressure Vessels (revision of ANSI/ASME BPVC Section VIII-2023) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME BPVC Section X-2025, Fiber-Reinforced Plastic Pressure Vessels (revision of ANSI/ASME BPVC Section X -2023) Final Action Date: 4/10/2025 | *Revision*

ANSI/ASME BPVC Section XI-2025, Rules for Inservice Inspection of Nuclear Reactor Facility Components (revision of ANSI/ASME BPVC Section XI-2023) Final Action Date: 4/10/2025 | *Revision*

AWWA (American Water Works Association)

6666 W. Quincy Avenue, Denver, CO 80235 | mrohr@awwa.org, www.awwa.org

ANSI/AWWA B601-2025, Sodium Metabisulfite (revision of ANSI/AWWA B601-2017) Final Action Date: 4/4/2025 | *Revision*

ANSI/AWWA B602-2025, Copper Sulfate (revision of ANSI/AWWA B602-2017) Final Action Date: 4/4/2025 | *Revision*

CTA (Consumer Technology Association)

1919 South Eads Street, Arlington, VA 22202 | cakers@cta.tech, www.cta.tech

ANSI/CTA 2068 (R2025), Definitions and Characteristics of Consumer Technologies for Monitoring Physical and Psychosocial Stress (reaffirmation of ANSI/CTA 2068-2020) Final Action Date: 4/14/2025 | *Reaffirmation*

ANSI/CTA 2074 (R2025), Intensity Metrics: Physical Activity Monitoring (reaffirmation of ANSI/CTA 2074-2020) Final Action Date: 4/14/2025 | *Reaffirmation*

ECIA (Electronic Components Industry Association)

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

ANSI/EIA 469-F-2025, Test Method for Destructive Physical Analysis (DPA) of Ceramic Monolithic Capacitors (revision of ANSI/EIA 469-E-2017) Final Action Date: 4/8/2025 | *Revision*

EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | cearl@esda.org, https://www.esda.org

ANSI/EOS ESD STM97.1-2025, ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Footwear/Flooring - Resistance Measurement in Combination with a Person (revision of ANSI/ESD STM97.1-2015) Final Action Date: 4/14/2025 | *Revision*

FCI (Fluid Controls Institute)

1300 Sumner Avenue, Cleveland, OH 44115 | fci@fluidcontrolsinstitute.org, www.fluidcontrolsinstitute.org

ANSI/FCI 4-1-2025, Pressure Regulator Hydrostatistics Shell Test Method (revision of ANSI/FCI 4-1-2014 (R2019)) Final Action Date: 4/14/2025 | *Revision*

ANSI/FCI 85-1-2025, Standard for Production and Performance Testing of Steam Traps (revision of ANSI/FCI 85-1-2019) Final Action Date: 4/14/2025 | *Revision*

HL7 (Health Level Seven)

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

ANSI/HL7 V26 IG CCHD, R1-2020 (R2025), HL7 Version 2.6 Implementation Guide: Newborn Screening for Critical Congenital Heart Defects (CCHD), Release 1 (reaffirmation and redesignation of ANSI/HL7 V26 IG CCHD, R1-2020) Final Action Date: 4/10/2025 | *Reaffirmation*

ANSI/HL7 V26 IG EHDI, R1-2020 (R2025), HL7 Version 2.6 Implementation Guide: Early Hearing Detection and Intervention (EHDI), Release 1 (reaffirmation and redesignation of ANSI/HL7 V26 IG EHDI, R1-2020) Final Action Date: 4/10/2025 | *Reaffirmation*

IEEE (Institute of Electrical and Electronics Engineers)

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

ANSI/IEEE C37.109-2025, Guide for the Protection of Shunt Reactors (new standard) Final Action Date: 4/8/2025 | *New Standard*

ANSI/IEEE C57.12.29-2025, Standard for Pad-Mounted Equipment - Enclosure Integrity for Coastal Environments (new standard) Final Action Date: 4/14/2025 | *New Standard*

NEMA (ASC C37) (National Electrical Manufacturers Association)

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

ANSI C37.50-2018 (R2025), Low-Voltage AC Power Circuit Breakers Used in Enclosures - Test Procedures (reaffirmation of ANSI C37.50-2018) Final Action Date: 4/10/2025 | *Reaffirmation*

ANSI C37.51-2018 (R2025), Metal-Enclosed Low-Voltage AC Power Circuit Breaker Switchgear Assemblies - Conformance Test Procedures (reaffirmation of ANSI C37.51-2018) Final Action Date: 4/10/2025 | *Reaffirmation*

ANSI C37.58-2019 (R2025), Indoor AC Medium-Voltage Switches for Use in Metal-Enclosed Switchgear - Conformance Test Procedures (reaffirmation of ANSI C37.58-2019) Final Action Date: 4/10/2025 | *Reaffirmation*

NEMA (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 | and_moldoveanu@nema.org, www.nema.org

ANSI/SM 31000-4-2025, Electrical Submeter - Additional Measurements Accuracy (new standard) Final Action Date: 4/14/2025 | *New Standard*

NSF (NSF International)

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

ANSI/NSF 170-2025 (i37r1), Glossary of Food Equipment Terminology (revision of ANSI/NSF 170-2024) Final Action Date: 4/4/2025 | *Revision*

PEARL (Professional Electrical Apparatus Reconditioning League)

2551 Lake Road, Ontario, NY 14519 | michelle@brakemarketing.com, www.pearl1.org

ANSI/PEARL EERS-2025, Electrical Equipment Reconditioning Standard for Electrical Apparatus and Equipment Used in Commercial and Industrial Applications (revision of ANSI/PEARL EERS-2018) Final Action Date: 4/8/2025 | *Revision*

ULSE (UL Standards & Engagement)

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

ANSI/UL 987-2020 (R2025), Standard for Stationary and Fixed Electric Tools (reaffirmation of ANSI/UL 987-2020) Final Action Date: 4/9/2025 | *Reaffirmation*

ANSI/UL 1447-2020 (R2025), UL Standard for Safety for Electric Lawn Mowers (reaffirmation of ANSI/UL 1447-2020) Final Action Date: 4/9/2025 | *Reaffirmation*

ANSI/UL 8800-2025, Standard for Safety for Horticultural Lighting Equipment and Systems (revision of ANSI/UL 8800 -2023) Final Action Date: 3/18/2025 | *Revision*

Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

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

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

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

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

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

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

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

ANSI Accredited Standards Developer

DirectTrustTM - DirectTrust.org, Inc.

DS2023_06 - Interoperable Secure Cloud Fax (ISCF)

Are you interested in contributing to the development and maintenance of the Interoperable Secure Cloud Fax Consensus Body to enable exchange of authenticated, secured documents via facsimile containing health and other sensitive information to known trusted recipients?
DirectTrust is currently seeking members in the following categories:

- Healthcare Sector
- Government Sector
- Payer Sector
- Consumer Sector
- Socialcare Sector
- General Interest and Advocacy
- Telecommunications Sector

If you are interested in joining the DS2023_06 Interoperable Secure Cloud Fax Consensus Body, contact Standards@DirectTrust.org.

ANSI Accredited Standards Developer

DirectTrustTM - DirectTrust.org, Inc.

DS2022_05 - Privacy-Enhancing Health Record Locator Service Ecosystem (PEHRLS)

Are you interested in contributing to the development of a standard for a privacy-enhancing record locator service ecosystem?
This consensus body is currently seeking voting members in the following categories:

- Government Sector
- Payer Sector
- Consumer Sector
- General Interest and Advocacy Sector
- Socialcare Sector

If you are interested in joining the DS2022_05 - Privacy-Enhancing Health Record Locator Service Ecosystem (PEHRLS) Consensus Body, contact Standards@DirectTrust.org.

ANSI Accredited Standards Developer

DirectTrustTM - DirectTrust.org, Inc.

DS2021_04 - Information Exchange for Human Service (IX4HS)

Are you interested in enhancing secure information exchange between healthcare and Human Services? The IX4HS Consensus Body is shaping the future of secure, seamless communication for better care coordination and service delivery.
This consensus body is currently seeking voting members in the following categories:

- Consumer Sector
- Government Sector
- Information Technology Sector
- Payer Sector
- Healthcare Sector

If you are interested in joining the DS2021_04- Information Exchange for Human Service (IX4HS) Consensus Body, contact Standards@DirectTrust.org.

ANSI Accredited Standards Developer

DirectTrustTM - DirectTrust.org, Inc.

DS2020_03 - Event Notifications via the Direct Standard(R)

Are you interested in contributing to the development and maintenance of an implementation guide for actors in the healthcare ecosystem who will use the Direct Standard(R) for the communication of various transactions in support of Encounter and Event Notifications?

DirectTrust is currently seeking members in the following categories:
- Consumer Sector
- Government Sector
- Social Care Sector
- Payer Sector
- Healthcare Sector

If you are interested in joining the DS2020_03- Event Notifications via the Direct Standard(R) Consensus Body, contact Standards@directtrust.org

ABYC (American Boat and Yacht Council)

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

BSR/ABYC P-1-202x, Installation of Exhaust Systems for Propulsion and Auxiliary Engines (revision of ANSI/ABYC P-1 -2019)
Interest Categories: soliciting for membership categories: Manufacturer - Accessory; Insurance/Survey

AHRI (Air-Conditioning, Heating, and Refrigeration Institute)

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 | jyeh2@ahrinet.org, www.ahrinet.org

BSR/AHRI Standard 1250-202x (I-P), Performance Rating of Walk-in Coolers and Freezers (revision of ANSI/AHRI Standard 1250 (I-P)-2014)

AHRI (Air-Conditioning, Heating, and Refrigeration Institute)

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 | jyeh2@ahrinet.org, www.ahrinet.org

BSR/AHRI Standard 1251-202x (SI), Performance Rating of Walk-in Coolers and Freezers (revision of ANSI/AHRI Standard 1251 (SI)-2014)

ASA (ASC S12) (Acoustical Society of America)

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

BSR/ASA S12.65-2006 (R202x), Rating Noise with Respect to Speech Interference (reaffirmation of ANSI/ASA S12.65-2006 (R2020))

ASA (ASC S12) (Acoustical Society of America)

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

BSR/ASA S12.67-2008 (R202x), Pre-Installation Airborne Sound Measurements and Acceptance Criteria of Shipboard Equipment (reaffirmation of ANSI/ASA S12.67-2008 (R2020))

ASA (ASC S12) (Acoustical Society of America)

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

BSR/ASA S12.68-2007 (R202x), Methods of Estimating Effective A-Weighted Sound Pressure Levels When Hearing Protectors Are Worn (reaffirmation of ANSI/ASA S12.68-2007 (R2020))

ASA (ASC S12) (Acoustical Society of America)

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

BSR/ASA S12.69-2010 (R202x), Procedure for Testing Railroad Horns ex situ (reaffirmation of ANSI/ASA S12.69 -2010 (R2020))

ASA (ASC S12) (Acoustical Society of America)

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

BSR/ASA S12.70-2016 (R202x), Criteria for Evaluating Speech Privacy in Healthcare Facilities (reaffirmation of ANSI/ASA S12.70-2016 (R2020))

ASA (ASC S12) (Acoustical Society of America)

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

BSR/ASA S12.76-2017 (R202x), Methods for Measurement of Supersonic Jet Noise from Uninstalled Military Aircraft Engines (reaffirmation of ANSI/ASA S12.76-2017 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S2.46-1989 (R202x), Characteristics to be Specified for Seismic Transducers (reaffirmation of ANSI/ASA S2.46-1989 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S2.61-1989 (R202x), Guide to the Mechanical Mounting of Accelerometers (reaffirmation of ANSI/ASA S2.61-1989 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S2.70-2006 (R202x), Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand (reaffirmation of ANSI/ASA S2.70-2006 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S2.71-1983 (R202x), Guide to the Evaluation of Human Exposure to Vibration in Buildings (reaffirmation of ANSI/ASA S2.71-1983 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S2.75-2017/Part 1 (R202x), Shaft Alignment Methodology, Part 1: General Principles, Methods, Practices, and Tolerances (reaffirmation of ANSI/ASA S2.75-2017/Part 1 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S2.75-2017/Part 2 (R202x), Shaft Alignment Methodology, Part 2: Vocabulary (reaffirmation of ANSI/ASA S2.75-2017/Part 2 (R2020))

ASA (ASC S2) (Acoustical Society of America)

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

BSR/ASA S12.75-2012 (R202x), Methods for the Measurement of Noise Emissions from High Performance Military Jet Aircraft (reaffirmation of ANSI/ASA S12.75-2012 (R2020))

ASABE (American Society of Agricultural and Biological Engineers)

2950 Niles Road, Saint Joseph, MI 49085 | walsh@asabe.org, https://www.asabe.org/

BSR/ASABE S652 MONYEAR-202x, Wind Loads on Circular Grain Bins (new standard)

ASC X9 (Accredited Standards Committee X9, Incorporated)

275 West Street, Suite 107, Annapolis, MD 21401 | ambria.frazier@x9.org, www.x9.org

BSR X9.100-111-202x, Check Endorsement (revision of ANSI X9.100-111-2018)

ASNT (American Society for Nondestructive Testing)

1201 Dublin Road, Suite G04, Columbus, OH 43215 | mthomas@asnt.org, www.asnt.org

BSR/ASNT CP-105-202x, Standard Topical Outlines for Qualification of Nondestructive Testing Personnel (revision of ANSI/ASNT CP-105-2024)

ASNT (American Society for Nondestructive Testing)

1201 Dublin Road, Suite G04, Columbus, OH 43215 | mthomas@asnt.org, www.asnt.org

BSR/ASNT CP-189-202x, Qualification and Certification of Nondestructive Testing Personnel (revision of ANSI/ASNT CP-189-2024)

ASNT (American Society for Nondestructive Testing)

1201 Dublin Road, Suite G04, Columbus, OH 43215 | mthomas@asnt.org, www.asnt.org

BSR/ASNT ILI-PQ-202x, In-Line Inspection Personnel Qualification and Certification Standard (revision of ANSI/ASNT ILI-PQ-2023)

AWS (American Welding Society)

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

BSR/AWS A5.2/A5.2M-202x, Specification for Carbon and Low Alloy Steel Rods for Oxyfuel Gas Welding (revision of ANSI/AWS A5.2/A5.2M-2018)

ECIA (Electronic Components Industry Association)

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

BSR/EIA 198-3-6-F-202x, Ceramic Dielectric Capacitors Classes I, II, III, and IV, Part III: Section 6: Axial-Leaded Capacitors, Conformally Coated and Molded Types (new standard)

FCI (Fluid Controls Institute)

1300 Sumner Avenue, Cleveland, OH 44115 | fci@fluidcontrolsinstitute.org, www.fluidcontrolsinstitute.org

BSR/FCI 15-1-202x, Standard for Production Testing of Pressure Regulators (revision of ANSI/FCI 15-1-2020)

NEMA (ASC C82) (National Electrical Manufacturers Association)

1812 N Moore Street, Arlington, VA 22209 | Connor.Grubbs@nema.org, www.nema.org

BSR C82.6-2015 (S202x), Standard for Lamp Ballasts - Ballasts for High-Intensity Discharge Lamps - Methods of Measurement (stabilized maintenance of ANSI C82.6-2015 (R2020))

NEMA (ASC C82) (National Electrical Manufacturers Association)

1812 N Moore Street, Arlington, VA 22209 | Connor.Grubbs@nema.org, www.nema.org

BSR C82.13-2020 (R202x), Standard for Lamp Ballasts - Definitions for Fluorescent Lamps and Ballasts (reaffirmation of ANSI C82.13-2020)

NSF (NSF International)

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

BSR/NSF 49-202x (r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2024)

NSF (NSF International)

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

BSR/NSF/CAN 61-202x (i195r1), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 61-2024)

VITA (VMEbus International Trade Association (VITA))

929 W. Portobello Avenue, Mesa, AZ 85210 | jing.kwok@vita.com, www.vita.com

BSR/VITA 47.2-202x, Class 2 Requirements for Environments, Design and Construction, Safety, and Quality for VITA 47 Plug-In Modules Dot Standard (revision of ANSI/VITA 47.2-2019)

VITA (VMEbus International Trade Association (VITA))

929 W. Portobello Avenue, Mesa, AZ 85210 | jing.kwok@vita.com, www.vita.com

BSR/VITA 47.3-202x, Class 3 Requirements for Environments, Design and Construction, Safety, and Quality for VITA 47 Plug-In Modules Dot Standard (revision of ANSI/VITA 47.3-2019)

American National Standards (ANS) Process

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

Where to find Procedures, Guidance, Interpretations and More…

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

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

www.ansi.org/essentialrequirements

• ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures):

www.ansi.org/standardsaction

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

www.ansi.org/sdoaccreditation

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

www.ansi.org/asd

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

www.ansi.org/asd

• American National Standards Key Steps:

www.ansi.org/anskeysteps

• American National Standards Value:

www.ansi.org/ansvalue

• ANS Web Forms for ANSI-Accredited Standards Developers:

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

• Information about standards Incorporated by Reference (IBR):

https://ibr.ansi.org/

• ANSI - Education and Training:

www.standardslearn.org

American National Standards Under Continuous Maintenance

The ANSI Essential Requirements: Due Process Requirements for American National Standards provides two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.7.1) and continuous maintenance (see clause 4.7.2). Continuous maintenance is defined as follows:

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

AAMI (Association for the Advancement of Medical Instrumentation)

AARST (American Association of Radon Scientists and Technologists)

AGA (American Gas Association)

AGSC (Auto Glass Safety Council)

ASC X9 (Accredited Standards Committee X9, Incorporated)

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

ASME (American Society of Mechanical Engineers)

ASTM (ASTM International)

GBI (Green Building Initiative)

HL7 (Health Level Seven)

Home Innovation (Home Innovation Research Labs)

IES (Illuminating Engineering Society)

ITI (InterNational Committee for Information Technology Standards)

MHI (Material Handling Industry)

NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)

NCPDP (National Council for Prescription Drug Programs)

NEMA (National Electrical Manufacturers Association)

NFRC (National Fenestration Rating Council)

NISO (National Information Standards Organization)

NSF (NSF International)

PHTA (Pool and Hot Tub Alliance)

RESNET (Residential Energy Services Network, Inc.)

SAE (SAE International)

TCNA (Tile Council of North America)

TIA (Telecommunications Industry Association)

TMA (The Monitoring Association)

ULSE (UL Standards & Engagement)

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

ANSI-Accredited Standards Developers (ASD) Contacts

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

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

ORDERING INSTRUCTIONS

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

ISO Standards

Additive manufacturing (TC 261)

ISO/ASTM DIS 52951, Additive Manufacturing - Data - Data packages for AM parts - 6/28/2025, $119.00

Aircraft and space vehicles (TC 20)

ISO/DIS 8913, Aerospace - Lightweight polytetrafluoroethylene (PTFE) metallic reinforced hose assemblies, classification 21 000 kPa (3 000 psi) and 204 °C (400 °F) - Procurement specification - 6/30/2025, $82.00

ISO/DIS 21384-3, Unmanned aircraft systems - Part 3: Operational procedures - 6/29/2025, $119.00

Corrosion of metals and alloys (TC 156)

ISO/DIS 16364, Corrosion of Metals and Alloys - Guidelines for Galvanic Corrosion Control - 7/3/2025, $67.00

Earth-moving machinery (TC 127)

ISO/DIS 21815-5, Earth-moving machinery - Collision warning and avoidance - Part 5: Risk area and risk level for other forms of motion - 6/30/2025, $125.00

Essential oils (TC 54)

ISO/DIS 21099, Essential oil of rockrose labdanum (Cistus ladanifer L.) - 6/28/2025, $40.00

Fire safety (TC 92)

ISO/DIS 13784-1, Reaction to fire test for sandwich panel building systems - Part 1: Small room test - 6/5/2025, $98.00

Fluid power systems (TC 131)

ISO/DIS 7986, Hydraulic fluid power - Sealing devices - Standard test methods to assess the performance of rod seals used in oil hydraulic reciprocating applications - 6/29/2025, $88.00

Industrial trucks (TC 110)

ISO/DIS 3691-1, Industrial trucks - Safety requirements and verification - Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks - 7/3/2025, $155.00

ISO/DIS 23308-4, Energy efficiency of industrial trucks - Test methods - Part 4: Variable-reach rough-terrain trucks - 7/3/2025, $46.00

Information and documentation (TC 46)

ISO/DIS 999, Information and documentation - Guidelines for the content, organization and presentation of indexes - 6/27/2025, $112.00

Non-destructive testing (TC 135)

ISO/DIS 12716, Non-destructive testing - Acoustic emission testing - Vocabulary - 6/28/2025, $67.00

Other

ISO/DIS 25712, Chemicals for the leather tanning industry - Determination of the total content of melamine - 6/26/2025, $58.00

Petroleum products and lubricants (TC 28)

ISO/DIS 3405, Petroleum and related products from natural or synthetic sources - Determination of distillation characteristics at atmospheric pressure - 6/27/2025, $112.00

Plastics (TC 61)

ISO/DIS 8810, Plastics - Determination of residual peroxide - Gas chromatography method - 6/30/2025, $62.00

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

ISO/DIS 4437-1, Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 1: General - 6/28/2025, $88.00

ISO/DIS 4437-2, Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 2: Pipes - 6/29/2025, $88.00

ISO/DIS 4437-3, Plastics piping systems for the supply of gaseous fuels - Polyethylene (PE) - Part 3: Fittings - 6/29/2025, $98.00

Road vehicles (TC 22)

ISO/DIS 17978-1, Road vehicles - Service-oriented vehicle diagnostics (SOVD) - Part 1: General information, definitions, rules and basic principles - 6/30/2025, $62.00

ISO/DIS 17978-2, Road vehicles - Service-oriented vehicle diagnostics (SOVD) - Part 2: Use cases definition - 6/30/2025, $67.00

Rubber and rubber products (TC 45)

ISO/DIS 15825, Rubber compounding ingredients - Carbon black - Determination of aggregate size distribution by disc centrifuge photosedimentometry - 6/13/2025, $71.00

ISO/DIS 28641, Rubber compounding ingredients - Organic chemicals - General test methods - 7/3/2025, $125.00

Security (TC 292)

ISO/DIS 28022, Security and resilience — Security management systems — Guidelines on security management system (SMS) processes - 6/29/2025, $88.00

Small tools (TC 29)

ISO/DIS 6789-1, Assembly tools for screws and nuts - Hand torque tools - Part 1: Requirements and methods for design conformance testing and quality conformance testing: minimum requirements for declaration of conformance - 6/28/2025, $77.00

Steel and aluminium structures (TC 167)

ISO/DIS 20895, Welded joints performance for seismic steel structures - 6/28/2025, $88.00

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

ISO/DIS 24351, Technical product documentation (TPD) - General requirements of the construction of three-dimensional models for mechanical products - 6/29/2025, $93.00

Textiles (TC 38)

ISO/DIS 105-C09, Textiles - Tests for colour fastness - Part C09: Colour fastness to domestic and commercial laundering - Oxidative bleach response using a non-phosphate reference detergent incorporating a low temperature bleach activator - 7/3/2025, $53.00

ISO/DIS 25086-1, Textiles - Determination of the snagging resistance of fabrics - Part 1: Mace test method - 7/3/2025, $53.00

Thermal insulation (TC 163)

ISO/DIS 17738-4, Thermal insulation products - Exterior insulation and finish systems (EIFS) - Part 4: Site Verification - 7/3/2025, $82.00

Tobacco and tobacco products (TC 126)

ISO 6080:2024/DAmd 1, - Amendment 1: Tobacco heating systems - Vocabulary - Amendment 1 - 6/30/2025, $33.00

ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 23167, Information technology - Cloud computing - Common technologies and techniques - 6/27/2025, $125.00

ISO/IEC DIS 27565.2, Information security, cybersecurity and privacy protection - Guidelines on privacy preservation based on zero-knowledge proofs - 4/21/2025, $107.00

ISO/IEC DIS 29151.2, Information security, cybersecurity and privacy protection - Controls and guidance for personally identifiable information protection - 1/10/2025, $119.00

ISO/IEC DIS 28033-4, Information Security - Fully homomorphic encryption - Part 4: Mechanisms for arithmetic based on look-up table evaluation - 7/3/2025, $107.00

IEC Standards

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

46A/1723/CDV, IEC 61196-1-305 ED2: Coaxial communication cables - Part 1-305: Mechanical test methods - Solderability and resistance to soldering, 07/04/2025

Capacitors and resistors for electronic equipment (TC 40)

40/3220/FDIS, IEC 60384-14/AMD1 ED5: Amendment 1 - Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains, 05/23/2025

Electric cables (TC 20)

20/2231/CDV, IEC 60287-3-3 ED2: Electric cables - Calculation of the current rating - Part 3-3: Sections on operating conditions - Cables crossing external heat sources, 07/04/2025

20/2241/NP, PNW 20-2241 ED1: Test method for pool fire / Hydro Carbon Fire for cables of rated voltage from 250 V and up to and including 30 kV, 07/04/2025

Electric road vehicles and electric industrial trucks (TC 69)

69/1046(F)/FDIS, IEC 62840-2 ED2: Electric vehicle battery swap system - Part 2: Safety requirements, 05/02/2025

Electric traction equipment (TC 9)

9/3212/FDIS, IEC 63341-1 ED1: Railway applications - Hydrogen and fuel cell systems for rolling stock - Part 1: Fuel cell power system, 05/23/2025

Electrical accessories (TC 23)

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

23K/122/NP, PNW 23K-122 ED1: Energy Efficiency - Customer Energy Management Systems - Part 3: Energy Manager, 07/04/2025

Electrical equipment in medical practice (TC 62)

62B/1381/CDV, IEC 62570 ED2: Standard practice for marking medical devices and other items for safety in the magnetic resonance environment, 07/04/2025

62C/945/FDIS, IEC 63322 ED1: Security of ME equipment containing high-activity sealed radioactive sources, 05/23/2025

Electrical installations of buildings (TC 64)

64/2749/CDV, IEC 60364-7-751 ED1: Low-voltage electrical installations - Part 7-751: Requirements for special installations or locations - Low voltage generating sets, 07/04/2025

Electroacoustics (TC 29)

29/1202/CD, IEC 61094-2 ED3: Electroacoustics - Measurement microphones - Part 2: Primary method for pressure calibration of laboratory standard microphones by the reciprocity technique, 06/06/2025

29/1198/CDV, IEC 61094-9 ED1: Electroacoustics - Measurement microphones - Part 9: Specifications for transfer standard microphones, 07/04/2025

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

48B/3155/CDV, IEC 61076-8-110 ED1: Connectors for electrical and electronic equipment - Product requirements- Part 8-110: Power connectors - Detail specification for 2P 300 A 1 000 V plus 2P 5 A 50 V rectangular housing shielded connectors with IP65/IP68 degree of protection when mated and locked, and IPXXB when unmated, 07/04/2025

Electrostatics (TC 101)

101/734/DTS, IEC TS 61340-5-6 ED1: Electrostatics - Part 5-6: Protection of electronic devices from electrostatic phenomena - Process assessment techniques, 06/06/2025

Environmental conditions, classification and methods of test (TC 104)

104/1106/FDIS, IEC 60068-2-75/AMD1 ED2: Amendment 1 - Environmental testing - Part 2-75: Tests - Test Eh: Hammer tests, 05/23/2025

Fibre optics (TC 86)

86C/1971/CD, IEC 62343/AMD1 ED3: Amendment 1 - Dynamic modules - Generic specification, 06/06/2025

86B/5030(F)/FDIS, IEC 63267-3-61 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector optical interfaces for enhanced macrobend multimode fibres - Part 3-61: Connector parameters of physically contacting 50 µm core diameter fibres - Non-angled 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrules for reference connection applications, 05/02/2025

86B/5037(F)/FDIS, IEC 63267-3-81 ED1: Fibre optic interconnecting devices and passive components - Connector optical interfaces for enhanced Macro bend multimode fibre - Part 3-81: Connector parameters of physically contacting 50 µm core diameter fibres - Non-angled polyphenylene sulphide rectangular ferrules with a single row of 12, 8, 4, or 2 fibres for reference connector applications, 05/09/2025

Fuel Cell Technologies (TC 105)

105/1115/NP, PNW 105-1115 ED1: Fuel cell technologies - Part X-XXX: Test methods - bipolar plate for PEFC, 07/04/2025

105/1116/NP, PNW 105-1116 ED1: Fuel cell technologies - Part X-XXX: Test methods - membrane electrode assembly for PEFC, 07/04/2025

High-voltage testing techniques (TC 42)

42/455/CDV, IEC 62475 ED2: High-current test techniques - Definitions and requirements for test currents and measuring systems, 07/04/2025

Laser equipment (TC 76)

76/769/CD, ISO TS 19818-2 ED1: Eye and face protection - Protection against laser radiation - Part 2: Guidance on the selection and use of laser eye and face protection related to ISO 19818-1, 06/06/2025

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

113/898/DTS, IEC TS 62565-4-3 ED1: Nanomanufacturing - Product specification - Part 4-3: Nanophotonic products - Blank detail specification: quantum dot enabled light emitting diodes, 06/06/2025

113/899/DTS, IEC TS 62607-6-27 Nanomanufacturing - Key control characteristics - Part 6-27: Graphene-related products - Field-effect mobility for layers of two-dimensional materials: field-effect transistor method, 06/06/2025

113/897/DTS, IEC TS 62607-6-28 Nanomanufacturing - Key control characteristics - Part 6-28: Graphene-related products - Number of layers for graphene films on a substrate: Raman spectroscopy, 06/06/2025

113/900/DTS, IEC TS 62607-6-35 ED1: Nanomanufacturing - Key control characteristics - Part 6-35: Graphene-related products - Density: free-pouring, tapping and compressing method, 06/06/2025

Nuclear instrumentation (TC 45)

45/995/CDV, IEC 63048-1 ED1: Mobile Remotely Controlled Systems (MRCS) for nuclear and radiological applications - Particular requirements for ground surveillance, 07/04/2025

Overhead lines (TC 11)

11/315/CD, IEC 61284 ED3: Overhead lines - Requirements and tests for fittings, 06/06/2025

Performance of household electrical appliances (TC 59)

59K/411/CDV, IEC/ASTM 63470 ED1: Cooking fume extractors - Methods for measuring the capture efficiency, 07/04/2025

Piezoelectric and dielectric devices for frequency control and selection (TC 49)

49/1493/CDV, IEC 63041-2 ED2: Piezoelectric sensors - Part 2: Chemical and biochemical sensors, 07/04/2025

Power capacitors (TC 33)

33/721/FDIS, IEC 60931-1 ED3: Shunt power capacitors of the non-self-healing type for AC systems having a rated voltage up to and including 1 000 V - Part 1: General, 05/23/2025

Power electronics (TC 22)

22G/516/CD, IEC 61800-5-1/AMD1 ED3: Amendment 1 - Adjustable speed electrical power drive systems - Part 5-1: Safety requirements - Electrical, thermal and energy, 07/04/2025

Printed Electronics (TC 119)

119/541/FDIS, IEC 62899-203-2 ED1: Printed electronics - Part 203-2: Materials - Semiconductor Ink- Space charge limited mobility measurement in printed organic semiconductive layers, 05/23/2025

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

116/875(F)/CDV, IEC 62841-1 ED2: Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 1: General requirements, 07/11/2025

Semiconductor devices (TC 47)

47F/510/NP, PNW 47F-510 ED1: Semiconductor devices - Micro-electromechanical devices - Part 57: RF MEMS Directional Coupler, 07/04/2025

Solar photovoltaic energy systems (TC 82)

82/2401/DTS, IEC TS 63126 ED2: Guidelines for qualifying PV modules, components and materials for operation at high temperatures, 06/06/2025

Standard voltages, current ratings and frequencies (TC 8)

8/1747/DTS, IEC TS 63222-4 ED1: Power quality management - Part 4: Harmonic analysis on public electric power network, 06/06/2025

8A/192/NP, PNW TS 8A-192 ED1: Generic EMT Simulation Models of Converter-based Power Plants for Power System Dynamic Analysis, 07/04/2025

Surface mounting technology (TC 91)

91/2026(F)/FDIS, IEC 60068-2-83 ED2: Environmental testing - Part 2-83: Tests - Test Tf: Solderability testing of electronic components for surface mounting devices (SMD) by the wetting balance method using solder paste, 05/02/2025

91/2027(F)/FDIS, IEC 60068-2-88 ED1: Environmental testing - Part 2-88: Tests - Test XD: Resistance of components and assemblies to liquid cleaning media, 05/02/2025

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

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

121A/678/CD, IEC TR 63649 ED1: Low-voltage switchgear and controlgear - Determination, verification and validation of safety related performance characteristic, 06/06/2025

(TC)

SyCSmartCities/374A/CD, IEC SRD 63347-2 ED1: Smart city use case collection and analysis - Management of Public Health Emergencies in Smart Cities - Part 2: Use Case Analysis, 06/06/2025

SyCSmartCities/375/NP, PNW TS SYCSMARTCITIES-375 ED1: Guidance on Multi-Functional Integrated Services “Street” Poles to support Smart Cities, 07/04/2025

Wearable electronic devices and technologies (TC 124)

124/309/CDV, IEC 63517 ED1: Wearable electronic textiles - Test methods for performance of heating products - Heating temperature and power consumption, 07/04/2025

ISO/IEC JTC 1, Information Technology

(TC)

JTC1-SC25/3307/CDV, ISO/IEC 11801-6/AMD1 ED1: Amendment 1 - Information technology - Generic cabling for customer premises - Part 6: Distributed building services, 07/04/2025

JTC1-SC41/502/FDIS, ISO/IEC 30186 ED1: Digital twin - Maturity model and guidance for a maturity assessment, 06/06/2025

Newly Published ISO & IEC Standards

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

ISO Standards

Aircraft and space vehicles (TC 20)

ISO 14622:2025, Space systems - Structural design - Loads and induced environment, $84.00

ISO 20188:2025, Space systems - Product assurance requirements for commercial satellites, $172.00

Geographic information/Geomatics (TC 211)

ISO 19116:2025, Geographic information - Positioning services, $259.00

Industrial automation systems and integration (TC 184)

ISO 3151-2:2025, Visualization elements of PLM-MES interface - Part 2: 3D error feedback in heavy industry, $230.00

Packaging (TC 122)

ISO 6590-1:2025, Packaging - Vocabulary - Part 1: Paper sacks, $172.00

Petroleum products and lubricants (TC 28)

ISO 8943:2025, Refrigerated light hydrocarbon fluids - Sampling of liquefied natural gas - Continuous and intermittent methods, $172.00

Plastics (TC 61)

ISO 13094:2025, Composites and reinforcement fibres - Carbon fibre reinforced plastics (CFRPs) and metal assemblies - Combined stress test, $84.00

Rubber and rubber products (TC 45)

ISO 1629:2025, Rubber and latices - Nomenclature, $56.00

Solid Recovered Fuels (TC 300)

ISO 3884:2025, 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, Tl, V, Zn), $287.00

Textiles (TC 38)

ISO 9073-6:2025, Nonwovens - Test methods - Part 6: Absorption, $84.00

Tobacco and tobacco products (TC 126)

ISO 21109:2025, Nicotine pouches - Test method for pH, $56.00

Tractors and machinery for agriculture and forestry (TC 23)

ISO 19932-3:2025, Equipment for crop protection - Knapsack sprayers - Part 3: Inspection of knapsack sprayers in use, $56.00

Transport information and control systems (TC 204)

ISO 12855:2025, Electronic fee collection - Information exchange between service provision and toll charging, $287.00

ISO 17423:2025, Intelligent transport systems - Application requirements and objectives, $201.00

ISO 25110:2025, Electronic fee collection - Interface definition for on-board account using an integrated circuit card (ICC), $201.00

ISO Technical Specifications

Fine ceramics (TC 206)

ISO/TS 5770:2025, Fine ceramics (advanced ceramics, advanced technical ceramics) - Relative method for determining thermal conductivity of ceramic coatings, $84.00

ISO/IEC JTC 1, Information Technology

ISO/IEC/IEEE 8802-1AS:2021/Amd 1:2025, - Amendment 1: Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part 1AS: Timing and synchronization for time-sensitive applications in bridged local area networks - Amendment 1: Inclusive terminology, $287.00

ISO/IEC TS 33060:2025, Information technology - Process assessment - Process assessment model for system life cycle processes, $259.00

IEC Standards

Automatic controls for household use (TC 72)

IEC 60730-2-14 Ed. 3.0 b:2025, Automatic electrical controls - Part 2-14: Particular requirements for electric actuators, $258.00

Electric traction equipment (TC 9)

IEC 62290-2 Ed. 3.0 b:2025, Railway applications - Urban guided transport management and command/control systems - Part 2: Functional requirements specification, $496.00

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

IEC 63171 Ed. 2.0 b:2025, Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests, $361.00

S+ IEC 63171 Ed. 2.0 en:2025 (Redline version), Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests, $613.00

Power electronics (TC 22)

IEC 61800-3 Ed. 4.0 b Cor.1:2025, Corrigendum 1 - Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods for PDS and machine tools, $0.00

IEC Technical Specifications

Safety of household and similar electrical appliances (TC 61)

IEC/TS 63576 Ed. 1.0 en:2025, Evaluation methods for protection against risk of fire in electric tumble dryers, $103.00

U.S. Technical Advisory Groups

ECCMA – Code Management Association

Combined U.S. TAG to ISO/TC 184, ISO/TC 184/SC 4 and ISO/TC 184/SC 5

Meeting Date: 2025-04-28, 9:00am-11:00am US Eastern

The ANSI Accredited U.S. Technical Advisory Group (U.S. TAG) to the Combined U.S. TAG to ISO/TC 184 – *Automation systems and integration*; ISO/TC 184/SC 4 – *Industrial data*; and ISO/TC 184/SC 5 – *Interoperability, integration, and architectures for enterprise systems and automation application* has announced a meeting on 2025-04-28, 9:00am-11:00am US Eastern. To learn more about the U.S. TAG and these committees, including upcoming events, please visit https://eccma.org/ustagmembership/

For more information or to participate, please contact the U.S. TAG Administrator, ECCMA, Sheron Koshy, sheron.koshy@eccma.org

International Organization for Standardization (ISO)

Call for International (ISO) Secretariat

ISO/TC 8/SC 25 – Maritime GHG reduction

Reply Deadline: May 2, 2025

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

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

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

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

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

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

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

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

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

Response Deadline: April 18, 2025

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

ISO/TC 154 operates under the following scope:

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

Development and maintenance of standards for
- *process identification (in the absence of development by other technical committees);*
- *data identification.*

Maintenance of the EDIFACT-Syntax.

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

Registration of Organization Names in the United States

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

Public Review

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

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

Proposed Foreign Government Regulations

Call for Comment

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

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

BSR/ASHRAE Addendum d
to ANSI/ASHRAE Standard 90.4-2022

Public Review Draft

Proposed Addendum d to Standard 90.4-2022, *Energy Standard for Data Centers*

First Public Review (February 2025)
(Draft Shows Proposed Changes to Current Standard)

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

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.
The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

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

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

Foreword

The current ASHRAE 90.4 MLCs, primarily developed in 2018, are based on air-cooled racks served by CHW CRAH units, served by an air-cooled chiller system. The CRAH units do not include air-economizers and the chiller plant is not water-cooled and does not include a waterside economizer. It is not a particularly efficient data center today, or when it was adopted, but it was a significant improvement over the previous MLCs and it was not particularly controversial, as most new data centers have little trouble meeting these MLCs.

Much has happened since the 90.4 MLCs were last updated in 2018, most notably the explosion of AI data centers with high density liquid-cooled racks. These liquid-cooled racks can be cooled at higher fluid temperatures than typical air-cooled racks, which presents the opportunity to improve the 90.4 MLCs. Meanwhile strides have also been made to improve the efficiency of mechanical systems serving air-cooled racks.

One option is to have separate MLCs for liquid-cooled vs. air-cooled racks, but this is problematic for a couple of reasons. Most data centers have a combination of air-cooled and liquid-cooled racks. In fact, most liquid-cooled racks have a combination of air-cooled and liquid-cooled server components. Data centers are also designed to have the flexibility to serve different fractions of air-cooled vs. liquid-cooled IT.

This addendum was developed by modeling several typical data center systems including these baselines:

a. An entirely air-cooled rack data center – based on the 2018 model with standard air-cooled chillers, PG25, and air economizers
b. An entirely liquid-cooled rack data center – including water-cooled chillers, cooling towers, water economizers, CDUs, PG25, constant TCS flow, and 95°F (35°C) TCS supply temperature.

The proposed MLCs in each climate zone are at about 100% higher (worse) than the higher of the two baselines. This shows that any combination of air-cooling and liquid-cooling should be able to achieve the proposed MLC. We have detailed analyses showing that the following system designs also meet these MLCs:

c. Baseline a with air-cooled chillers and dry coolers instead of air economizers.
d. Baseline b with the TCS supply temperature set to 75°F (24°C) and the water+sewer costs doubled compared to national average utility costs.
e. Baseline b with dry coolers instead of towers (zero water consumption) and 85°F (29°C) TCS supply temperature.
f. Baseline b with dry coolers instead of towers and variable TCS flow and 20% oversized dry coolers and 75°F (24°C) TCS supply temperature.
g. Baseline b with dry coolers instead of towers and variable TCS flow and a lower CDU heat exchanger approach (5°F (2.7°C) instead of 9°F (5°C)) and 75°F (24°C) TCS supply temperature.
h. Baseline b with air-cooled chillers and dry coolers and 75°F (24°C) TCS supply temperature.

Other systems that are expected to meet the proposed MLCs include:

- Air-cooled racks with direct evaporative cooling
- Liquid-cooled racks with immersion cooling
- Several proprietary systems including ones using liquid cooling refrigerant and phase change

Lastly, this section makes changes to both the previous standard and published Addendum g to Standard 90.4-2022.

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

Addendum d to 90.4-2022

Modify the definitions in Section 3 as follows:

3.2 Definitions

Liquid-cooled ITE: *ITE* that is cooled by a fluid other than air and that does not use server fans to flow air through the server. Common liquid cooling fluids include water, glycol, and refrigerant. Individual servers can be partially liquid-cooled and partially air-cooled, with server fans serving the air-cooled devices.

Air-cooled ITE: *ITE* that is cooled by the flow of air through the *ITE* equipment. Onboard server fans are typically used to move air through servers.

Modify the definitions in Section 3 as follows:

6.5 **Maximum Annualized Mechanical Load Component (Annualized MLC).** Annualized MLC shall be calculated using Equation 6.5. The resulting value shall be less than or equal to the value in Table 6.5, "Maximum *Annualized Mechanical Load Component (*Maximum *Annualized MLC)*".

$$\text{Annualized MLC} = \frac{\sum \text{MechE for } 25\%, 50\%, 75\%, 100\% \text{ ITE Design} + \text{MechW}_N - \text{HeatRec}_N}{\text{2.5 x 8760 hours x ITE design power}} + \sum_{N = 25,50,75,100} (\text{ServerFanAdjustment}_N)$$

Where

MechE = (*process cooling segment* + *process ventilation segment* + *process heating segment*); all in kWh, determined annually and according to the design, at that percentage of *ITE design.*

To show effect of heat recovery on these systems, see 6.5.2(d). To show the effect of on-site renewables on MLC, see 11.2.

MechW_N (kWh) = total annual makeup water cost and sewer cost of all mechanical *equipment* (e.g. cooling towers, evaporative coolers, humidifiers, water filtration or treatment *equipment*) at a constant *ITE* load of *N*% of the design *ITE* load. Sewer costs include blowdown from cooling towers, water filtration equipment, etc. This includes mechanical *equipment* serving *data center* electrical *equipment* (e.g., *UPS systems* and *transformers*). Water and sewer costs of

shared *systems* that serve both *data center spaces* and non-*data-center spaces* shall be prorated on an hourly capacity-weighted basis. Water and sewer costs shall be converted from utility billing units to kWh using the actual water, sewer and electricity utility rates for the site or using the following typical utility rates:

Makeup water: $3.86 / 1000 gallons ($1.02 / 1000 liters)

Sewer: $6.95 / 1000 gallons ($1.84 / 1000 liters)

Electricity: $0.11 / kWh

$ServerFanAdjustment_N$ = - 0.02 for that portion of the ITE load that is *liquid-cooled.* For the portion of ITE load that is *air-cooled* the adjustment = 0.00 if the supply air drybulb temperature (SAT) entering the ITE <= 77F. If SAT > 77F then the *air-cooled* ServerFanAdjustment = + 0.0014 * (SAT – 77F).

Informative Note: For example, if 80% of the ITE load is liquid-cooled and 20% is air-cooled and the SAT in a given load/weather bin is 90F, then the ServerFanAdjustment for that bin = - 0.8 * 0.02 + 0.2 * 0.0014 * (90-77) = -0.0124. [Offer same calculation in Celsius]

Table 6.5 Maximum Annualized Mechanical Load Component (Annualized MLC)

	New *data centers* and *additions* with Design ITE power > 1000~~300~~ kW				*Data centers* with Design ITE power <= 1000~~300~~ kW and *alterations* to *data centers* constructed before 1/1/2026			
Climate zones as listed in ASHRAE Std. 169	*Process heating segment*	*Process ventilation segment*	*Process cooling segment*	Maximum *annualized MLC*	*Process heating segment*	*Process ventilation segment*	*Process cooling segment*	Maximum *annualized MLC*
0A	0	0.01	~~0.28~~0.147	~~0.29~~0.157	0.01	0.01	~~0.35~~0.28	~~0.37~~0.30
0B	0	0.01	~~0.31~~0.150	~~0.32~~0.160	0.01	0.01	~~0.39~~0.31	~~0.41~~0.33
1A	0	0.01	~~0.29~~0.147	~~0.30~~0.157	0.01	0.01	~~0.35~~0.29	~~0.37~~0.31
1B	0	0.01	~~0.30~~0.150	~~0.31~~0.160	0.01	0.01	~~0.37~~0.30	~~0.39~~0.32
2A	0.01	0.01	~~0.26~~0.136	~~0.27~~0.146	0.01	0.01	~~0.33~~0.26	~~0.35~~0.28
3A	0.01	0	~~0.23~~0.117	~~0.24~~0.127	0.01	0.01	~~0.31~~0.23	~~0.33~~0.25
4A	0.01	0	~~0.20~~0.112	~~0.21~~0.122	0.02	0.01	~~0.30~~0.20	~~0.33~~0.23
5A	0.01	0	~~0.18~~0.107	~~0.19~~0.117	0.02	0.02	~~0.29~~0.18	~~0.34~~0.22
6A	0.01	0	~~0.18~~0.111	~~0.19~~0.121	0.02	0.02	~~0.27~~0.18	~~0.31~~0.22
2B	0.01	0	~~0.19~~0.170	~~0.20~~0.180	0.01	0.01	~~0.31~~0.19	~~0.33~~0.21
3B	0.01	0	~~0.19~~0.163	~~0.20~~0.173	0.01	0	~~0.30~~0.19	~~0.33~~0.20
4B	0.01	0	~~0.16~~0.122	~~0.17~~0.132	0.01	0.01	~~0.27~~0.16	~~0.29~~0.18
5B	0.01	0	~~0.16~~0.122	~~0.17~~0.132	0.02	0.02	~~0.26~~0.16	~~0.30~~0.20
6B	0.01	0	~~0.16~~0.103	~~0.17~~0.113	0.02	0.02	~~0.27~~0.16	~~0.31~~0.20
3C	0.01	0	~~0.16~~0.100	~~0.17~~0.110	0.01	0	~~0.26~~0.16	~~0.27~~0.17
4C	0.01	0	~~0.16~~0.100	~~0.17~~0.110	0.01	0	~~0.26~~0.16	~~0.27~~0.17
5C	0.01	0	~~0.16~~0.100	~~0.17~~0.110	0.01	0	~~0.26~~0.16	~~0.29~~0.17
7	0.01	0	~~0.16~~0.111	~~0.17~~0.110	0.03	0.03	~~0.26~~0.16	~~0.31~~0.22
8	0.01	0.01	~~0.14~~0.130	~~0.15~~0.150	0.03	0.04	~~0.25~~0.14	~~0.32~~0.21

6.5.1 **Annualized MLC for Partial Renovations**. For a facility being renovated where only one or two of the *annualized MLC* segments is being modified, compliance requirements in Table 6.5 apply only to the segments being modified. Trade-offs are allowed among *process cooling*, *process heating*, and *process ventilation segment* values to meet the aggregate requirement of only those *annualized MLC* segments involved in the project's scope.

6.5.2 Annualized MLC Calculation Compliance Requirements:

a. Weather data shall be taken exclusively from the NSRB Typical Meteorological Year Version (TMY3) file for a site with location and altitude nearest the data center site.

Informative Note*:* Some *bins* will contain more annual hours than other *bins*, and so are proportionally factored into the model's annual results.

b. Weather data shall be divided into calculation *bins* with a maximum 2°F (1°C) increment. *Systems* using an evaporation process will use wet-bulb with a mean coincident dry-bulb temperature for creating the *bins*. *Systems* with a non-evaporative process shall use dry-bulb temperature with mean coincident ~~wet bulb~~ moisture ratio for creating the *bins*. Full hourly calculations (using 8760 *bins*, each of one hour) are also acceptable to use.

c. The *systems' energy* calculation may consider operation of *economizer* capacity in the design and available *redundant equipment* at the 100% *ITE* load condition and separately at the *ITE* part-load condition if calculated using partially loaded *equipment efficiencies*.

d. For *data center* designs where heat recovery measures are being provided, Equation 6.5 shall be calculated for compliance with each of the design's heat recovery measures either "active" or "inactive" (at the discretion of the *design professional*.)

Informative Note: This Standard leaves all energy or emission savings credits available for the benefit of the data center's host or neighboring projects, without the possibility of "double counting" such energy or emission credits. Data centers can be reliable and economical all-electric heat sources for nearby buildings and industrial processes. Ideally, potential neighbors and landlords will discover that data centers are an economical way to switch from fossil fuels to a grid electric source for their needed heat. Because the success of heat recovery requires proximity between data center and neighboring buildings, any lower efficiency ITE cooling modes associated with heat export may be considered "inactive" in the *data center's annualized MLC* compliance calculation. Any on-site heat recovery measures may be shown as "active" to lower the *annualized MLC* used for compliance.

e. ~~If the *data center* uses *mechanical cooling*, the calculated *rack* inlet temperature and *dew point* shall be within *Thermal Guidelines for Data Processing Environments* recommended thermal envelope for more than 8460 of the hours per year. If the *data center* does not use *mechanical cooling*, this requirement does not apply.~~ The default cycles of concentration (CoC) for calculating evaporation blowdown shall be 3.5. A custom CoC shall be used if an analysis of the site water chemistry and treatment system is performed.

f. Any *UPS* and *transformer* cooling *system's* input *energy* shall also be included in this term, evaluated at their corresponding part-load *efficiencies.*

g. The specific electrical losses used to calculate a project's *annualized MLC* shall be greater than or equal to the same electrical *losses* used to calculate the project's *design ELC* used for compliance.

h. Reviewable *annualized MLC* calculations shall separately report results for 100%, 75%, 50%, and 25% *ITE* capacity in the calculations.

BSR/ASHRAE/ACCA Addendum b
to ANSI/ASHRAE/ACCA Standard 211-2018 (RA 2023)

Public Review Draft

Proposed Addendum b to Standard 211-2018 (RA 2023), Standard for Commercial Building Energy Audits and Decarbonization Assessments

First Public Review (April 2025)
(Draft Shows Proposed Changes to Current Standard)

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

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FOREWORD

This addendum adds definitions for 'energy audit', decarbonization assessment' and 'retrocommissioning'

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

Addendum b

Add definitions to Section 3.1 as follows:

energy audit: Evaluation of how energy is currently used in a building and identification of opportunities for reducing energy use, demand and costs

decarbonization assessment: Evaluation of a building's current greenhouse gas (GHG) emissions (Scope 1 and Scope 2) and identification of opportunities to reduce or eliminate GHG emissions through energy efficiency, reduction or elimination of on-site combustion of fossil fuels, reduction of refrigerant emissions, and renewable energy.

Retro-commissioning: Also referred to as Existing Building Commissioning or Building Tune-up, retro-commissioning is the commissioning process applied to an existing facility and systems. Retro-commissioning establishes the Owner's project requirements for the existing building and its systems, and includes the technical process of inspecting, testing, analyzing, calibrating, repairing, and optimizing building systems, and training operators for the purpose of improving building performance (IEQ, energy and water use).

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

Public Review Draft

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

First Public Review (March 2025)
(Draft shows Proposed Changes to Current Standard)

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

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FOREWORD

The glossary changes in this proposed addendum are coordinated with changes that the FGI editions are incorporating as evolving guidance on the planning and programing of these various treatment settings is prescribed by FGI.

The space ventilation tables have been updated with the addition of new FGI spaces that will be detailed in their upcoming editions.

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

Addendum u to 170-2021

Revise Section 3 as shown below. The remainder of Section 3 is unchanged. Reference Addendum d to 170-2021.

3. Definitions

~~***Class 1 imaging room***: an imaging room designated for the performance of patient care activities, including diagnostic radiography, fluoroscopy, mammography, computed tomography (CT), ultrasound, magnetic resonance imaging (MRI), nuclear medicine, and other imaging modalities, including services that use natural orifice entry and do not pierce or penetrate natural protective membranes.~~

~~***Class 2 imaging room***: an imaging room designated for the performance of patient care activities, including diagnostic and therapeutic procedures such as coronary, neurological, or peripheral angiography, including electrophysiology, cardiac catheterization, and interventional angiography and similar procedures.~~

~~***Class 3 imaging room***: an imaging room designated for the performance of patient care activities, including invasive procedures and any other Class 2 procedure during which the patient will require physiological monitoring and is anticipated to require active life support. procedural invasive fluoroscopy: therapeutic or diagnostic invasive procedures that require fluoroscopic imaging (e.g., cardiac catheterization, interventional angiography, cardiac stenting, or implantation of devices). (Informative Note: These procedures are typically performed in a restricted or semirestricted area based on the classification of the imaging procedure being performed.)~~

~~***invasive procedure:*** a procedure that is performed in an aseptic surgical field and penetrates the~~

~~protective surfaces of a patient's body (e.g., subcutaneous tissue, mucous membranes, cornea). An invasive procedure may fall into one or more of the following categories:~~

~~a. Requires entry into, or opening of, a sterile body cavity (i.e., cranium, chest, abdomen, pelvis, joint spaces)~~
~~b. Involves insertion of an indwelling foreign body~~
~~c. Includes excision and grafting of burns that cover more than 20% of total body area~~
~~d. Does not begin as an open procedure but has a recognized measurable risk of requiring conversion to an open procedure~~

~~(***Informative Notes:***~~
~~1. Invasive procedures are performed in locations suitable to the technical requirements of the procedure with consideration of infection control and anesthetic risks and goals. Accepted standards of patient care are used to determine where an invasive procedure is performed. "Invasive procedure" is a broad term commonly used to describe procedures ranging from a simple injection to a major surgical procedure. For the purposes of this document, the term is limited to the above description. The intent is to differentiate those procedures that carry a high risk of infection, either by exposure of a usually sterile body cavity to the external environment or by implantation of a foreign object into a normally sterile site. Procedures performed through orifices normally colonized with bacteria, and percutaneous procedures that do not involve an incision deeper than skin, would not be included in this definition.)~~
~~2. Definition is adapted from the FGI Guidelines; see FGI [2018a, 2018b] in Informative Appendix E.)~~

~~***operating room (OR):*** a room in the surgical suite that meets the requirements of a restricted area and is designated and equipped for performing invasive procedures. (***Informative Note:*** Definition is adapted from the FGI Guidelines; see FGI [2018a, 2018b] in Informative Appendix E.)~~

~~***procedural fluoroscopy:*** therapeutic or diagnostic procedures that require fluoroscopic imaging (e.g., cardiac catheterization, interventional angiography, cardiac stenting, or implantation of devices). (***Informative Note:*** These procedures are typically performed in a restricted or semirestricted area based on the classification of the imaging procedure being performed.)~~

~~***procedure room:*** a room designated for the performance of patient care that requires high-level disinfection or sterile instruments and some environmental controls but is not required to be performed with the environmental controls of an operating room. (***Informative Note:*** Definition is adapted from the FGI Guidelines; see FGI [2018a, 2018b] in Informative Appendix E.)~~

~~***restricted area:*** a designated space in the semirestricted area of the surgical suite that can only be accessed through a semirestricted area. The restricted access is primarily intended to support a high level of asepsis control, not necessarily for security purposes. Traffic in the restricted area is limited to authorized personnel and patients. Personnel in restricted areas are required to wear surgical attire and cover head and facial hair. Masks are required where open sterile supplies or scrubbed persons may be located. (***Informative Note:*** Definition is adapted from the FGI Guidelines; see FGI [2022a, 2022b] in Informative Appendix E.)~~

Revise Table 7-1 and the notes to Table 7-1 as shown below. The remainder of Table 7-1 is unchanged.

Table 7-1 Design Parameters—Inpatient Spaces

Function of Space (f)	Pressure Relationship to Adjacent Areas (n)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	Unoccupied Turndown	Minimum Filter Efficiencies (c)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
DIAGNOSTIC AND TREATMENT									
~~Gastrointestinal~~ endoscopy procedure room *(FGI 2.2-3.11.2 & Table 2.1-1)* (x)	NR	2	6	NR	No	Yes	MERV-8	20-60	68-73/20-23

Normative Notes for Table 7-1 (continued):

x. If the planned space is designated in the organization's operational plan to be used for bronchoscopy and gastrointestinal and other endoscopy services, the design parameters for "bronchoscopy, sputum collection, and pentamidine administration" shall be used.

Add the rooms indicated below to Table 8-1 and revise the notes to Table 8-1 as shown below. The remainder of Table 8-1 is unchanged. Reference Addendum h to 170-2021.

Table 8-1 Design Parameters—Specialized Outpatient Spaces

Function of Space (f)	Pressure Relationship to Adjacent Areas (n)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	Unoccupied Turndown	Minimum Filter Efficiencies (c)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
DIAGNOSTIC AND TREATMENT									
Exam/observation room *(FGI 2.1–~~3.2.1~~3.2.2.2)*	NR	2	4	NR	NR	Yes	MERV-8	Max 60	70–75/21–24
Short stay patient room *(FGI xx)*	NR	2	4	NR	NR	Yes	MERV-8	Max 60	70–75/21–24

Sleep testing room *(FGI xx)*	NR	2	4	NR	NR	Yes	MERV-8	Max 60	70–75/21–24	

Normative Notes for Table 8-1:

h. If the planned space is designated in the organization's operational plan to be used for bronchoscopy and gastrointestinal and other endoscopy services, the design parameters for "bronchoscopy, sputum collection, and pentamidine administration" shall be used.

Add the rooms indicated below to Table 8-2. The remainder of Table 8-2 is unchanged.

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

Function of Space (f)	Pressure Relationship to Adjacent Areas (d)	ach Design Option		All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	Unoccupied Turndown	Min. Filter Efficiencies (c)	Design RH % (i)	Design Temperature °F/°C (k)	R_p-R_a Air-Class Design Option		
		Min. Outdoor ach (q)	Min. Total ach (q)							Air Class (q)	R_p cfm/(L·s)/ person and Min. Space Population (q)	R_a cfm/ft/(L·s/m) (q)
GENERAL DIAGNOSTIC AND TREATMENT												
Behavioral and mental health observation room/area *(FGI 2.12-3.3)*	NR	2	3	NR	NR	Yes	MERV-8	NR	70–75/21–24	1	5 (2.5) / 2	0.06 / (0.3)
Behavioral and mental health exam room *(FGI 2.11-3.2.2)*	NR	2	3	NR	NR	Yes	MERV-8	NR	70–75/21–24	1	5 (2.5) / 2	0.06 / (0.3)
Behavioral and mental health central milieu room *(FGI 2.11-3.2.4)*	NR	2	3	NR	NR	Yes	MERV-8	NR	70–75/21–24	1	5 (2.5) / 2	0.06 / (0.3)
Behavioral and mental health group room *(FGI 2.11-3.2.5)*	NR	2	3	NR	NR	Yes	MERV-8	NR	70–75/21–24	1	5 (2.5) / 2	0.06 / (0.3)

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

Public Review Draft

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

First Public Review (March 2025)
(Draft shows Proposed Changes to Current Standard)

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

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FOREWORD

This proposed addendum follows up on action earlier this year when the committee expanded the minimum definition of a HEPA filter to include those filters classified under test methods more commonly used outside the United States. The reason behind this was to offer better guidance to international users of Standard 170 and to follow through on ASHRAE's desire to be a more global organization. For general ventilation air filters, there are two primary classification test standards: the MERV rating system, based on ASHRAE 52.2, and the ISO 16890 standard, which replaced the European Norm (EN 779) a few years ago. This proposed addendum provides equivalencies between ASHRAE 52.2 and ISO 16890 with regard to minimum filtration required by Standard 170.

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

Addendum v to 170-2021

Revise Section 6.4f as shown below. The remainder of Section 6.4 is unchanged.

6.4 Filtration. Filtration of mechanically supplied air shall be provided as follows:

a. Particulate matter filters, minimum MERV-8, shall be provided upstream of the first heat exchanger surface of any air-conditioning system that combines return air from multiple rooms or introduces outdoor air.
b. Outdoor air shall be filtered in accordance with Table 7-1, 8-1, 8-2, or 9-1.
c. Air supplied from equipment serving multiple or different spaces shall be filtered in accordance with Table 7-1, 8-1, 8-2, or 9-1.
d. Air recirculated within a room shall be filtered in accordance with Table 7-1, 8-1, 8-2, or 9-1, or Section 7.1(a)(5), 8.1(a)(5), 8.2(a)(5), or 9.1(a)(5).
e. The design shall include all necessary provisions to prevent moisture accumulating on filters located downstream of cooling coils and humidifiers.
f. Minimum filter requirements shall meet the equivalent MERV rating when tested in accordance with ASHRAE Standard 52.2 [4]. Filters tested in accordance with ISO16890[20] filters meeting ePM10 – 50% are equivalent to MERV 8, filters meeting ePM1-70% are equivalent to MERV 14 and filters meeting ePM1-95% are equivalent to MERV 16.

…

Add new reference to Section 11 as shown below. The remainder of Section 11 is unchanged.

11. NORMATIVE REFERENCES

20. ISO 16890 (2016) Air Filters for General Ventilation.

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

NSF/ANSI International Standard for Biosafety Cabinetry —

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

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Informative Annex 1

Biosafety cabinet selection, installation, use, lifespan, and decommissioning

The information contained in this annex is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. Therefore, this annex may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to this standard.

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I-1.7 BSC use practices and procedures

•

I-1.7.6 Terminal purging and wipedown

a) Following completion of work, allow the BSC to run for a 5-min period without personnel activity to purge air in the total work area;

b) Decontamination of the interior surfaces should be repeated after removal of all materials, cultures, apparatus, etc. Check grills and diffuser grids for spilled or splashed materials that may support fungus growth in the workspace; and

c) The interior surfaces of the workspace should next be disinfected with an appropriate disinfectant for an appropriate contact time. Use of chlorine bleach in the BSC will damage the BSC stainless steel work surface. Most surface disinfectants require a specific contact time, depending upon the microbiological agents used within the BSC. Consult appropriate disinfectant documents for proper application and suitability against the material used in the BSC.

I-1.7.7 Use the following procedure to effectively clean or surface disinfect the BSC work zone surfaces:

a) Raise the sliding sash window to a full-open position.
b) Silence the audible alarm during the cleaning process.
c) Wipe all surfaces in parallel strokes from clean to dirty.

I-1.7.8 ~~Paper catch prefilter~~

~~Some BSCs have a paper catch filter installed behind the rear divider panel of the work zone. This area forms the return air path to the motor / blower. If the airflow is blocked, performance of the BSC can be compromised. Therefore, the paper catch should be checked and cleaned no less than weekly or daily if paper products are used for procedures. Removed paper must be properly discarded as contaminated hazardous waste.~~

I-1.7.8

Consider the following elements to effectively clean or surface disinfect below the BSC work surface containing the drain trough and sometimes the paper catch screen behind the interior rear wall of the BSC work area.

As with the BSC work area, the frequency of surface decontamination under the work surface should be determined based on evaluations of the cabinet as used. Given the lack of exposure to splashes and other materials used in the BSC work area, the appropriate frequency of cleaning and surface decontamination under the work surface may be much less including as infrequent as annually. One approach is to start with a frequency of monthly but inspect the area before cleaning and surface decontamination and note the condition. After the first quarter or year, if appropriate extend or reduce the intervals between cleaning and decontamination.

Additional care may be necessary to safely clean and surface decontaminate under the work surface. In order to access the area, the work surface must be raised. The work surface may be heavy and awkward to move. In addition to managing the work surface, the drain trough extends back farther than the interior rear wall of the cabinet and out of easy reach for many people. It may be necessary to identify cleaning tools to extend to the rear or a risk evaluation to assess cleaning and decontamination process.

Use the following procedure to effectively clean or surface disinfect the area under the BSC work zone:

a) Don appropriate PPE.
b) Raise the sliding sash window to a full-open position.
c) Silence the audible alarm during the cleaning process.
d) After cleaning or surface disinfecting the BSC work zone surfaces, raise the front of the work surface so it is at an angle with the rear edge still supported by the cabinet. For larger cabinets it may be necessary to have assistance or add a temporary support to hold the work surface at the angle needed for access.
e) Liberally spray or douse the area under the work surface with an appropriate surface decontaminant and let it sit for the required contact time for effectiveness.
f) Inspect the area for hazardous debris including broken glass, needles and other sharps. Take appropriate steps to safety remove this contaminated material.
g) After removal of hazardous debris and the contact time required for the decontaminant has elapsed, gently wipe the drain trough area. This gentle clean is intended to discover any hazardous debris that was not visible or was missed. After appropriate removal of any debris, continue to clean and disinfect the area under the work surface.
h) Inspect the drain valve. Over time debris and material may collect and block the drain valve. Inspect it to assure it is not blocked and will be functional if needed to manage and drain a spill.
i) Some BSCs have a paper catch screen installed to the rear of the area under the work surface in the return air path to the motor / blower. If the airflow is obstructed, performance of the BSC can be compromised. Therefore, the paper catch screen should be checked and obstructing material removed as appropriate. If paper products are used for procedures, the paper catch screen may require more frequent inspection. Removed paper must be properly discarded as contaminated hazardous waste.

Rationale: *Paper catch prefilter language expanded for clarity and guidance.*

Draft PDS-01
RESNET/ICC 301-2022 Addendum G-202x
Integrated Heat Pump Water Heater (iHPWH)

Modify Standard ANSI/RESNET/ICC 301-2022 as follows. Note: Where sections, tables and equations are added or deleted affecting existing section, table or equation numbers respectively and the references to those numbers, the renumbering will be established editorially upon the finalization of the addendum.

1. Add definitions to Section 3.2 Definitions

Heat Pump Water Heater (HPWH) - A water heater that transfers thermal energy from one temperature level to another temperature level for the purpose of heating water, including all ancillary equipment such as fans, storage tanks, or controls necessary for the device to perform its function.

Integrated Heat Pump Water Heater (iHPWH) – An air-source Heat Pump Water Heater where the heat pump is integrated into the unitary water heater.

2. Add acronyms to Section 3.3 Acronyms

HPWH – Heat pump water heater

iHPWH – Integrated heat pump water heater

3. Add a new table note reference 'ac' and modify table note 'v' to the 'Service water heating systems' section from Table 4.2.2(1): *[See language below]*

Building Component	Energy Rating Reference Home	Rated Home
Service water heating systems [p, t, u, v, 1, v.2, v.3]	Efficiency: Electric: EF = 0.97 - (0.00132 * store gal) Fossil fuel: EF = 0.67 - (0.0019 * store gal)	 Same as Rated Home[ac] Same as Rated Home

4. Modify the table note 'u' in 'Table 4.2.2(1)' as follows:

u. The Uniform Energy Factor (UEF) or Energy Factor (EF) shall be obtained for residential hot water equipment.~~, or~~ For commercial hot water equipment, UEF, COP or the Thermal Efficiency (TE) and Standby Loss (SL) shall be obtained ~~for commercial hot water equipment~~ from manufacturer's literature or from AHRI directory for equipment being used where available. When UEF is obtained, the First Hour Rating (FHR) shall also be obtained. For commercial water heaters where EF or UEF is not available, an Approved commercial hot water system calculator shall be used to determine the EF or UEF.

5. Modify the table note 'v' in 'Table 4.2.2(1)' as follows and create a new table note:

v.1. Where the heat balance of the space(s) connected to a Service Hot Water System is (are) explicitly modeled by software, t~~T~~he heat sources and sinks associated with the Service Hot Water System shall be included ~~in the energy balance for the space in which the Service Hot Water System is located~~. For a Service Hot Water System with a storage tank, the simulation shall include storage tank heat losses to the appropriate space.

v.2. For air-source HPWH, the simulation shall include the spaces where supply air intake is extracted and exhaust air is discharged. Where necessary, all air-source HPWH simulations shall include supplementary electric resistance elements to meet the hot water demand of the Dwelling Unit. The COP of an air-source HPWH shall be adjusted for the temperature of its supply air intake and the tank heat transfer shall be adjusted for the temperature of the space.

*v.3 F*or all HPWH, the UEF shall be separated into the heat pump compressor COP and the tank UA according to Tables X and Y.

Table X: HPWH Compressor COP Values

First Hour Rating[1] (gal/hr)	**COP_{comp}**
>= 18, < 51	1.0005 * UEF - 0.0789
>= 51, < 75	1.0909 * UEF - 0.0868
>= 75	1.1022 * UEF - 0.0877

Table Y: HPWH Tank UA Values

Tank Volume (gal)	**Tank UA (Btu/hr-F)**
<= 58	3.6
> 58, <= 73	4.0
> 73	4.7

1 (Informative Note) There are no HPWH products currently on the market with First Hour Rating < 18 gal/hr.

6. Add new table notee 'ac' language

ac. Where an iHPWH is installed, the rated UEF shall be used to determine the compressor COP if one of the following conditions is met for each water heater:

i. A ducted intake and ducted exhaust is installed and the incoming air is drawn from the same space as the space to which the exhaust is discharged.

ii. The enclosed space containing the water heater is verified to have a total net free opening area to an adjacent heated or conditioned space of no less than 75 in^2 per 100 watts of compressor power, using any combination of grilles, louvers, door undercuts, or a louvered door. Where the compressor power is not specified by the manufacturer, the total net free opening area shall be no less than 560 in^2.

iii. The iHPWH is in an enclosed space having a volume equal to or greater than 1,000 ft^3 which is within the Conditioned Space Volume of the Dwelling Unit.

For all other iHPWH installations, the maximum allowable COP (COP_{eff}) shall be determined by the equation below.

$$COP_{eff} = (COP_{comp} - 1.53) * (1 - (1.009 * \exp(-5.492*(RV)))) + 1.53$$

Where:
COP_{comp} = Heat pump compressor COP at the rated UEF
RV = Relative Volume = MIN [(iHPWH containment volume, ft^3)/1500 ft^3), 1.0]

7. Modify the 'Service Hot Water Equipment' section from 'Table 4.5.2(1)' as follows:

Table 4.5.2(1) Minimum Rated Features

Building Element	Minimum Rated Feature
15. Service Hot Water Equipment	For Residential Equipment - Equipment type, location, efficiency (Uniform Energy Factor and First Hour Rating; or Energy Factor), extra tank insulation R-Value, flow rates of showers and Bathroom sink faucets. For Integrated Heat Pump Water Heaters – containment volume (ft^3) and the net free opening area (in^2) of the space containing the water heater. If ducted, the space to which the exhaust air is discharged and the space from which the intake air is supplied. For Commercial Equipment - Equipment type, location, Uniform Energy Factor, COP, or Thermal Efficiency and Standby Loss, extra tank insulation value, flow rates of showers and Bathroom sink faucets.

8. Modify 'Building Element: Service Hot Water (SHW) Equipment' table within Normative Appendix B as follows:

Efficiency	Determine and record the Energy Factor, Uniform Energy Factor, COP, or thermal efficiency of the service hot water equipment	Look for the water heater's nameplate and product literature. Record the manufacturer, model number and if listed directly on the nameplate, the efficiency rating. Search for the model number in the manufacturer's data sheets or ~~an~~ appropriate efficiency rating directory to determine and record the EF, UEF, COP, or thermal efficiency rating. When UEF is recorded, also record the First Hour Rating. When thermal efficiency is recorded, also record the standby loss if available. When the efficiency rating cannot be determined, approximate the age of the unit and use a default efficiency.
Individual service hot water equipment type	Determine and record type, capacity, and fuel source of standalone water heater serving single Dwelling Unit	Identify whether the equipment is storage or instantaneous, identify its fuel source and record storage tank capacity in gallons. Also record whether the SHW equipment is an Integrated Heat Pump Water Heater, or supplemented by a desuperheater and/or if it is integrated with the space heating system. *Integrated Heat Pump Water Heater* – For Integrated Heat Pump Water Heaters, record whether the system has a ducted intake and exhaust and record the spaces to and from which the air is ducted. If not ducted, for the space that contains the iHPWH, measure dimensions of the room to calculate its volume (ft^3) and record the total net free opening area (in^2) of any grilles/louvers/door undercuts. Where the net free area of a grille or louvered opening is not specified by the manufacturer, the net free area shall be calculated as 35% of the area of the grille or louvered opening.

BSR/UL 61010-2-030, Standard for Safety for Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 2-030: Particular Requirements for Equipment Having Testing or Measuring Circuits.

1. Revisions to the proposal document dated December 6, 2024 per responses to comments received.

PROPOSAL

9.101.2.1DV D2 – Modification: Add item c) to the fourth paragraph, add the note, and replace the compliance clause with the following:

c) in cases where protective devices or components described in a) or b) cannot be used for technical or operating reasons, or the MEASURING CIRCUIT is not RATED for MEASUREMENT CATEGORIES II, III, IV, the equipment may be tested to meet 9.101.2.3A.

NOTE An example of such cases is an input impedance selection switch in oscilloscope.

Conformity is checked by inspection, evaluation of the design of the equipment, and as specified in 9.101.2.2, 9.101.2.3 and 9.101.2.3A, as applicable.

9.101.2.3ADV D2 – Addition: Add Clause 9.101.2.3ADV

9.101.2.3ADV Other protection

When the conditions defined in 9.101.2.1DV c) apply and the protections specified in 9.101.2.2 or 9.101.2.3 cannot be used, the equipment shall not cause a HAZARD resulting from the application of the maximum RATED voltage.

Conformity is checked by the following test, performed three times on the same sample of equipment.

A voltage equal to the highest RATED voltage for any TERMINAL is applied between the TERMINALS *of the MEASURING CIRCUIT for 1 min. The source of the test voltage shall deliver a current of at least the possible a.c. or d.c. short-circuit current as applicable. If the function or range controls have any effect on the electrical characteristics of the input circuit, the test is repeated with the function or range controls in every combination of positions, including during the change of function or range.*

During and after the test, no electric shock or spread of fire shall result. Where arc flash can occur, no HAZARD shall arise, nor shall there be any evidence of fire, arcing, explosion, or damage to the insulation which provides protection against electric shock.

101.3.4DV D2 *Modification: Replace the first paragraph with the following:*

Equipment that is not permanently connected to the measuring circuit, shall be able to withstand permanent overvoltage and continue to give an unambiguous indication of any HAZARDOUS LIVE voltages up to the maximum RATED voltage.

UL 555, Standard for Fire Dampers

1. Expanded Referenced Documents

PROPOSAL

1.1 The fire dampers covered by these requirements are intended for installation in accordance with the following standards:

a) ~~National Fire Protection Association~~ Standard for Installation of Air-Conditioning and Ventilating Systems, NFPA 90A;

b) Standard for Fire Doors and Other Opening Protectives, NFPA 80;

c) International Mechanical Code,

d) International Building Code; and

e) Uniform Mechanical Code.

2. Formatting and Typo Corrections

PROPOSAL

6.4 The length of the sleeve or frame extending beyond the wall or floor opening for both the rigid and breakaway joints between the sleeve or frame and duct shall not exceed:

a) Six inches (152 mm) on each side for fire dampers intended to be installed in the plane of a fire barrier and for use without an actuator or a factory installed access door in the sleeve.

b) Six inches (152 mm) on one side and 16 in (406 mm) on the opposite side for fire dampers intended for use with an actuator and/or a factory installed access door on the longer side.

c) Sixteen inches (406 mm) on each side for fire dampers intended for use with an actuator on one side and a factory installed access door on the other side.

d) Six inches (152 mm) on one side and ~~sixteen~~ 16 in (406 mm) on damper side for fire dampers intended to be installed outside of wall or floor plane.

10.1.4.1 For dampers intended to be mounted outside the plane of the wall, the average temperature rise above the damper on the unexposed surface of the fire barrier shall be compared to the average temperature rise above a control sample. The control sample shall be of the same construction as the sample being evaluated and shall be mounted such that the blades are in the plane of the wall when the damper is closed. The thermocouple ~~thermal couple~~ array shown in Figure 10.1 shall be used to measure the temperature rise above both samples. At the end of the test the average temperature rise above the sample mounted outside the plane of the wall shall not exceed the average temperature rise above the control sample by more than 5%.

10.3.3 The thermocouples are to be enclosed in sealed porcelain tubes, 3/4 in (19 mm) in outside diameter and 1/8 in (3.2 mm) in wall thickness or, as an alternative in the case of base-metal thermocouples, enclosed in sealed, standard-weight 1/2 in [0.84 in (21 mm) outside diameter] black wrought-steel or black wrought-iron pipe. See ~~the Standard for Welded and Seamless Wrought Steel Pipe, ANSI/~~ASME B36.10~~M-1996~~. The exposed length of the pyrometer tube and thermocouple in the furnace chamber is not to be less than 12 in (305 mm). Other types of protecting tubes or pyrometers that, under test conditions, give the same indications as those specified within the limit of accuracy that applies for furnace temperature measurements are not prohibited from being used.

Table 10.1
Hose stream test

Rating	Water pressure at base of nozzle		Duration of application, s/ft2 (s/m2) of exposed area[a]	
	Psi	(KPa)		
3-h	45	(310)	3.0	(32)
1- 1/2- h	30	(207)	1.5	(16)
1- h	30	(207)	0.9	(10)
Less than 1 h	30	(207)	0.6	(6)
a The exposed area is calculated using the outside dimensions of the test specimen, including a frame, hangers, tracks and other parts of the assembly when provided. The exposed area does not include the wall into which the specimen is mounted. When multiple test specimens are mounted in the same wall, the rectangular or square wall area encompassing all of the specimens is the exposed area since the hose stream must traverse this area during its application.				

14.1.7 Fire dampers that are to be qualified at sizes exceeding their single section maximum shall be evaluated via one of the four following methods:

…

Option 3 – Conduct dynamic closure testing on a single section of the multiple section assembly as described in Section 14.2 at the minimum test airflow and pressure corresponding to the desired rated airflow and pressure of the multiple section assembly (reference Table 14.1). This method is only applicable for controlled closure type multiple section dampers employing a single ~~temperature response~~ heat responsive device and which are either driven by a common drive mechanism, such as a jackshaft, or have demonstrated that the assembly closes in unison.

…

3. Exceeding Maximum Rigid Joints

PROPOSAL

6.5 For rigid joints between the sleeve and duct:

a) The maximum thickness for a sleeve shall be 0.135 in (3.43 mm) for uncoated steel and 0.138 in (3.51 mm) for coated steel, unless a larger sleeve thickness is tested to the requirements of the Fire Endurance and Hose Stream Test, Section 10, as well as the Duct Impact Test, Section 15.

4. Salt Spray Sample Sizes

PROPOSAL

9.3 The overall size of the sample used for the salt spray exposure test, including the actuator, is ~~not to exceed~~ 42-in high by 46-in wide (1.07-m by 1.15-m) for vertical fire dampers and 46-in long by 28-in wide (1.15-m by 0.71-m) for horizontal fire dampers. Larger sizes shall not be prohibited from being tested.

5. Expanded Cautionary Statement

PROPOSAL

10.2.1.4 CAUTION – Precautions are to be taken when testing with actuators that present a risk of explosion or fire when exposed to high temperature, as well any potential electrical hazards.

6. Vertically and Horizontally Mounted Fire Dampers

PROPOSAL

10.2.1.6 Fire damper assemblies are to be installed in the following manner:

a) When a single fire damper assembly is to be tested, two samples are to be installed. One sample is to be installed with the upstream side facing the furnace and the other sample is to be installed with the downstream side facing the furnace; or

b) When a multiple fire damper assembly is to be tested, one sample is to be installed. Half of the fire dampers in this sample are to be installed with the upstream side facing the furnace and the other half are to be installed with the downstream side facing the furnace. When the assembly has an odd number of fire dampers, the upstream side is to have one additional fire damper.

10.2.1.7 Horizontal fire damper assemblies may be tested in one direction (e.g. upstream side facing the furnace or downstream side facing the furnace) when this is the only intended installation as specified by the manufacturer's installation instructions. The top, bottom, or both sides of the damper shall be marked to indicate the proper mounting direction. See Marking, Section 17.

~~10.2.3.2 Vertical fire damper assemblies are to be installed in the following manner:~~

~~a) When a single fire damper assembly is to be tested, two samples are to be installed. One sample is to be installed with the upstream side facing the furnace and the other sample is to be installed with the downstream side facing the furnace.~~

~~b) When a multiple fire damper assembly is to be tested, one sample is to be installed. Half of the fire dampers in this sample are to be installed with the upstream side facing the furnace and the other half are to be installed with the downstream side facing the furnace. When the assembly has an odd number of fire dampers, the upstream side is to have one additional fire damper.~~

7. Concrete Cure Time

PROPOSAL

10.2.2.2 When tested in a concrete slab, the concrete is to cure ~~at least 28 days before the fire test, and~~ until the moisture content of the concrete is reduced to 75% or less relative humidity at 73 ±5°F (23 ±3°C).

10.2.2.3 Concrete slabs shall not be prohibited from being put in controlled environmental conditions to accelerate curing times.

8. Out of Wall Fire Damper Installation

PROPOSAL

10.2.5.2 Vertical fire damper assemblies with the blades mounted outside plane of the wall are to be installed in the following manner:

a) Dampers are to be installed in a representative wall assembly as specified by the manufacturer’s installation instructions for out of wall plane applications. One sample with damper mounted outside of wall plane facing towards exposed side (the furnace), one sample with

damper mounted outside of wall plane facing towards non exposed side (non-furnace) and a control sample installed in accordance with the manufacturer's installation instructions for applications of blades ~~within~~ outside the wall plane.

b) A grid of 9 equally spaced thermocouples as shown in Figure 10.1 is installed above the ~~reference~~ control sample (damper mounted in the wall plane/assembly when blades are closed) and over the sample that extends out of the plane away from the furnace. The thermocouples are to be attached via staples over the insulated portion. The tips of the thermocouples are to be depressed in the wall so as to be flush to the surface of the wall. The thermocouples are to be held in thermal contact with the surface with pressure-sensitive paper tape.

9. Compliance Criteria Clarification

PROPOSAL

3.1.2 CURTAIN DAMPER – A damper which uses a folded, interlocked series of blades.

3.4.1 MULTI-BLADE DAMPER – A damper having more than one blade, where the operation of the damper involves rotation of an axis.

3.6.1 ROUND DAMPER – A damper having a circular shaped blade, where the operation of the damper involves rotation of an axis.

3.7.1 SINGLE BLADE DAMPER – A damper having one blade, where the operation of the damper involves rotation of an axis.

10.1.3.1 Movement or warping of any part of the fire damper assembly during the test shall not result in any of the following:

a) Visible through openings in excess of 3/8 in (9.5 mm) between the damper blade edges and the frame members perpendicular to the axis of motion of the damper blade on ~~rectangular~~ multi-blade and single blade dampers.

b) Visible through openings in excess of 1/8 in (3.2 mm) between the damper blade edges and the frame members on:

i) Curtain dampers; and

ii) ~~parallel to the axis of motion of the damper blade on rectangular~~ Multi-blade and single blade dampers, parallel to the axis of motion of the damper blade.

UL 555C, Standard for Safety for Ceiling Dampers

1. Volume Control Ceiling Damper Closing Reliability Test Options

PROPOSAL

7.3A Alternatively, when the damper is intended for use as a volume control damper it is permitted to be cycled 20,000 full-stroke cycles as described in 7.3 and then perform 100,000 repositioning cycles. A "repositioning cycle" is a minimum rotation of the damper actuator of 5 ±2 degrees or 10 % in one direction and in the reversed direction. The repositions shall be achieved in one of two ways:

a) The actuator on the damper shall be moved forward 10 ±2 degrees and then move back 5 ±2 degrees. This sequence of movements shall be considered one reposition. Once the damper and actuator reach the full-open position the same series of movements shall be performed to move the damper and actuator back to the full close position. This shall be repeated until 100,000 repositions have been achieved; or

b) The actuator on the damper shall be moved from the 0 % position (full closed) to the 10 % position and then back to the 0 % position. This sequence of movements shall be considered one reposition. That same series of movements shall be performed for 10,000 repositions. Another 10,000 repositions shall then be performed between the 10 % and 20 % positions, the 20 % and 30 % positions, the 30 % and 40 % positions, the 40 % and 50 % positions, the 50 % and 60 % positions, the 60 % and 70 % positions, the 70 % and 80 % positions, the 80 % and 90 % positions, and finally the 90 % and 100 % positions for a total of 100,000 repositions.

2. Hydrostatic Strength Test for Pneumatic Actuators

PROPOSAL

9B Hydrostatic Strength Test for Pneumatic Actuators

9B.1 When tested as described in 9B.2, the sample shall withstand the test pressure for 1 min without leakage or rupture.

Exception: Leakage at a gasket or fitting during the hydrostatic pressure test shall not occur unless it occurs at a pressure more than 50 % of the required test pressure.

9B.2 A pneumatic actuator is to be subjected to a hydrostatic test at a pressure 5 times its maximum rated pressure. The sample is to be filled with water to exclude air and is to be connected to a hydraulic pump. The pressure is to be raised gradually to the required test pressure.

3. Spring Closing Force Test

PROPOSAL

9.1 A spring-operated ceiling damper or ceiling air diffuser is to employ a spring or springs capable of exerting a force of 2-1/2 times that required to close and automatically latch (if a latch is provided) the ceiling damper or ceiling air diffuser. The damper used for the spring closing force test is to be the damper previously subjected to the Closing Reliability Test, Section 7.

UL 555S, Standard for Smoke Dampers

1. Expanded Referenced Documents

PROPOSAL

1.3 The smoke dampers covered by these requirements are intended for installation in accordance with the following standards:

a) ~~National Fire Protection Association~~ Standard for Installation of Air Conditioning and Ventilating Systems, NFPA 90A~~,~~ ;

b) Standard for Smoke Door Assemblies and Other Opening Protectives, NFPA 105;

c)~~,~~ ~~the~~ International Mechanical Code (IMC)~~,~~ ;

d) ~~the~~ International Building Code (IBC)~~,~~ ; and

e) ~~the~~ Uniform Mechanical Code (UMC).

2. Formatting and Typo Corrections

PROPOSAL

11.3.1.1 Multiple assemblies shall comply with the requirements of one of the items listed below. The requirements of items (b) and (c) shall not be used for dampers intended for non-controlled closure:

a) The requirements of Sections 11.1.1 – 11.2.12,

b) One single section is to be tested at the maximum specified volumetric airflow rate for the multiple assembly. Damper assemblies at least two sections wide and two sections high shall also be tested to the requirements of Section 11.3.2 to qualify the assembly.

c) The requirements of Section 11.3.2. The damper section or sections driven by a single actuator that make up these multiple assemblies shall have already been tested to the requirements of Section 11.2 or 11.4. These multiple assemblies shall either be driven by a common drive mechanism, such as a jackshaft, or shall demonstrate that the assembly closes in unison. Corridor dampers and combination fire and smoke dampers tested to this option shall utilize a single heat responsive device.

d) The requirements of Section 11.4.

Exception: Multiple section damper assemblies that are multiple sections wide and only one section high or that are multiple sections high and only one section wide utilizing a common drive mechanism do not require any additional testing. Corridor dampers and combination fire and smoke dampers taking advantage of this exception shall utilize a single heat responsive device.

11.3.2.5 After the temperature degradation test, the multiple section damper assembly is to be reassembled (if necessary) and subjected to the ambient air operation test on the chamber as described in Section 11. All of the actuators in the multiple assembly shall be operated in unison. For the purposes of this test, as an alternative to the minimum ~~aie~~ air velocity requirements of Section 11.1.3, the test velocity shall be set to the minimum test air velocity in Table 11.1 multiplied by 0.25. To compensate for the reduced air velocity the full closed pressure shall be increased by the difference in velocity pressure between the minimum test air velocity of Section 11.2 and the test air velocity of this section. Table 11.2 lists the increase in the full closed pressure that shall be applied to the minimum test pressure values of Table 11.1.

BSR/UL 746C, Standard for Safety for Polymeric Materials - Use in Electrical Equipment Evaluations

1. Addition of Exposure and Evaluation Requirements for Polymeric Materials Exposed to UVC for UV Germicidal Irradiation (UVGI) Purposes to Paragraphs 25.1, 25.2, 25.3, Table 25.1, Paragraphs 57.1.1, 57.2.1 and 57.2.2

PROPOSAL

25 Ultraviolet Light Exposure

25.1 A polymeric material that will be exposed to an UV ~~weathering~~ source shall be resistant to degradation when exposed to the applicable UVA/UVB (ex., weathering or solar exposure) or UVC (for example, germicidal) ~~test~~ tests described in 57.1.1 – 57.2.7.

25.2 Table 25.1 summarizes the minimum property retention limitations after UV conditioning for base samples of the material and any colors under consideration. The flammability classification of the material shall not be reduced ~~as a result of 1000 hours of xenon-arc (ASTM G151 and G155), weatherometer conditioning~~. The average physical property values after UV conditioning shall not be less than 70 percent of the unconditioned value when the standardized small-scale physical tests indicated in Table 25.1 are performed.

25.3 If the material has a thickness less than 0.25 mm (0.01 inch) or it is a vulcanized rubber or is a thermoplastic elastomer (typically used as non-enclosure or part of the enclosure), impact testing mentioned in Table 25.1 shall be waived and, alternatively testing shall be performed for deformation resistance.

Exception No. 1: Where it is not practical to conduct the Tensile, Izod, or Charpy impact test using the standard specimens, the Gardner Impact Test as specified in Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimens by Means of a Striker Impacted by a Falling Weight (Gardner Impact), ASTM D5420, may be performed on representative sections of the equipment enclosure.

Exception No. 2: ~~If~~ For UVA/UVB (for example, weathering or solar exposure) test programs only, if the impact value for a material that has been tested in accordance with the requirements in this section has exhibited less than 70 percent retention but at least 25 percent retention of the impact property, it is considered acceptable provided that all of the following results are obtained:

a) An unconditioned enclosure in the thinnest wall thickness complies with the resistance to unconditioned Ball Impact Test percent retention levels shown in Table 25.2, and

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

Table 25.1
Minimum property retention limitations after ultraviolet light and water immersion conditioning

Property	Ultra-violet light[a]	Water immersion[b]
Flammability Classification	Unchanged	Unchanged
Tensile or Flexural Strength[c, e]	70 Percent	50 Percent
Tensile, Izod or Charpy Impact[c, e]	70 Percent	50 Percent
Tensile Strength and Elongation[d, e]	70 Percent	50 Percent

Property	Ultra-violet light[a]	Water immersion[b]
[a] ~~1000 hours xenon-arc exposure.~~ See 57.1.1 – 57.2.5. [b] ~~7 days at 70°C.~~ See 58.1. [c] For functional support, the test methods are tensile strength and flexural strength. For Impact Resistance the test methods are Tensile, Izod, or Charpy impact. See Table 57.1. [d] Alternate testing per 25.3 and 26.1.3 for deformation resistance, the test method is tensile strength and elongation. [e] The same test method shall be chosen for all exposures (both UV and Water exposure evaluations, as applicable) and for all colors evaluated.		

57.1.1 Using standard test procedures, property values for the material are to be determined both before and after the conditioning described below. Specimens are to be exposed ~~to ultraviolet light and water spray by~~ in accordance with the Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices That Use Laboratory Light Sources, ASTM G151 using the following apparatus, as appropriate:

a) For UVA/UVB (for example, weathering or solar exposure) evaluations, expose specimens to ultraviolet light and water spray using a Xenon-arc lamp apparatus in accordance with ~~the Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices That Use Laboratory Light Sources, ASTM G151, and~~ the Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Nonmetallic Materials, ASTM G155. The spectral power distribution of the xenon lamp shall conform to the requirement in Table 1 in ASTM G155 for a xenon lamp with daylight filters. A programmed cycle of 120 minutes consisting of a 102-minute light exposure and an 18-minute exposure to water spray with light shall be used. The apparatus shall operate with a spectral irradiance of 0.35 W/m^2 nm at 340 nm and a black-panel temperature of 63 ±3°C (145.4 ±5.4°F)~~.~~ or

Exception: Indoor enclosures that are subjected to UV radiation sources (such as, high intensity discharge lamps), may be conditioned without exposure to water.

b) For UVC (for example, germicidal) evaluations, expose specimens to ultraviolet light using a low-pressure mercury lamp apparatus in accordance with the Standard Practice for Operating UVC Lamp Apparatus for Exposure of Materials, ASTM G224. In accordance with ASTM G224, Appendix X2, Table X2.1, Cycle 2, a programmed cycle of 120 minutes consisting of a 60 minute light exposure (35±3°C black panel temperature) and a 60 minute dark exposure (30±3°C black panel temperature) shall be used. The apparatus shall operate with a spectral irradiance of 60 W/m^2 at 254 nm.

57.2 Method

57.2.1 The specimens as indicated in the Standard for Polymeric Materials – Short Term Property Evaluations, UL 746A, and the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94, are to be mounted ~~vertically on the inside of the cylinder~~ in the ~~xenon-arc light~~ apparatus, with the width of the specimens facing the ~~xenon~~ light source, and so that they do not touch each other.

Exception No. 1: For flexural strength specimens the ultraviolet-exposed side is to be in contact with the two points when using the three-point loading method.

Exception No. 2: Izod impact specimens are to be notched prior to UV conditioning with the direction of UV exposure towards the notch.

57.2.2 ~~Two sets of specimens for impact and one set for the other properties are to be exposed. The additional set of impact specimens is to be exposed for a total of 500 hours and all other sets for a total of 1000 hours.~~ Specimens shall be exposed in the respective apparatus for the duration specified below;

a) For UVA/UVB (for example, weathering or solar exposure) evaluations, two sets of specimens for impact and one set for the other properties are to be exposed. The additional set of impact specimens is to be exposed for a total of 500 hours and all other sets for a total of 1000 hours.

b) For UVC (for example, germicidal) evaluations, all sets are to be exposed for 336 hours

After the test exposure, the specimens are to be removed from the test apparatus, examined for signs of deterioration such as crazing or cracking, and retained under conditions of ambient room temperature and atmospheric pressure for not less than 16 hours, nor more than 30 days, before being subjected to flammability and physical tests. As a part of the test program, specimens that have not been exposed to ultraviolet light and water are to be preconditioned in accordance with ASTM D 618, Standard Practice for Conditioning Plastics for Testing, or ISO 291, Plastics – Standard atmospheres for conditioning and testing, at 23 ±2°C and 50±10 percent relative humidity for a minimum of 48 hours and are to be subjected to flammability and physical tests and the results obtained are compared against the specimens that have undergone exposure.

2. Revision of the Flammability Classification Criteria in Table 25.1

PROPOSAL

Table 25.1
Minimum property retention limitations after ultraviolet light and water immersion conditioning

Property	Ultra-violet light[a]	Water immersion[b]
Flammability Classification	~~Unchanged~~ Not be reduced	~~Unchanged~~ Not be reduced
Tensile or Flexural Strength[c, e]	70 Percent	50 Percent
Tensile, Izod or Charpy Impact[c, e]	70 Percent	50 Percent
Tensile Strength and Elongation[d, e]	70 Percent	50 Percent

[a] 1000 hours xenon-arc exposure. See 57.1.1 – 57.2.5.

[b] 7 days at 70°C. See 58.1.

[c] For functional support, the test methods are tensile strength and flexural strength. For Impact Resistance the test methods are Tensile, Izod, or Charpy impact. See Table 57.1.

[d] Alternate testing per 25.3 and 26.1.3 for deformation resistance, the test method is tensile strength and elongation.

[e] The same test method shall be chosen for both UV and Water exposure evaluations and for all colors evaluated.

BSR/UL 1277, Standard for Safety for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members

1. Criteria for Joist Pull Test, Revised 26.1, 26.5 and 26.9

PROPOSALS

26 Pulling-Through-Joists Test

26.1 Finished, cable containing two or three insulated 14 or 12 AWG copper or 12 AWG aluminum or copper-clad aluminum circuit conductors ~~with a grounding conductor~~ shall each be constructed to withstand the low-temperature pulling through joists test described in 26.2 – 26.9 without any opening occurring in the jacket that exposes the cable interior (see 26.7 and 26.8), ~~without any change in the position of the grounding conductor that results in the metal of the grounding conductor touching the insulation on a circuit (see 26.9),~~ and without physical damage to the insulation (see 26.9).

26.5 A 250-ft (75-m) coil of finished cable~~, in its carton~~, is to be placed flat on or close to the floor of the cold chamber. The ~~inner circle is to be removed from the carton to make the~~ inner end of the cable is to be made accessible. The cable is to be cooled in circulating air to a temperature of −20.0 ±2.0°C (−4.0 ±3.6°F) for 21 ±3 h. The vertical distance between the bottom of the coil inside the cold chamber and a line perpendicular to the center of the 2 by 4's mentioned in 26.4 is to be 6.67 ft (2.03 m). The horizontal distance between the first 2 by 4 and a line perpendicular to the center of the ~~carton in which the~~ cable ~~is located,~~ is to be 18 inches (457 mm). After the cooling, the procedures described in 26.6 and 26.7 are to be carried out without delay and completed within 5 minutes.

26.9 A 3-ft (1-m) section of ~~T~~ the most severely scuffed, abraded, twisted, disturbed portion, or a combination thereof of each test length is to be cut from the tested specimen ~~3-ft (1-m) section~~. The portion cut from the section is then to be cut to ~~be~~ a length of 6 – 8 inches (150 – 200 mm) ~~long~~, with the scuffing, etc. occupying the center of its length. The jacket is to be slit longitudinally along both of the curved edges of the cable and, with the portion lying flat on a horizontal surface, the uppermost flat half of the jacket is to be lifted off to expose the interior of the cable. The cable interior is not to be disturbed while the jacket is slit and its upper half is removed. ~~The interior of the portion is to be examined for maintenance of the position of the grounding conductor.~~ Spacers and fillers may be removed from the cable during this examination. The conductors are to be removed from each test length and the insulation on the conductors is to be examined. If the insulation on any conductor shows checking (as evidenced by a circumferential depression in the outer surface), cracking, splitting, tearing, shattering, or other physical damage, this result is to be recorded as not acceptable. If any of the examinations described in this paragraph show unacceptable results, no additional tests are to be performed but one additional 3-ft (1-m) section is to be cut and examined as described in this paragraph from each cable test length from which unacceptable results were obtained. These additional section(s) are to be the severely scuffed, abraded, twisted, disturbed portions, or a combination thereof of the test lengths. The cable is not acceptable if unacceptable results are shown in any of the three examinations of any additional sections.

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3. Updating Format and Testing Details

PROPOSAL

2.1 A component of a product covered by this Standard shall:

a) Comply with the requirements for that component as specified in this Standard;

b) Be used in accordance with its rating(s) established for the intended conditions of use; and

c) Be used within its established use limitations or conditions of acceptability.

2.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard; or

b) Is superseded by a requirement in this Standard.; or

c) Is separately evaluated when forming part of another component, provided the component is used within its established ratings and limitations.

2.3 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

3.1 "Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information."

3A Referenced Publications

3A.1 Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard.

3A.2 The following publications are referenced in this Standard:

ANSI/ASME B1.20.1, Standard for Pipe Threads, General Purpose (Inch)

ASTM E11, Standard Specification for Wire-Cloth Sieves for Testing Purposes

NFPA 13, Standard for the Installation of Sprinkler Systems

UL 157, Standard for Gaskets and Seals

5.1 The inlet shall have a nominal 1/2-inch size or larger male or female NPT pipe thread in accordance with ANSI/ASME B1.20.1 or other suitable means of connection such as a grooved end.

9.1 An elastomeric part used to provide a seal shall have the following properties when tested as specified in UL 157:

a) For silicone rubber (having poly-organo-siloxane as its constituent characteristic), a minimum tensile strength of 500 psi (3.4 MPa) and a minimum ultimate elongation of 100 percent.

b) For natural rubber and synthetic rubber other than silicone rubber, a minimum tensile strength of 1500 psi (10.3 MPa) and minimum ultimate elongation of 150 percent; or a minimum tensile strength of 2200 psi (15.2 MPa) and a minimum ultimate elongation of 100 percent.

c) Those properties relating to maximum tensile set; minimum tensile strength and elongation after oven aging; and hardness after oven aging, all as specified in UL 157. The maximum service temperature used to determine the oven time and temperature for oven aging is 60°C (140°F).

9.2 UL 157, provides for the testing of either finished elastomeric parts or sheets or slab material. Sheet or slab material is to be tested when the elastomeric parts are O-rings having diameters of less than 1 inch (25.4 mm). The material tested is to be the same as that used in the product, regardless of whether finished elastomeric parts or sheet or slab material is tested.

11.1 An assembled valve shall withstand an internal hydrostatic pressure equal to four times the maximum set pressure of the valve, but not less than 700 psig (48 bar4800 kPa), without rupture; and 1.5 times the maximum set pressure of the valve, but not less than 250 psig (17 bar1700 kPa), without leakage.

Table 14.1
Contaminant for contaminated-water cycling test

Sieve designation [a]	Nominal sieve opening		Grams of contaminant (±5 percent)		
	inch	(mm)	Pipe scale	Top soil	Sand
No. 25	0.0278	(0.706)	-	456	200
No. 50	0.0117	(0.297)	82	82	327
No. 100	0.0059	(0.150)	84	6	89
No. 200	0.0029	(0.074)	81	–	21
No. 325	0.0017	(0.043)	153	–	3
	Total		400	544	640

[a] Sieve designations correspond with those specified in ASTM E11. Cenco-Meinzer sieve sizes 25 mesh, 50 mesh, 100 mesh, 200 mesh, and 325 mesh, corresponding with the number designation in the table, have been found to comply with ASTM E11.

15 10-Day Moist Ammonia Air Stress Cracking Test

15.1 After being subjected to the conditions described in 15.2 – 15.5, a brass part containing more than 15 percent zinc shall show no evidence of cracking when examined using 25X magnification.

Exception: Cracking is allowed when it does not impact the ability of the product to comply with the requirements of this Standard.

15.2 Each test sample is to be subjected to the physical stresses normally imposed on or within a part as the result of assembly with other components. Such stresses are to be applied to the sample prior to and maintained during the test. Samples with threads, intended to be used for installing the product in the field, are to have the threads engaged and tightened to the torque specified in Table 15.1. Polytetrafluoroethylene (PTFE) tape or pipe compounds are not to be used on the threads.

15.3 A sample or samples without plating or coating is to be degreased and then continuously exposed for ten days to a moist ammonia-air mixture maintained in a glass chamber having a glass cover.

15.4 Aqueous A sufficient amount of aqueous ammonia to cover the bottom of the chamber and having a specific gravity of 0.94 is to be maintained during the test. The samples are to be positioned so that the lowest portion of the samples are 1-1/2 (+1/2, -0) inches [(38.1 mm) (+12.7 mm, -0 mm)] above the aqueous ammonia solution and supported by an inert tray. The moist ammonia-air mixture in the chamber is to be maintained at atmospheric pressure with the temperature constant at 93 ±2°F (34 ±1°C).

15.5 After the exposure period, the test samples are to be examined using a microscope having a magnification of 25X for any cracking, delamination or other degradation as a result of the test exposure.

16.1 The manufacturer shall provide the required production control, inspection, and tests which shall include at least the following:

a) Each valve shall be tested for operation. The valve is to be filled with water and the inlet pressure is to be slowly increased until the valve starts to allow the flow of water. The opening pressure shall be within the limits of 95 and 105 percent of the set pressure marked on the valve.

b) Each valve shall be factory-tested for seat leakage. The seat leakage test is to be conducted hydrostatically at a pressure of not less than 85 percent of the set pressure marked on the valve. There shall be no leakage through the body or past the seat.
c) Each valve shall be tested for body leakage. The body leakage test is to be conducted hydrostatically at 150 percent of the maximum permitted set pressure, but not less than 250 psig (17 bar). There shall be no leakage through the body or distortion of the valve.

17.1 A relief valve shall be marked with the following:

a) Manufacturer's or private labeler's name or identifying symbol.

b) Nominal size of valve (inlet).

c) Model number or the equivalent.

d) Set pressure.

e) Direction of intended flow.

f) Year of manufacture. Valves produced in the last three months of a calendar year are able to be marked with the following year as the date of manufacture.

17.2 The markings required by 17.1 shall be included on the valve body to form a permanent part of the device such as:

a) By being molded, stamped, cast; or

b) By use of paint-stenciled, stamped, or etched corrosion resistant metal nameplate, permanently secured to the valve flexible sprinkler hose ; or

c) By indelible stamping on a pressure-sensitive label. Ordinary usage, handling, and storage of the product are to be considered in determining the permanence of marking. Adhesive attached marking and labeling systems shall comply with the indoor- or outdoor-use requirements in UL 969.