

CONTENTS

American National Standards

Project Initiation Notification System (PINS)	2
Call for Comment on Standards Proposals	8
Final Actions - (Approved ANS)	28
Call for Members (ANS Consensus Bodies)	31
American National Standards (ANS) Process	35
Accreditation Announcements (Standards Developers)	36
ANS Under Continuous Maintenance	38
ANSI-Accredited Standards Developer Contacts	39

International Standards

ISO and IEC Draft Standards	41
ISO and IEC Newly Published Standards	44
International Electrotechnical Commission (IEC)	46
International Organization for Standardization (ISO)	47

Information Concerning

Registration of Organization Names in the United States	50
Proposed Foreign Government Regulations	51

Project Initiation Notification System (PINS)

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

AAFS (American Academy of Forensic Sciences)

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

Revision

BSR/ASB Std 032-202x, Standard for a Training Program in Bloodstain Pattern Analysis (revision of ANSI/ASB Std 032-2020)

Stakeholders: All bloodstain pattern analysts, trainees, and mentors.

Project Need: A consensus standard for minimum training and education for a bloodstain pattern analyst provides criteria to assess whether a practitioner meets the minimum requirements to be considered a qualified bloodstain pattern analyst. This standard defines the requirements for the training program and its mentorship component.

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

This document provides minimum pre-training educational requirements for an individual currently in, or entering into, a bloodstain pattern analyst training program, and the minimum training requirements that a trainee must successfully complete prior to practicing as a bloodstain pattern analyst. This document also includes the required components of a mentorship program, including mentoring and evaluation of casework, mock casework, as well as courtroom preparation and testimony.

ASME (American Society of Mechanical Engineers)

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

New Standard

BSR/ASME B31E-202x, Standard for the Seismic Design of Above-Ground Piping Systems (new standard)

Stakeholders: Liquid and gas pipeline industries, contractors, Federal and State regulators, and service providers.

Project Need: The B31 Mechanical Design Technical Committee is seeking to issue this Standard as a new ANS with technical rewrite and updates to reflect the state-of-the-art with regard to seismic design and retrofit of above-ground piping systems.

Interest Categories: AA- Constructor, AB- Designer, AF- General Interest, AH- Insurance/Inspection, AK- Manufacturer, AP- Pipeline Operator/Owner, AW- User.

BSR/ASME B31E-202x, Standard for the Seismic Design of Above-Ground Piping Systems, provides recommendations for the seismic design of above-ground piping systems in the scope of ASME B31, Code for Pressure Piping (Sections B31.1, B31.3, B31.4, B31.5, B31.8, and B31.9). If adopted by the individual B31 Code Section, these may become requirements of that section. The recommendations in this Standard are valid when the piping system complies with the materials, design, fabrication, examination, testing, and inspection requirements of the applicable ASME B31 Code Section. Seismic design loads are intended to be developed site-specifically or may developed from the ASCE environmental loads standard or any comparable standard. Regarding seismic failure, it has been recognized by experienced piping designers that fatigue damage, inelastic performance, and local instabilities may not be adequately considered using elastic analysis and the traditional short-term sustained (occasional) loads analysis methods of the B31 Code Sections. This standard will permit the B31 piping designer to perform traditional static or dynamic analysis methods considering the current understanding of B31 piping performance while also providing additional more rigorous guidance for assessing the effects of redundancy, instability, and redistribution of loads due to inelasticity.

ASQ (American Society for Quality)

Elizabeth Spaulding <espaulding@asq.org> | 600 N Plankinton Avenue | Milwaukee, WI 53203 www.asq.org

Revision

BSR/ASQ S3-202x, An Attribute Chain Sampling Program (revision of ANSI/ASQ S3-2012 (R2017))

Stakeholders: Government, Industry, Academia

Project Need: An attribute chain sampling program provides procedures and properties for plans that can contribute to reducing inspection and improving performance characteristics of sampling inspection. The standard can be used alone or in conjunction with ANSI/ASQ Z1.4 and ANSI/ISO/ASQ 2859-1.

Interest Categories: Producer, User, General Interest

This standard is intended as a stand-alone standard to provide a source of a limited selection of chain sampling plans and their operating characteristics (OC), and to assist in the application of the chain sampling procedures while performing attribute, lot-by-lot, single sampling inspection. It is further intended to serve as a further explanation of and to provide the operating characteristics for the optional fractional acceptance number plans for single sampling that are included in ISO 2859-1. Fractional acceptance number plans are essentially chain-sampling procedures.

ASSP (Safety) (American Society of Safety Professionals)

Lauren Bauerschmidt <LBauerschmidt@assp.org> | 520 N. Northwest Highway | Park Ridge, IL 60068 www.assp.org

Revision

BSR/ASSP Z359.15-202x, Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest Systems (revision and redesignation of ANSI/ASSP Z359.15-2024)

Stakeholders: Fall Protection Safety Professionals

Project Need: Based upon the consensus of the Z359 committee and the leadership of ASSP.

Interest Categories: Fall Protection Safety Professionals

This standard establishes requirements for the design criteria, qualification testing (performance requirements), marking and instructions, user inspections, maintenance, and storage and removal from service of single anchor lifelines and fall arresters for users within the capacity range of 110 to 310 pounds (50 to 140 kg).

ASTM (ASTM International)

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

New Standard

BSR/ASTM E1321-202x, Test Method for Determining Material Ignition and Flame Spread Properties (new standard)

Stakeholders: Surface Burning Industry

Project Need: This test method is used to measure some material-flammability properties that are scientifically constant and compatible and to derive specific properties that allow the prediction and explanation of the flame-spread characteristics of materials.

Interest Categories: Producer, User, General Interest

This test method addresses the fundamental aspects of piloted ignition and flame spread.

AWS (American Welding Society)

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

Revision

BSR/AWS C3.11M/C3.11-202x, Specification for Torch Soldering (revision of ANSI/AWS C3.11M/C3.11-2024)

Stakeholders: Plumbing industry, food handling equipment manufacturers, and the heating and air conditioning industry.

Project Need: Update for current torch soldering practices.

Interest Categories: Producers, General Interest, Educators, and Users

This specification describes relevant equipment, fabrication procedures, and quality (inspection) requirements for the torch soldering of materials. This document includes criteria for classifying torch-solder joints based on loading and the consequences of failure and quality assurance criteria defining the limits of acceptability in each class.

AWS (American Welding Society)

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

Revision

BSR/AWS C3.12M/C3.12-202x, Specification for Furnace Soldering (revision of ANSI/AWS C3.12M/C3.12-2024)

Stakeholders: Refrigeration and air conditioning industries and electronics industry

Project Need: Update for current practices in furnace soldering

Interest Categories: Producers, General Interest, Educators, Users

This specification provides the minimum requirements for equipment, materials, processing procedures as well as inspection for metal and ceramic base materials that can be furnace soldered. This specification provides criteria for classifying furnace soldered joints based on loading and the consequences of failure. It also provides quality assurance criteria that define the limits of acceptability in each class. This specification describes acceptable furnace soldering equipment, materials, and procedures, as well as the required inspection for each class of solder joint so produced.

BHMA (Builders Hardware Manufacturers Association)

Tony Gambrell <agambrell@kellencompany.com> | 529 14th Street NW, Suite 1280 | Washington, DC 20045 www.buildershardware.com

Revision

BSR/BHMA A156.9-202x, Cabinet Hardware (revision of ANSI/BHMA A156.9-2020)

Stakeholders: Consumers, Door and Hardware Manufacturers, Building and Construction

Project Need: Update per five-year revision cycle[†]

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

This Standard contains requirements for cabinet hardware and includes hinges, knobs, pulls, catches, shelf rests, standards and brackets, drawer slides, rotating shelves and track with guides for sliding panels. Included are performance tests covering operational, cyclical, strength, and finish criteria.

BHMA (Builders Hardware Manufacturers Association)

Tony Gambrell <agambrell@kellencompany.com> | 529 14th Street NW, Suite 1280 | Washington, DC 20045 www.buildershardware.com

Revision

BSR/BHMA A156.37-202x, Multipoint Locks (revision of ANSI/BHMA A156.37-2020)

Stakeholders: Consumers, Door and Hardware Manufacturers, Building and Construction

Project Need: Update per five-year revision cycle[†]

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

This Standard establishes performance requirements for Multipoint Locks and includes operational tests, cycle tests, strength tests, security tests, and finish tests.

ECIA (Electronic Components Industry Association)

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

Revision

BSR/EIA 364-36C-202x, Determination of Gas-Tight Characteristics Test Procedure for Electrical Connectors, and/or Contact Systems (revision and redesignation of ANSI/EIA 364-36B-2006 (R2019))

Stakeholders: Electronics, electrical and telecommunications industries

Project Need: Revise and redesignate current ANS

Interest Categories: User, Producer and General Interest

This procedure is to determine the integrity of contacting surfaces (at the mating and/or termination areas) by assessment of the gas-tight characteristics of the contacting surfaces. The gas-tight characteristic simulates the ability of the contacting surfaces to prevent harsh environments from penetrating between them and forming oxides and/or films that will degrade electrical performance. It is recommended for contacts and/or connector (socket) assemblies directly exposed to outside environments or those that are in uncontrolled environments (internal or external to electronic packaging).

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

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

Revision

BSR/IAPMO ES1000-202x, Building Code Compliance of Spray-Applied Polyurethane Foam (revision of ANSI/IAPMO ES1000-2020)

Stakeholders: Code officials, Manufactures

Project Need: Update references for the code editions and references to NFPA 5000

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

This standard provides a method for determining building code compliance for Spray-applied Polyurethane Foam (SPF) used for insulation, roofing, and sealant applications, associated materials and building assemblies incorporating SPF and associated materials. It is intended to serve as the basis for evaluation reports that are prepared to assist building officials in determining when materials and assemblies meet the prescriptive requirements or intent of the building code.

ICC (International Code Council)

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

New Standard

BSR/ICC 820-202x, Standard for Water Supply and Sanitary Drainage System Performance Assessment and Data Extraction (WSSD-SPADE) in the Built Environment (new standard)

Stakeholders: Design professionals, engineers, building owners, contractors, consultants, academia, inspectors, manufacturers, operators, testing laboratories and standard development organizations.

Project Need: The validity of design standards for both water supply and sanitary drainage systems has been called into question in recent years. Many scientific studies identify that these systems are often oversized due to antiquated pipe-sizing approaches. New methodologies that design systems to more realistic conditions are being developed globally. A primary issue identified as a gap within research is inconsistency in the type of data to be collected and varying methods of collection and monitoring which hinders the ability to compare results between datasets, therefore a WSSD-SPADE standard is needed to provide a uniform approach for collecting data and monitoring buildings for pressure, flow rate, temperature and other metrics to provide insight into consumption patterns and system conditions/performance for water supply and sanitary drainage systems .

Interest Categories: Manufacturer, Builder, Standards Promulgator/Testing Laboratory, User, Utility, Consumer, Public Segment, Government Regulator, Insurance

This standard is intended to apply to water supply and sanitary drainage systems in the built environment including residential, multi-family, mixed use, institutional, healthcare facilities and commercial buildings. This standard would provide a uniform approach for collecting data and monitoring buildings for pressure, flow rate, temperature and other metrics to provide insight into consumption patterns and system conditions/performance for water supply and sanitary drainage systems.

ULSE (UL Standards & Engagement)

Cynthia Byrne <cynthia.byrne@ul.org> | 1603 Orrington Ave | Evanston, IL 60201 <https://ulse.org/>

National Adoption

BSR/UL 61810-10-202x, Standard for Safety for Electromechanical Elementary Relays - Part 10: Additional Functional Aspects and Safety Requirements for High-Capacity Relays (national adoption with modifications of IEC 61810-10)
Stakeholders: Manufacturers and Supply Chain for industrial control equipment, smart grids, electric vehicles, electrical energy storage (EES) systems, solar photovoltaic energy systems, power electronic systems and equipment, secondary cells and batteries, and road vehicles.

Project Need: The purpose of this activity is to publish a standard that is written specifically for high-capacity relays, and that incorporate requirements related to special construction features meant specifically for making, breaking, and/or continuously carrying voltage and/or current levels that are higher than typical relays. Current existing standards do not account for special construction features that allow relays of this type to make/break/carry higher voltages and current. Compliance to these standards can be very difficult for devices using these special features.

Interest Categories: Producer, Supply Chain, Testing & Standards Organization, and General.

This standard is an adoption of IEC 61810-10 with US deviations. It will cover electromechanical elementary relays (non-specified time all-or-nothing relays) with high capability requirements like breaking or short-circuit capabilities and similar for incorporation into low-voltage equipment. These relays may have a specific design to extinguish the electric arc between contacts (e.g., by magnetic blow-out) or use an insulation coordination not covered by IEC 61810-1 (e.g., by gas-filled contact chambers) or require safety assessments not covered by IEC 61810-1 (e.g., for higher loads).

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: October 6, 2024

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

180 Technology Parkway, Peachtree Corners, GA 20092 | knguyen@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE Addendum af to ANSI/ASHRAE Standard 15-2022, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2022)

This proposed addendum better aligns the definitions of evaporator and condenser.

[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 20092 | knguyen@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE Addendum z to ANSI/ASHRAE Standard 15-2022, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2022)

This proposed addendum better harmonizes the requirements for Group A2L refrigerants in Sections 7.6 and 7.7.

It specifically better aligns the requirements on refrigerant charge limits and ventilation. Changes related to Addendum e of the 2022 edition of ASHRAE Standard 15 are also noted, as they affect the same section.

[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: October 6, 2024

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

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

Addenda

BSR/ASHRAE/ASHE Addendum 170k-202x, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021)

The proposed addendum clarifies that this section applies to the central systems that provide cooling or heating by changing the name of the section. It adds a requirement for cooling reserve capacity in addition to the heating reserve capacity for spaces already listed in this section. This provides guidance to designers to a minimum reserve capacity required to start with and engage with the facility on what their operational needs are. The addendum also takes out the onsite fuel requirement from 6.1.2.1 so that the exception to 6.1.2.1 does not apply to it anymore. Its added back in 6.1.2.2 as its own requirement. The addendum removes the lower limit of 400 ton cooling load as the starting point for considering any reserve capacity for cooling in Inpatient and Residential Health Care facilities.

[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 | tloxley@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE/ASHE Addendum j to ANSI/ASHRAE/ASHE Standard 189.3-2021, Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 189.3-2021)

The second public review of this draft addresses comments from the first public review and clarifies the requirements for scope 3 emissions, finish schedules, and plans for addressing allergens from cleaning products in sensitive-care populations.

[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 | etoto@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE/IES Addendum ah to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This addendum removes an informative note referring to specific simulation programs, reinforcing the fact that various programs are suitable for implementing 90.1 performance paths provided they are capable of meeting the requirements of 12.4.1, C3.1, and/or G2.2, as appropriate.

[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>

Comment Deadline: October 6, 2024

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

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

Addenda

BSR/ASHRAE/IES Addendum ak to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
This addendum restricts the use of electric resistance heating when a single-zone system is used in warmer climate zones (i.e., above 2B).

[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 | etoto@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE/IES Addendum aq to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
The primary purpose of this proposal is to increase the minimum requirement for on-site renewable energy from an output capacity of 0.5 W/sf to 0.75 W/sf, where Section 10.5.1.1 is applicable. It also clarifies values associated with off-site renewable requirements where Section 10.5.1.3 is used instead.

[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 | etoto@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE/IES Addendum ar to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
This addendum requires that an ECB and Appendix G analysis be conducted using actual utilities rates or supply contracts from utilities or energy suppliers versus average EIA rates when available.

[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 | etoto@ashrae.org, www.ashrae.org

Addenda

BSR/ASHRAE/IES Addendum av to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
This addendum creates more exacting provisions for envelope alterations. The new format is intended to better communicate the requirements, triggers, and allowances associated with performing an envelope alteration to promote energy efficiency within the impacted area(s).

[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>

Comment Deadline: October 6, 2024

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

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

Addenda

BSR/ASHRAE/IES Addendum az to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This addendum introduces requirements for the electrical service and controls to be provided where electrical vehicle spaces are present.

[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>

IICRC (The Institute of Inspection, Cleaning and Restoration Certification)

4043 S Eastern Ave., Las Vegas, NV 89119 | mwashington@iicrcnet.org, <https://www.iicrc.org>

New Standard

BSR/IICRC S400-202x, S400 Standard for Professional Cleaning, Maintenance, and Restoration of the Commercial Built Environment (new standard)

This standard focuses on the commercial built environment and defines frequencies, objectives, results, principles, and practices to clean, maintain, and restore the built environment. The built environment is defined as materials, building assemblies, structures, furniture, fixtures, and equipment located inside a building envelope.

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

Send comments (copy psa@ansi.org) to: <https://iicrc.org/s400/>

NSF (NSF International)

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

Revision

BSR/NSF 14-202x (i145r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2023)

The physical, performance, and health effects requirements in this standard apply to thermoplastic and thermoset plastic piping system components including, but not limited to, pipes, fittings, valves, joining materials, gaskets, and appurtenances.

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

Send comments (copy psa@ansi.org) to: Monica Milla <mmilla@nsf.org>

NSF (NSF International)

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

Revision

BSR/NSF 53-202x (i159r2), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2023)

The POU and POE systems addressed by this standard are designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality. Systems covered under this standard are intended to reduce substances that are considered established or potential health hazards.

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

Send comments (copy psa@ansi.org) to: Monica Milla <mmilla@nsf.org>

Comment Deadline: October 6, 2024

NSF (NSF International)

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

Revision

BSR/NSF 173-202x (i111r1), Dietary Supplements (revision of ANSI/NSF 173-2024)

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

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

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

NSF (NSF International)

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

Revision

BSR/NSF 455-4-202x (i43r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2022)

This standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 and 21 CFR Part 211, International Council for Harmonisation of Technical Requirements for Pharmaceutical for Human Use (ICH) Quality Guidelines, 1, 7, and 10, as well as incorporating additional retailer requirements.

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

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

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 644-202x, Standard for Container Assemblies for LP-Gas (revision of ANSI/UL 644-2014 (R2019))

The following changes in requirements are being proposed for your review: 1. Updating Standard to align with ULSE Style Manual 2. Adding requirements for actuated liquid withdrawal excess-flow valves 3. Revising Section 11, Filler Valves and Vapor-Return Valves, by adding other valve types as options for container assemblies

[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/ProposalsAvailable>

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 817-202X, Standard for Safety for Cord Sets and Power-Supply Cords (revision of ANSI/UL 817-2023)

Addition of New 9.9.8 and Revised Appendix A to Align with Requirements Related to Reese's Law in UL 4200A; Addition of SS2-50R for RV Cord Sets, Revised 10.11.1 and 10.11.4.

[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: October 6, 2024

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 962A-202x, Standard for Furniture Power Distribution Units (revision of ANSI/UL 962A-2023)

Recirculation of the following topics: (1) Class 2 Marking Alignment with UL 1310.

[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 | Linda.L.Phinney@ul.org, <https://ulse.org/>

Revision

BSR/UL 2438-202X, Standard for Safety for Outdoor Seasonal-Use Cord-Connected Wiring Devices (revision of ANSI/UL 2438-2022)

Addition of Section 13A and Revised Appendix A, to Align with Requirements Related to Reese's Law in UL 4200A

[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: October 21, 2024

AAFS (American Academy of Forensic Sciences)

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

New Standard

BSR/ASB Std 202-202x, Standard for Interactions Between Medicolegal Death Investigation Authorities and Organ and Tissue Procurement Organizations and Eye Banks (new standard)

This standard defines a framework for relationships and communication between medicolegal death investigation authorities and organ, eye, and tissue procurement organizations. This document does not specifically address donation in the context of a mass fatality event.

Single copy price: Free

Obtain an electronic copy from: Document and comments template can be viewed on the AAFS Standards Board website at: www.aafs.org/academy-standards-board

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

AGMA (American Gear Manufacturers Association)

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

Reaffirmation

BSR/AGMA 1010-F14, Appearance of Gear Teeth - Terminology of Wear and Failure (reaffirmation of ANSI/AGMA 1010-14 (R2020))

This nomenclature standard identifies and describes the classes of common gear failures and illustrates degrees of deterioration.

Single copy price: \$390.00 (non-member); \$195.00 (member)

Obtain an electronic copy from: tech@agma.org

Send comments (copy psa@ansi.org) to: Todd Praneis, tech@agma.org

Comment Deadline: October 21, 2024

AGMA (American Gear Manufacturers Association)

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

Reaffirmation

BSR/AGMA 2011-B14, Cylindrical Wormgearing Tolerance and Inspection Methods (reaffirmation of ANSI/AGMA 2011-B14 (R2019))

This standard describes and defines variations that may occur in unassembled wormgearing. It displays measuring methods and practices, giving suitable warnings if a preferred probe cannot be used. The applicability of single or double flank composite testing is discussed, using a reference gear. Tooth thickness measurement is shown using direct measurement as well as the use of measurements over wires or pins. Equations for the maximum variations are given for the stated ranges, as a function of size, pitch, and tolerance grade.

Single copy price: \$230.00

Obtain an electronic copy from: tech@agma.org

Send comments (copy psa@ansi.org) to: Todd Praneis, tech@agma.org

API (American Petroleum Institute)

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

Revision

BSR/API RP 3000-202x, Classifying and Loading of Crude Oil into Rail Tank Cars (revision of ANSI/API RP 3000-2014)

This document provides guidance on the material characterization, transport classification, and quantity measurement of petroleum crude oil (crude oil) for the loading of rail tank cars. Guidance on the documentation of measurement results is also provided. The criteria for determining the frequency of sampling and testing of petroleum crude oil are identified for transport classification. This document applies only to petroleum crude oil classified as Hazard Class 3—Flammable Liquid under the US Code of Federal Regulations (CFR) at the time of publication.

Single copy price: \$136.00

Obtain an electronic copy from: buflodj@api.org

Send comments (copy psa@ansi.org) to: John Buflod, buflodj@api.org

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

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

Addenda

BSR/ASHRAE/IES Addendum at to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This addendum modifies Section 12, Appendix G, and other associated requirements to reflect the latest Standard 140 requirements by which building performance simulation programs must now be evaluated.

Single copy price: \$35.00

Obtain an electronic copy from: standards.section@ashrae.org

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

Comment Deadline: October 21, 2024

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

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

Revision

BSR/ASHRAE Standard 40-2014R, Methods of Testing for Rating Heat-Operated Unitary Air-Conditioning and Heat-Pump Equipment (revision of ANSI/ASHRAE Standard 40-2014 (R2024))

This revision of ANSI/ASHRAE Standard 40-2014 is a substantial update of the standard. The standard provides test methods for determining the heating and cooling output capacities and energy inputs of unitary air-conditioning and heat pump equipment that is heat-operated.

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>

ASSP (ASC A10) (American Society of Safety Professionals)

520 N. Northwest Highway, Park Ridge, IL 60068 | TFisher@assp.org, www.assp.org

Revision

BSR/ASSP A10.37 202X, Debris Net Systems Used During Construction and Demolition Operations (revision and redesignation of ANSI/ASSE A10.37-2016)

This standard establishes safety requirements for the design, selection, installation, and use of debris net systems during construction, demolition operations, and for the temporary containment of debris from deteriorating structures. The purpose of this standard is to provide the criteria for debris net selection and use and to provide design, test and installation requirements for debris nets.

Single copy price: \$125.00

Obtain an electronic copy from: Tim Fisher; TFisher@assp.org

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

ASSP (Safety) (American Society of Safety Professionals)

520 N. Northwest Highway, Park Ridge, IL 60068 | rblanchette@assp.org, www.assp.org

Revision

BSR/ASSP Z490.1-202x, Criteria for Accepted Practices in Safety, Health and Environmental Training (revision and redesignation of ANSI/ASSE Z490.1-2016)

This standard establishes criteria for safety, health and environmental training programs, including program management, development, delivery, evaluation, and documentation. The purpose of this standard is to provide criteria for accepted practices for safety, health and environmental training programs including development, delivery, evaluation, and program management.

Single copy price: \$150.00

Obtain an electronic copy from: RBlanchette@assp.org

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

Comment Deadline: October 21, 2024

ASTM (ASTM International)

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

New Standard

BSR/ASTM WK72526-202x, Practice for Opinions on the Interpretation of Primer Gunshot Residue (pGSR) Analysis by Scanning Electron Microscopy/Energy Dispersive X-Ray Spectrometry (SEM/EDS) (new standard)
<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

New Standard

BSR/ASTM WK73484-202x, Practice for Standard Practice for Reporting Results and Opinions of Explosives Analysis (new standard)
<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

New Standard

BSR/ASTM WK89493-202x, Guide for Detection and Preservation of Forensic Trace Evidence (new standard)
<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Reaffirmation

BSR/ASTM E2554-2018 (R202x), Practice for Estimating and Monitoring the Uncertainty of Test Results of a Test Method Using Control Chart Techniques (reaffirmation of ANSI/ASTM E2554-2018)
<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

Comment Deadline: October 21, 2024

ASTM (ASTM International)

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

Reaffirmation

BSR/ASTM E2586-2019 (R202x), Practice for Calculating and Using Basic Statistics (reaffirmation of ANSI/ASTM E2586-2019)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

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ASTM (ASTM International)

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

Reaffirmation

BSR/ASTM E2833-2012 (R202x), Practice for Certification Bodies that Certify Personnel Engaged in Inspection and Testing of Construction Activities and Materials Used in Construction, Including Special Inspection (reaffirmation of ANSI/ASTM E2833-2012 (R2018))

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

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ASTM (ASTM International)

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

Reaffirmation

BSR/ASTM E3134-2020 (R202x), Specification for Transportation Tunnel Structural Components and Passive Fire Protection Systems (reaffirmation of ANSI/ASTM E3134-2020)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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ASTM (ASTM International)

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

Revision

BSR/ASTM E84-202x, Test Method for Surface Burning Characteristics of Building Materials (revision of ANSI/ASTM E84-2023d)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

Comment Deadline: October 21, 2024

ASTM (ASTM International)

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

Revision

BSR/ASTM E1317-202x, Test Method for Flammability of Surface Finishes (revision of ANSI/ASTM E1317-2019)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E1354-202x, Test Method for Heat and Visible Smoke Release Rates for Materials and Products

Using an Oxygen Consumption Calorimeter (revision of ANSI/ASTM E1354-2023)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E1546-202x, Guide for Development of Fire-Hazard-Assessment Standards (revision of ANSI/ASTM E1546-2021)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E1740-202x, Test Method for Determining the Heat Release Rate and Other Fire-Test-Response Characteristics of Wall Covering or Ceiling Covering Composites Using a Cone Calorimeter (revision of ANSI/ASTM E1740-2022)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

Comment Deadline: October 21, 2024

ASTM (ASTM International)

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

Revision

BSR/ASTM E1966-202x, Test Method for Fire-Resistive Joint Systems (revision of ANSI/ASTM E1966-2015 (R2019))

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E2067-202x, Practice for Full-Scale Oxygen Consumption Calorimetry Fire Tests (revision of ANSI/ASTM E2067-2023)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E2102-202x, Test Method for Measurement of Mass Loss and Ignitability for Screening Purposes Using a Conical Radiant Heater (revision of ANSI/ASTM E2102-2021)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E2257-202x, Test Method for Room Fire Test of Wall and Ceiling Materials and Assemblies (revision of ANSI/ASTM E2257-2022)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

Comment Deadline: October 21, 2024

ASTM (ASTM International)

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

Revision

BSR/ASTM E2307-202x, Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-Story Test Apparatus (revision of ANSI/ASTM E2307-2023B)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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ASTM (ASTM International)

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

Revision

BSR/ASTM E2587-202x, Practice for Use of Control Charts in Statistical Process Control (revision of ANSI/ASTM E2587-2016 (R2021))

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E2782-202x, Guide for Measurement Systems Analysis (MSA) (revision of ANSI/ASTM E2782-2022)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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ASTM (ASTM International)

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

Revision

BSR/ASTM E2816-202x, Test Methods for Fire Resistant Metallic HVAC Duct Systems (revision of ANSI/ASTM E2816-2020)

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

Comment Deadline: October 21, 2024

ASTM (ASTM International)

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

Revision

BSR/ASTM E2910-202x, Guide for Preferred Methods for Acceptance of Product (revision of ANSI/ASTM E2910-2012 (R2018))

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ASTM (ASTM International)

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

Revision

BSR/ASTM E3021-202x, Guide for Evaluating the Relative Effectiveness of Building Systems to Resist the Passage of Products of Combustion Based on the Aggregation of Leakage Rates (revision of ANSI/ASTM E3021/E3021M-2015 (R2019))

<https://www.astm.org/get-involved/technical-committees/ansi-review>

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

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

ATIS (Alliance for Telecommunications Industry Solutions)

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

Stabilized Maintenance

BSR ATIS 0700724-2014 (S202x), UMTS Handover Interface for Lawful Interception (stabilized maintenance of ANSI ATIS 0700724-2014 (R2019))

This standard is based on 3GPP TS33.108, modified to become a standard for Telecommunications. Laws of individual nations and regional institutions (e.g., European Union), and sometimes licensing and operating conditions, define a need to intercept telecommunications traffic and related information in modern telecommunications systems. It has to be noted that lawful interception shall always be done in accordance with the applicable national or regional laws and technical regulations. Nothing in this standard, including the definitions, is intended to supplant national law.

Single copy price: \$275.00

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 | jrosario@aws.org, www.aws.org

New Standard

BSR/AWS C2.26/C2.26M-202x, Specification for Thermal Spray Powder (new standard)

This specification establishes the requirements for the classification of powders for various thermal spray processes. The requirements include particle size distribution, apparent density, flow characteristics and chemical composition. Requirements for manufacturing, labeling and packaging are also included.

Single copy price: \$25.00

Obtain an electronic copy from: jrosario@aws.org

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

Comment Deadline: October 21, 2024

CRRC (Cool Roof Rating Council)

2435 N. Lombard Street, Portland, OR 97217 | sarah@coolroofs.org, www.coolroofs.org

Revision

BSR/CRRC S100-202x, Standard Test Methods for Determining Radiative Properties of Materials (revision of ANSI/CRRC S100-2021)

This standard covers specimen preparation and test methods for determining the initial and aged radiative properties of roofing and exterior wall materials.

Single copy price: Free

Obtain an electronic copy from: <https://coolroofs.org/resources/ansi-crrc-s100>

Send comments (copy psa@ansi.org) to: Sarah Schneider <sarah@coolroofs.org>

CSA (CSA America Standards Inc.)

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

New Standard

BSR/CSA Z21.107-202x, Gas thermal shutoff devices (same as ANSI Z21.107) (new standard)

This Standard applies to gas thermal shutoff devices constructed entirely of new unused parts and materials intended for use after the service meter or second stage regulator, hereinafter referred to as “devices”, ranging from 3/8 in (DN 10) up to 6 in (DN 150) nominal pipe size. Devices covered by this Standard automatically shut off the gas flow when they reach a set temperature. This is a single-use control. This Standard applies to devices for use with natural or propane gas, at pressures not to exceed 72 psi (496 kPa).

Single copy price: Free

Obtain an electronic copy from: ansi.contact@csagroup.org

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

CTA (Consumer Technology Association)

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

Revision

BSR/CTA 202x-C-202x, Standard Method of Measurement for Powered Subwoofers (revision of ANSI/CTA 2010-B-2014 (R2020))

This standard defines a method for measuring the audio performance of subwoofers, both passive and powered. The standard is being revised in order to incorporate new rating methods and to make additional edits as needed.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

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

ECIA (Electronic Components Industry Association)

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

Reaffirmation

BSR/EIA 364-14B-1999 (R202x), Ozone Exposure Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-14B-1999 (R2019))

This standard establishes a test method to assess the ability of connectors to withstand the effects of controlled amounts of ozone and still maintain effective environmental protection.

Single copy price: \$78.00

Obtain an electronic copy from: store accuristech.com

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

Comment Deadline: October 21, 2024

ECIA (Electronic Components Industry Association)

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

Reaffirmation

BSR/EIA 364-18B-2007 (R202x), Visual and Dimensional Inspection Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-18B-2007 (R2019))

This standard establishes guidelines for visual and dimensional inspection of electrical connectors and sockets prior to, during, and after other test procedures.

Single copy price: \$78.00

Obtain an electronic copy from: store accuristech.com

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

ECIA (Electronic Components Industry Association)

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

Reaffirmation

BSR/EIA 364-39B-1999 (R202x), Hydrostatic Test Procedure for Electrical Connectors, Contacts, and Sockets (reaffirmation of ANSI/EIA 364-39B-1999 (R2019))

This standard establishes a test method to assess the ability of unmated receptacles and wired mated harness to withstand hydrostatic pressures that are encountered in the undersea environment.

Single copy price: \$79.00

Obtain an electronic copy from: store accuristech.com

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

ECIA (Electronic Components Industry Association)

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

Reaffirmation

BSR/EIA 364-45C-2012 (R202x), Firewall Flame Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-45C-2012 (R2019))

This standard establishes a test method to determine the ability of a mated pair of electrical firewall connectors to resist specified flame and vibration conditions during 20 minutes of exposure by preventing flames from breaching the firewall through the connectors and providing specific electrical performance for the first 6 minutes.

Single copy price: \$85.00

Obtain an electronic copy from: store accuristech.com

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

ECIA (Electronic Components Industry Association)

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

Reaffirmation

BSR/EIA 364-50B-2012 (R202x), Dust (Fine Sand) Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-50B-2012 (R2019))

This standard establishes a method to ascertain the ability of fully wired connector assemblies to resist the effects of dry dust (fine sand) laden atmosphere.

Single copy price: \$78.00

Obtain an electronic copy from: store accuristech.com

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

Comment Deadline: October 21, 2024

ECIA (Electronic Components Industry Association)

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

Revision

BSR/EIA 364-31G-202x, Humidity Test Procedure for Electrical Connectors and Sockets (revision and redesignation of ANSI/EIA 364-31F-2019)

The purpose of these tests is to evaluate materials and/or connector/socket assemblies as they are impacted by the effects of high humidity and heat. These tests are intended to be non-condensing.

Single copy price: \$89.00

Obtain an electronic copy from: store accuristech.com

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

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 | standards@iapmostandards.org, www.asse-plumbing.org

New Standard

BSR/ASSE Series 28000-202x, Qualification for Inspectors of Cured In Place Pipe (CIPP) rehabilitations. (new standard)

This standard establishes minimum knowledge and performance criteria as it applies to the qualified individual who provides inspection of Cured in Place Pipe (CIPP) rehabilitations and installations. The inspector assures proper installation water tightness and the elimination of group water penetration into the rehabilitated pipe.

Single copy price: Free

Obtain an electronic copy from: standards@iapmostandards.org

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

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

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

Reaffirmation

BSR/IAPMO S1001.1 (R202x), Design and Installation of Solar Water Heating Systems (reaffirmation of ANSI/IAPMO S1001.1-2013 (R2019))

This Standard specifies requirements for the design and installation of pre-engineered solar water heating systems intended to be installed as stand-alone systems or in conjunction with auxiliary water heaters, including component selection and sizing criteria.

Single copy price: Free

Obtain an electronic copy from: standards@iapmostandards.org

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

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

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

Reaffirmation

BSR/IAPMO Z1157 (R202x), Ball Valves (reaffirmation of ANSI/IAPMO Z1157-2014e1 (R2019))

This Standard covers ball valves in sizes NPS-1/8 to NPS-4, with minimum rated working pressures of 860 kPa (125 psi) at 23°C (73°F), intended for use in water supply and distribution systems and specifies requirements for materials, physical characteristics, performance, testing, and markings.

Single copy price: Free

Obtain an electronic copy from: standards@iapmomstandards.org

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

Comment Deadline: October 21, 2024

IIAR (International Institute of All-Natural Refrigeration)

1001 North Fairfax Street, Alexandria, VA 22314 | tony_lundell@iiar.org, www.iiar.org

Revision

BSR/IIAR 5-202x, Standard for Startup of Closed-Circuit Ammonia Refrigeration Systems (revision of ANSI/IIAR 5-2019)

This standard specifies minimum requirements for the startup of closed-circuit ammonia refrigeration systems.

Single copy price: Free until public review period is completed

Obtain an electronic copy from: tony_lundell@iiar.org

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

IIAR (International Institute of All-Natural Refrigeration)

1001 North Fairfax Street, Alexandria, VA 22314 | tony_lundell@iiar.org, www.iiar.org

Revision

BSR/IIAR 6-202x, Standard for Inspection, Testing, and Maintenance of Closed-Circuit Ammonia Refrigeration Systems (revision of ANSI/IIAR 6-2019)

This standard specifies minimum requirements for inspection, testing, and maintenance of closed-circuit ammonia refrigeration systems. This standard is intended to assist individuals responsible for developing and implementing inspection, testing, and maintenance programs for facilities with stationary closed-circuit ammonia refrigeration systems using recognized and generally accepted good engineering practices (RAGAGEP).

Single copy price: Free until the public review period is completed

Obtain an electronic copy from: tony_lundell@iiar.org

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

NSF (NSF International)

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

Revision

BSR/NSF 14-202x (i142r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2023)

The physical, performance, and health effects requirements in this standard apply to thermoplastic and thermoset plastic piping system components including, but not limited to, pipes, fittings, valves, joining materials, gaskets, and appurtenances.

Single copy price: Free

Obtain an electronic copy from: <https://standards.nsf.org/higherlogic/ws/public/download/76529/14i142r1%20-%20Normative%20References%20-%20JC%20memo%20%26%20ballot.pdf>

Send comments (copy psa@ansi.org) to: Monica Milla <mmilla@nsf.org>

TIA (Telecommunications Industry Association)

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

Revision

BSR/TIA 455-11-E-202x, Vibration Test Procedures for Fiber Optic Components and Cables (revision and redesignation of ANSI/TIA 455-11D-2010 (R2014))

This is a revision of ANSI/TIA 455-11-D and will update the MIL-STD-202 documents referenced in document, and to update revision versions of outdated references. Entire document is open for comment.

Single copy price: \$84.00

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

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

Comment Deadline: October 21, 2024

ULSE (UL Standards & Engagement)

1603 Orrington Ave, Suite 20000, Evanston, IL 60201 | Susan.P.Malohn@ul.org, <https://ulse.org/>

New Standard

BSR/UL 3001-202x, Standard for Safety for Distributed Energy Resource Systems (new standard)

(1) The First Edition of the Standard for Safety for Distributed Energy Resource Systems, UL 3001, including applicable requirements for Canada. The Standard requirements provide a means for evaluation of a Distributed Energy Resource System (DER system) as a system and consider hazards associated with the interaction between sources and interaction with external energy sources such as an area EPS and other DER systems.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

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

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 924-202x, Standard for Safety for Emergency Lighting and Power Equipment (revision of ANSI/UL 924-2022)

This proposal for UL 924 covers: (1) Scope updates; (2) Direct current output; (3) Additional battery options; (4) ELCF Test; (5) Battery discharge test; (6) Temperature test; (7) Emergency equipment with AC and DC input ratings; (8) Emergency battery pack replacement marking; (9) Instructions for directly controlled emergency luminaires; (10) Editorial updates; (11) Area of Refuge Signs; and (12) Functional Safety Evaluations.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

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

Comment Deadline: November 5, 2024

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 20-202x, Standard for General-Use Snap Switches (revision of ANSI/UL 20-2023)

Ballot for the following topic: The proposed Fifteenth Edition of the Standard for General-Use Snap Switches, UL 20.

Single copy price: Free

Order from: Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

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

Comment Deadline: November 5, 2024

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 1484-202x, Standard for Residential Gas Alarms (revision of ANSI/UL 1484-2022a)

1.1 These requirements cover electrically operated gas alarms intended for installation in residential occupancies and recreational vehicles (RVs). 1.2 These requirements cover gas alarms intended to detect flammable gases such as propane and natural gas. 1.3 These requirements also cover all remote accessories that may be connected to a gas alarm.

Single copy price: Free

Order from: csds.ul.com

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

Comment Deadline: December 5, 2024

NASBLA (National Association of State Boating Law Administrators)

1020 Monarch Street, Suite 200, Lexington, KY 40513 | Kaci.christopher@nasbla.org, www.nasbla.org

New Standard

BSR/NASBLA 1200-202x, K-12 Personal Flotation Device Standard (new standard)

This Standard defines general, entry-level knowledge developed for a Kindergarten through 12th grade (K-12) audience about the importance of Personal Flotation Device (PFD) use in, on, or around water. It has been prepared to provide guidance on the application of PFDs for persons engaged in water-related activities. PFDs selected and maintained according to this Standard should give a reasonable assurance of safety from drowning to a person who is immersed in water. This consensus-based standard is designed to support educators and raise the overall level of knowledge, skills, and competencies of the K-12 audience. This standard is not intended to be submitted for consideration as an ISO, IEC, or ISO/IEC JTC-1 standard.

Single copy price: Free

Order from: Kaci Christopher <Kaci.christopher@nasbla.org>

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

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:

IEEE (Institute of Electrical and Electronics Engineers)

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

BSR/IEEE 3303-202x, Standard Adoption of Moving Picture, Audio and Data Coding by Artificial Intelligence (MPAI) Technical Specification Compression and Understanding of Industrial Data 1.1 (new standard)

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

Final Actions on American National Standards

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

ASC X9 (Accredited Standards Committee X9, Incorporated)

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

ANSI X9.97-1-2024, Financial services - Secure cryptographic devices (retail) - Part 1: Concepts, requirements and evaluation methods (identical national adoption of ISO 13491-1-2016) Final Action Date: 8/27/2024 | *National Adoption*

ANSI X9.97-2-2024, Secure cryptographic devices (retail) - Part 2: Secure compliance checklists for devices used in financial transactions (identical national adoption of ISO 13491-2-2023) Final Action Date: 8/27/2024 | *National Adoption*

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

180 Technology Parkway, Peachtree Corners, GA 20092 | knguyen@ashrae.org, www.ashrae.org

ANSI/ASHRAE Addendum ab to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum af to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum ag to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum ai to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum aj to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum ak to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum al to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum am to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum a to ANSI/ASHRAE Standard 154-2022, Ventilation for Commercial Cooking Operations (addenda to ANSI/ASHRAE Standard 154-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum b to Standard 209-2018, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 209-2018) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum f to ANSI/ASHRAE Standard 147-2019, Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems (addenda to ANSI/ASHRAE Standard 147-2019) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum g to ANSI/ASHRAE Standard 15.2-2022, Safety Standard for Refrigeration Systems in Residential Applications (addenda to ANSI/ASHRAE Standard 15.2-2022) Final Action Date: 8/30/2024 | *Addenda*

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

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

ANSI/ASHRAE Addendum g to Standard 209-2018, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 209-2018) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum h to ANSI/ASHRAE Standard 15.2-2022, Safety Standard for Refrigeration Systems in Residential Applications (addenda to ANSI/ASHRAE Standard 15.2-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum h to Standard 209-2018, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 209-2018) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum k to Standard 209-2018, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 209-2018) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum l to Standard 209-2018, Energy Simulation Aided Design for Buildings except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE Standard 209-2018) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum n to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE Addendum w to ASHRAE Standard 15-2022, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2022) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE/ASHE Addendum 170p-2021, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 8/30/2024 | *Addenda*

ANSI/ASHRAE/ASHE Addendum 170q-2021, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 8/30/2024 | *Addenda*

ASME (American Society of Mechanical Engineers)

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

ANSI/ASME A112.18.1/CSA B125.1-2024, Plumbing Supply Fittings Standard (revision of ANSI/ASME A112.18.1-2012/CSA B125.1-2018) Final Action Date: 8/27/2024 | *Revision*

FM (FM Approvals)

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

ANSI/FM 4920-2014 (R2024), Filters Used in Clean Room Facilities (reaffirmation of ANSI/FM 4920-2014) Final Action Date: 8/28/2024 | *Reaffirmation*

ANSI/FM 4880-2024, Evaluating the Fire Performance of Insulated Building Panel Assemblies and Interior Finish Materials (revision of ANSI/FM 4880-2017) Final Action Date: 8/27/2024 | *Revision*

IEEE (Institute of Electrical and Electronics Engineers)

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

ANSI/IEEE 762-2024, Standard Definitions for Use in Reporting Electric Generating Unit Reliability, Availability, and Productivity (new standard) Final Action Date: 8/29/2024 | *New Standard*

ANSI/IEEE 2831-2024, Recommended Practice for Distributed Traveling Wave Fault Location Devices for High-Voltage Direct-Current (HVDC) Transmission Lines (new standard) Final Action Date: 8/29/2024 | *New Standard*

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

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

INCITS 569-2024, Information technology - Fibre Channel - Link Services - 5 (new standard) Final Action Date: 8/27/2024 | *New Standard*

INCITS 570-2024, Information technology - Fibre Channel - Generic Services - 9 (FC-GS-9) (new standard) Final Action Date: 8/27/2024 | *New Standard*

NSF (NSF International)

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

ANSI/NSF 49-2024 (i173AAr1), Biosafety Cabinetry: Design, Construction, Performance and Field Certification (revision of ANSI/NSF 49-2022) Final Action Date: 8/27/2024 | *Revision*

ANSI/NSF 49-2024 (i173BBr1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022) Final Action Date: 8/26/2024 | *Revision*

ANSI/NSF 49-2024 (i173CCr1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022) Final Action Date: 8/26/2024 | *Revision*

ANSI/NSF 49-2024 (i173DDr1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2022) Final Action Date: 8/26/2024 | *Revision*

SCTE (Society of Cable Telecommunications Engineers)

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

ANSI/SCTE 54-2024, Digital Video Service Multiplex and Transport System Standard for Cable Television (revision of ANSI/SCTE 54-2020) Final Action Date: 8/27/2024 | *Revision*

ANSI/SCTE 172-2024, Constraints on NAL Structured Video Coding for Digital Program Insertion (revision of ANSI/SCTE 172-2017) Final Action Date: 8/27/2024 | *Revision*

ANSI/SCTE 197-2024, Recommendations for Spot Check Loudness Measurements (revision of ANSI/SCTE 197-2018) Final Action Date: 8/27/2024 | *Revision*

ANSI/SCTE 214-1 2022-2024, MPEG DASH for IP-Based Cable Services - Part 1: MPD Constraints and Extensions (revision of ANSI/SCTE 214-1-2022) Final Action Date: 8/27/2024 | *Revision*

ANSI/SCTE 215-1 2024, HEVC Video Constraints for Cable Television - Part 1: Coding (revision of ANSI/SCTE 215-1-2020) Final Action Date: 8/27/2024 | *Revision*

ULSE (UL Standards & Engagement)

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

ANSI/UL 2044-2019 (R2024), Standard for Commercial Closed-Circuit Television Equipment (reaffirmation and redesignation of ANSI/UL 2044-2019) Final Action Date: 8/28/2024 | *Reaffirmation*

ANSI/UL 3030-2018 (R2024), Standard for Unmanned Aircraft Systems (reaffirmation of ANSI/UL 3030-2018) Final Action Date: 8/30/2024 | *Reaffirmation*

ANSI/UL 2443-2024, Standard for Flexible Sprinkler Hose with Fittings for Fire Protection Service (revision of ANSI/UL 2443-2023) Final Action Date: 8/26/2024 | *Revision*

Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

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

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

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

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

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

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

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE's standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.

SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.

Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures.

More information is available at www.scte.org or by e-mail from standards@scte.org.

ASME (American Society of Mechanical Engineers)

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

BSR/ASME B31E-202x, Standard for the Seismic Design of Above-Ground Piping Systems (new standard)

ASSP (ASC A10) (American Society of Safety Professionals)

520 N. Northwest Highway, Park Ridge, IL 60068 | TFisher@ASSP.org, www.assp.org

BSR/ASSP A10.37 202X, Debris Net Systems Used During Construction and Demolition Operations (revision and redesignation of ANSI/ASSE A10.37-2016)

ASSP (Safety) (American Society of Safety Professionals)

520 N. Northwest Highway, Park Ridge, IL 60068 | LBauerschmidt@assp.org, www.assp.org

BSR/ASSP Z359.15-202x, Safety Requirements for Single Anchor Lifelines and Fall Arresters for Personal Fall Arrest Systems (revision and redesignation of ANSI/ASSP Z359.15-2024)

ATIS (Alliance for Telecommunications Industry Solutions)

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

BSR ATIS 0700724-2014 (S202x), UMTS Handover Interface for Lawful Interception (stabilized maintenance of ANSI ATIS 0700724-2014 (R2019))

AWS (American Welding Society)

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

BSR/AWS C2.26/C2.26M-202x, Specification for Thermal Spray Powder (new standard)

AWS (American Welding Society)

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

BSR/AWS C3.11M/C3.11-202x, Specification for Torch Soldering (revision of ANSI/AWS C3.11M/C3.11-2024)

AWS (American Welding Society)

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

BSR/AWS C3.12M/C3.12-202x, Specification for Furnace Soldering (revision of ANSI/AWS C3.12M/C3.12-2024)

BHMA (Builders Hardware Manufacturers Association)

529 14th Street NW, Suite 1280, Washington, DC 20045 | agambrall@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.9-202x, Cabinet Hardware (revision of ANSI/BHMA A156.9-2020)

BHMA (Builders Hardware Manufacturers Association)

529 14th Street NW, Suite 1280, Washington, DC 20045 | agambrall@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.37-202x, Multipoint Locks (revision of ANSI/BHMA A156.37-2020)

CTA (Consumer Technology Association)

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

BSR/CTA 202x-C-202x, Standard Method of Measurement for Powered Subwoofers (revision of ANSI/CTA 2010-B-2014 (R2020))

Interest Categories: CTA and the R4 Audio and Video Systems Committee are particularly interested in adding new members (called “users” who acquire video products from those who create them) as well as those with a general interest.

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-31G-202x, Humidity Test Procedure for Electrical Connectors and Sockets (revision and redesignation of ANSI/EIA 364-31F-2019)

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-36C-202x, Determination of Gas-Tight Characteristics Test Procedure for Electrical Connectors, and/or Contact Systems (revision and redesignation of ANSI/EIA 364-36B-2006 (R2019))

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-14B-1999 (R202x), Ozone Exposure Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-14B-1999 (R2019))

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-18B-2007 (R202x), Visual and Dimensional Inspection Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-18B-2007 (R2019))

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-39B-1999 (R202x), Hydrostatic Test Procedure for Electrical Connectors, Contacts, and Sockets (reaffirmation of ANSI/EIA 364-39B-1999 (R2019))

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-45C-2012 (R202x), Firewall Flame Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-45C-2012 (R2019))

ECIA (Electronic Components Industry Association)

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

BSR/EIA 364-50B-2012 (R202x), Dust (Fine Sand) Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-50B-2012 (R2019))

NASBLA (National Association of State Boating Law Administrators)

1020 Monarch Street, Suite 200, Lexington, KY 40513 | Kaci.christopher@nasbla.org, www.nasbla.org

BSR/NASBLA 1200-202x, K-12 Personal Flotation Device Standard (new standard)

NSF (NSF International)

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

BSR/NSF 14-202x (i145r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2023)

NSF (NSF International)

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

BSR/NSF 53-202x (i159r2), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2023)

NSF (NSF International)

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

BSR/NSF 173-202x (i111r1), Dietary Supplements (revision of ANSI/NSF 173-2024)

NSF (NSF International)

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

BSR/NSF 455-4-202x (i43r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2022)

TIA (Telecommunications Industry Association)

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

BSR/TIA 455-11-E-202x, Vibration Test Procedures for Fiber Optic Components and Cables (revision and redesignation of ANSI/TIA 455-11D-2010 (R2014))

American National Standards (ANS) Process

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

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

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

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

Accreditation Announcements (Standards Developers)

Approval of Accreditation – ASD

AdvaMed - Advanced Medical Technology Association

Effective August 27, 2024

ANSI's Executive Standards Council has approved **AdvaMed - Advanced Medical Technology Association** as an ANSI Accredited Standards Developer (ASD) under its proposed operating procedures for documenting consensus on AdvaMed -sponsored American National Standards, effective **August 27, 2024**. For additional information, please contact: Carolyn Hull, Advanced Medical Technology Association (AdvaMed) | 1301 Pennsylvania Avenue, Suite 400, Washington, DC 20004 | (202) 771-6497, chull@advamed.org

Approval of Reaccreditation – ASD

ACCT - Association for Challenge Course Technology

Effective August 28, 2024

The reaccreditation of **ACCT - Association for Challenge Course Technology** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ACCT-sponsored American National Standards, effective **August 28, 2024**. For additional information, please contact: Leslie Sohl, Association for Challenge Course Technology (ACCT) | P.O. Box 19797, Boulder, CO 80308 | (303) 941-9438, leslie.sohl@acctinfo.org

Approval of Reaccreditation – ASD

APCO - Association of Public-Safety Communications Officials-International

Effective August 26, 2024

The reaccreditation of **APCO - Association of Public-Safety Communications Officials-International** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on APCO-sponsored American National Standards, effective **August 26, 2024**. For additional information, please contact: Aimee Jarrell, Association of Public-Safety Communications Officials-International (APCO) | 351 N. Williamson Boulevard, Daytona Beach, FL 32114-1112 | (386) 944-2413, jarrella@apcointl.org

Approval of Reaccreditation – ASD

AWPA (ASC O5) - American Wood Protection Association Wood Poles and Other Wood Products

Effective August 27, 2024

The reaccreditation of the **American Wood Protection Association**, sponsor of **ASC O5, Wood Poles and Other Wood Products** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on AWPA (ASC O5)-sponsored American National Standards, effective **August 27, 2024**. For additional information, please contact: Nicole Butler, American Wood Protection Association | 2430 US Highway 27 STE #330-223, Clermont, FL 34714 | (205) 733-4077, email@awpa.com

Accreditation Announcements (Standards Developers)

Approval of Reaccreditation – ASD

PSAI - Portable Sanitation Association International

Effective August 28, 2024

The reaccreditation of **PSAI - Portable Sanitation Association International** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on PSAI-sponsored American National Standards, effective **August 28, 2024**. For additional information, please contact: Veronica Crosier, Portable Sanitation Association International (PSAI) | 1601 Utica Avenue South, Suite 213, Minneapolis, MN 55416 | (651) 290-6295, veronicac@ewald.com

Approval of Reaccreditation – ASD

ROHVA - Recreational Off-Highway Vehicle Association

Effective August 28, 2024

The reaccreditation of **ROHVA - Recreational Off-Highway Vehicle Association** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ROHVA-sponsored American National Standards, effective **August 28, 2024**. For additional information, please contact: Ken Glaser, Recreational Off-Highway Vehicle Association (ROHVA) | 2 Jenner Street, Suite 150, Irvine, CA 92618 | (949) 255-2560, kglaser@rohva.org

Approval of Reaccreditation – ASD

SVIA - Specialty Vehicle Institute of America

Effective August 28, 2024

The reaccreditation of **SVIA - Specialty Vehicle Institute of America** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on SVIA-sponsored American National Standards, effective **August 28, 2024**. For additional information, please contact: Ken Glaser, Specialty Vehicle Institute of America (SVIA) | 2 Jenner, Suite 150, Irvine, CA 92618 | (949) 727-3727, kglaser@svia.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)
 PRCA (Professional Ropes Course Association)
 RESNET (Residential Energy Services Network, Inc.)
 SAE (SAE International)
 TCNA (Tile Council of North America)
 TIA (Telecommunications Industry Association)
 TMA (The Monitoring Association)
 ULSE (UL Standards & Engagement)

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

ANSI-Accredited Standards Developers (ASD) Contacts

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

AAFS

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

Teresa Ambrosius
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AGMA

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

Phillip Olson
olson@agma.org

Todd Praneis
praneis@agma.org

API

American Petroleum Institute
200 Massachusetts Avenue NW
Washington, DC 20001
www.api.org

John Buflod
buflodj@api.org

ASC X9

Accredited Standards Committee X9,
Incorporated
275 West Street, Suite 107
Annapolis, MD 21401
www.x9.org

Ambria Calloway
ambria.frazier@x9.org

ASHRAE

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

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Emily Toto
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ASME

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

ASQ

American Society for Quality
600 N Plankinton Avenue
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www.asq.org

Elizabeth Spaulding
espaulding@asq.org

ASSP (Safety)

American Society of Safety Professionals
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ASTM

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428
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Laura Klineburger
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ATIS

Alliance for Telecommunications Industry
Solutions
1200 G Street NW, Suite 500
Washington, DC 20005
www.atis.org

Anna Karditzas
akarditzas@atis.org

AWS

American Welding Society
8669 NW 36th Street, Suite 130
Miami, FL 33166
www.aws.org

Jennifer Rosario
jrosario@aws.org

Kevin Bulger
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BHMA

Builders Hardware Manufacturers
Association
529 14th Street NW, Suite 1280
Washington, DC 20045
www.buildershardware.com

Tony Gambrell
agambrell@kellencompany.com

CRRC

Cool Roof Rating Council
2435 N. Lombard Street
Portland, OR 97217
www.coolroofs.org

Sarah Schneider
sarah@coolroofs.org

CSA

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

Debbie Chesnik
ansi.contact@csagroup.org

CTA

Consumer Technology Association
1919 South Eads Street
Arlington, VA 22202
www.cta.tech

Catrina Akers
cakers@cta.tech

ECIA

Electronic Components Industry
Association
13873 Park Center Road, Suite 315
Herndon, VA 20171
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Laura Donohoe
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FM

FM Approvals
One Technology Way
Norwood, MA 02062
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josephine.mahnken@fmapprovals.com

IAPMO (ASSE Chapter)

ASSE International Chapter of IAPMO
18927 Hickory Creek Drive, Suite 220
Mokena, IL 60448
www.asse-plumbing.org

Terry Burger
standards@iapmostandards.org

IAPMO (Z)

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

Terry Burger
standards@iapmostandards.org

ICC

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

Karl Aittaniemi
kaittaniemi@iccsafe.org

IEEE

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

Suzanne Merten
s.merten@ieee.org

IIAR

International Institute of All-Natural
Refrigeration
1001 North Fairfax Street
Alexandria, VA 22314
www.iiar.org

Tony Lundell
tony_lundell@iiar.org

IICRC

The Institute of Inspection, Cleaning and
Restoration Certification
4043 S Eastern Ave.,
Las Vegas, NV 89119
https://www.iicrc.org

Mili Washington
mwwashington@iicrcnet.org

ITI (INCITS)

InterNational Committee for Information
Technology Standards
700 K Street NW, Suite 600
Washington, DC 20001
www.incits.org

Lynn Barra
INCITS-comments@connectedcommunity.
org

NASBLA

National Association of State Boating Law
Administrators
1020 Monarch Street, Suite 200
Lexington, KY 40513
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NSF

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789 N. Dixboro Road
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SCTE

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

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TIA

Telecommunications Industry Association
1320 North Courthouse Road, Suite 200
Arlington, VA 22201
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ULSE

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ISO & IEC Draft International Standards



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

COMMENTS

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

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

ORDERING INSTRUCTIONS

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

ISO Standards

Acoustics (TC 43)

ISO 23591:2021/DAMd 1, - Amendment 1: Acoustic quality criteria for music rehearsal rooms and spaces - Amendment 1: Asian (Korean) traditional music (Gugak) - 11/14/2024, \$40.00

Building construction (TC 59)

ISO/DIS 11431, Building and civil engineering sealants - Determination of adhesion/cohesion properties of sealants after exposure to heat, water and artificial light through glass - 11/15/2024, \$40.00

Carbon dioxide capture, transportation, and geological storage (TC 265)

ISO/DIS 27928, Carbon dioxide capture - Performance evaluation methods for CO₂ capture connected to a CO₂ intensive plant - 11/15/2024, \$98.00

Clinical laboratory testing and in vitro diagnostic test systems (TC 212)

ISO/DIS 18704, Molecular in vitro diagnostic examinations - Specifications for pre-examination processes for urine and other body fluids - Isolated cell free DNA - 11/16/2024, \$88.00

Corrosion of metals and alloys (TC 156)

ISO/DIS 5929.2, Corrosion of Metals and Alloys - Test and evaluation method for the corrosion of steel bar embedded in concrete structure exposed to total corrosion zones in marine environments - 9/5/2024, \$82.00

Jewellery (TC 174)

ISO/DIS 21261-3, Jewellery and precious metals - Responsible precious metals - Part 3: Requirements for recycled gold - 11/16/2024, \$53.00

Mining (TC 82)

ISO/DIS 22932-8, Mining - Vocabulary - Part 8: Extraction - 11/21/2024, \$155.00

Optics and optical instruments (TC 172)

ISO/DIS 9689, Raw optical glass - Resistance to attack by aqueous alkaline phosphate-containing detergent solutions at 50 degrees C - Testing and classification - 11/18/2024, \$58.00

Plain bearings (TC 123)

ISO/DIS 4383, Plain bearings - Multilayer materials for thin-walled plain bearings - 11/14/2024, \$53.00

Service activities relating to drinking water supply systems and wastewater systems - Quality criteria of the service and performance indicators (TC 224)

ISO/DIS 24599, Guidelines for the management of mobile toilets under epidemic situations - 11/18/2024, \$62.00

Solid Recovered Fuels (TC 300)

ISO/DIS 18708, Solid recovered fuels - Determination of bulk density - 11/14/2024, \$82.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 13818-1:2023/DAMd 1, - Amendment 1: Information technology - Generic coding of moving pictures and associated audio information - Part 1: Systems - Amendment 1: Codec parameter clarifications and other improvements - 11/17/2024, \$53.00

ISO/IEC DIS 7818, Information technology - User interfaces - Framework for voice user interfaces for personal mobility services - 11/17/2024, \$46.00

ISO/IEC DIS 14651, Information technology - International string ordering and comparison - Method for comparing character strings and description of the common template tailorable ordering - 11/18/2024, \$119.00

ISO/IEC DIS 19770-5, Information technology - IT asset management - Part 5: Overview and vocabulary - 11/16/2024, \$88.00

ISO/IEC DIS 22121-3, Information technology - Virtual keyboards user interfaces - Part 3: Virtual keyboards interactions - 11/17/2024, \$77.00

ISO/IEC DIS 23008-6, Information technology - High efficiency coding and media delivery in heterogeneous environments - Part 6: 3D audio reference software - 11/17/2024, \$33.00

ISO/IEC DIS 20071-20, Information technology - User interface component accessibility - Part 20: Developing audiovisual content - 11/15/2024, \$58.00

ISO/IEC DIS 23090-12, Information technology - Coded representation of immersive media - Part 12: MPEG immersive video - 11/22/2024, \$165.00

IEC Standards

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

46/1016/CD, IEC 61935-2/AMD1 ED4: Amendment 1 - Specification for the testing of balanced and coaxial information technology cabling - Part 2: Cords as specified in ISO/IEC 11801-1 and related standards, 10/25/2024

Capacitors and resistors for electronic equipment (TC 40)

40/3174/CD, IEC 60940 ED3: Application of capacitors, resistors, inductors and complete filter units for electromagnetic interference suppression - General rules and safety requirements, 10/25/2024

Electrical accessories (TC 23)

23E/1368/FDIS, IEC 61008-1 ED4: Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules, 10/11/2024

23E/1369/FDIS, IEC 61008-2-1 ED2: Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 2-1: RCCBs according to classification 4.1.1, 10/11/2024

Electrical equipment in medical practice (TC 62)

62C/920/CDV, IEC 62083 ED3: Medical device software - Requirements for the safety of radiotherapy treatment planning systems, 11/22/2024

Fibre optics (TC 86)

86B/4950/CD, IEC 61753-022-07 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 022-07: Hardened fibre optic connectors terminated on multimode fibre for category A - Outdoor aerial environment, 10/25/2024

Flat Panel Display Devices (TC 110)

110/1682/CD, IEC TR 63340-2 ED1: Electronic displays for special applications - Part 2: Elevator and escalator, 10/25/2024

Industrial-process measurement and control (TC 65)

65C/1302A/CDV, IEC/IEEE 60802 ED1: Time-sensitive networking profile for industrial automation, 10/25/2024

Lamps and related equipment (TC 34)

34/1206/CDV, IEC 63494-1 ED1: Lighting systems - Electro-mechanical interfaces - Part 1: Safety, 11/22/2024

34/1207/CDV, IEC 63494-2-1 ED1: Lighting systems - Electro-mechanical interfaces - Part 2-1: Four-pin ELV twist-lock interface Type ZB18, 11/22/2024

Nuclear instrumentation (TC 45)

45B/1070/CDV, IEC 60325 ED4: Radiation protection instrumentation - Alpha, beta and alpha/beta (beta energy >60 keV) contamination meters and monitors, 11/22/2024

Power electronics (TC 22)

22/398A/CD, IEC 62477-2 ED2: Safety requirements for power electronic converter systems and equipment - Part 2: Power electronic converters from 1 000 V AC or 1 500 V DC up to 36 kV AC or 54 kV DC, 10/04/2024

Rotating machinery (TC 2)

2/2209/CDV, IEC 60034-30-1 ED2: Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code), 11/22/2024

Safety of household and similar electrical appliances (TC 61)

61C/924/FDIS, IEC 60335-2-34 ED7: Household and similar electrical appliances - Safety - Part 2-34: Particular requirements for motor-compressors, 10/11/2024

61/7282(F)/FDIS, IEC 60335-2-80 ED4: Household and similar electrical appliances - Safety - Part 2-80: Particular requirements for fans, 09/13/2024

Semiconductor devices (TC 47)

47F/478/CDV, IEC 62047-49 ED1: Semiconductor devices - Micro-electromechanical devices - Part 49: Temperature and humidity test methods for piezoelectric MEMS cantilevers, 11/22/2024

47/2870/CD, IEC 63550-1 ED1: Semiconductor devices - Neuromorphic devices - Part 1: Evaluation method of basic characteristics in memristor devices, 11/22/2024

47/2871/CD, IEC 63550-2 ED1: Semiconductor devices - Neuromorphic devices - Part 2: Evaluation method of linearity in memristor devices, 11/22/2024

Solar photovoltaic energy systems (TC 82)

82/2302/CD, IEC TS 63202-6 ED1: Photovoltaic cells - Part 6: Hot water soaking test for crystalline silicon solar cells, 10/25/2024

Standard voltages, current ratings and frequencies (TC 8)

8/1718/CD, IEC TS 62786-2 ED1: Distributed energy resources connection with the grid - Part 2 Additional requirements for PV generation, 10/25/2024

Surface mounting technology (TC 91)

91/1968/CDV, 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, 11/22/2024

Switchgear and controlgear (TC 17)

17A/1413/DTS, IEC TS 62271-313 ED1: High-voltage switchgear and controlgear - Part 313: Direct current circuit-breakers, 10/25/2024

17A/1412/DTS, IEC TS 62271-315 ED1: High-voltage switchgear and controlgear - Part 315: Direct current (DC) transfer switches, 10/25/2024

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

121/172/CDV, IEC 63208 ED1: Switchgear and controlgear and their assemblies for low voltage - Security aspects, 11/22/2024

ISO/IEC JTC 1, Information Technology**(JTC1)**

JTC1-SC25/3268/CDV, ISO/IEC 10192-4-3: Information technology - Home Electronic System (HES) interfaces - Part 4 -3: Common user interface and cluster-to-cluster interface to support interworking among home cluster systems - Messaging, 11/22/2024

JTC1-SC25/3269/CDV, ISO/IEC 18012-3 ED1: Information Technology-Home Electronic System-Guidelines for product interoperability-Part 3: Lexicon, 11/22/2024

JTC1-SC25/3270/CDV, ISO/IEC 18012-4 ED1: Information Technology-Home Electronic System-Guidelines for product interoperability-Part 4: Event encoding, 11/22/2024



Newly Published ISO & IEC Standards

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

ISO Standards

Agricultural food products (TC 34)

[ISO 16140-2:2016/Amd 1:2024](#), - Amendment 1: Microbiology of the food chain - Method validation - Part 2: Protocol for the validation of alternative (proprietary) methods against a reference method - Amendment 1: Revision of qualitative method comparison study data evaluation, relative level of detection calculations in the interlaboratory study, calculation and interpretation of the relative trueness study, and inclusion of a commercial sterility testing protocol for specific products, \$166.00

[ISO 16140-4:2020/Amd 1:2024](#), - Amendment 1: Microbiology of the food chain - Method validation - Part 4: Protocol for method validation in a single laboratory - Amendment 1: Validation of a larger test portion size for qualitative methods, \$23.00

Anaesthetic and respiratory equipment (TC 121)

[ISO 19211:2024](#), Anaesthetic and respiratory equipment - Fire-activated oxygen shut-off devices for use during oxygen therapy, \$124.00

[ISO 80601-2-79:2024](#), Medical electrical equipment - Part 2-79: Particular requirements for basic safety and essential performance of ventilatory support equipment for ventilatory impairment, \$278.00

[ISO 80601-2-80:2024](#), Medical electrical equipment - Part 2-80: Particular requirements for basic safety and essential performance of ventilatory support equipment for ventilatory insufficiency, \$278.00

Industrial automation systems and integration (TC 184)

[ISO/PAS 8329:2024](#), Extended master connection file (χMCF) - Description of mechanical connections and joints in structural systems, \$278.00

Industrial trucks (TC 110)

[ISO 5053-3:2024](#), Industrial trucks - Vocabulary - Part 3: Accessories and components, \$278.00

Machine tools (TC 39)

[ISO 2407:2024](#), Test conditions for internal cylindrical grinding machines with horizontal spindle - Testing of accuracy, \$194.00

[ISO 19085-7:2024](#), Woodworking machines - Safety - Part 7: Surface planing, thickness planing and combined surface/thickness planing machines, \$223.00

[ISO 19085-9:2024](#), Woodworking machines - Safety - Part 9: Circular saw benches (with and without sliding table), \$223.00

Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)

[ISO 10427-1:2024](#), Oil and gas industries including lower carbon energy - Equipment for well cementing - Part 1: Casing bow-spring centralizers, \$54.00

Other

[IWA 45:2024](#), \$194.00

[IWA 46:2024](#), \$250.00

Pulleys and belts (including veebelts) (TC 41)

[ISO 18573:2024](#), Conveyor belts - Test atmospheres and conditioning periods, \$54.00

Solid mineral fuels (TC 27)

[ISO 924:2024](#), Coal preparation plant - Principles and conventions for flowsheets, \$54.00

ISO Technical Specifications

Rubber and rubber products (TC 45)

[ISO/TS 5462:2024](#), Rubber latex coated fabric gloves - Specification, \$81.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 30141:2024](#), Internet of Things (IoT) - Reference architecture, \$250.00

Other

[ISO/IEC TS 17035:2024](#), Conformity assessment - Guidelines for validation and verification programmes, \$124.00

IEC Standards

Electrical apparatus for explosive atmospheres (TC 31)

[IEC 60079-14 Ed. 6.0 b:2024](#), Explosive atmospheres - Part 14: Electrical installation design, selection and installation of equipment, including initial inspection, \$515.00

Measuring equipment for electromagnetic quantities (TC 85)

[IEC 60688 Ed. 5.0 b:2024](#), Electrical measuring transducers for converting AC and DC electrical quantities to analogue or digital signals, \$515.00

Other

[IEC SRD 63314 Ed. 1.0 en:2024](#), Active assisted living (AAL) guidance for education and training of persons working in the field of AAL, \$148.00

Performance of household electrical appliances (TC 59)

[IEC 60704-2-10 Ed. 3.0 b:2024](#), Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-10: Particular requirements for ranges, ovens, steam ovens, grills and microwave ovens, \$103.00

[IEC 60704-2-10 Ed. 3.0 en:2024 EXV](#), Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-10: Particular requirements for ranges, ovens, steam ovens, grills and microwave ovens, \$515.00

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

[IEC 62841-3-11 Ed. 1.0 en:2024 EXV](#), Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-11: Particular requirements for transportable combined mitre and bench saws, \$975.00

[IEC 62841-3-11 Ed. 1.0 b:2024](#), Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-11: Particular requirements for transportable combined mitre and bench saws, \$386.00

[IEC 62841-3-15 Ed. 1.0 en:2024 EXV](#), Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-15: Particular requirements for transportable magnetic drills, \$932.00

Terminology (TC 1)

[IEC 60050-815 Ed. 3.0 b:2024](#), International Electrotechnical Vocabulary (IEV) - Part 815: Superconductivity, \$547.00

IEC Technical Reports**Electrical Energy Storage (EES) Systems (TC 120)**

[IEC/TR 62933-2-201 Ed. 1.0 en:2024](#), Review of testing for BESS in consideration of implementing repurpose and reuse batteries, \$444.00

Measuring equipment for electromagnetic quantities (TC 85)

[IEC/TR 63519 Ed. 1.0 en:2024](#), Aspects and understanding of measurement uncertainty - Background information on measurement uncertainty based on the example of IEC TC 85 (Measuring equipment for electrical and electromagnetic quantities), \$103.00

International Electrotechnical Commission (IEC)

USNC TAG Administrator - Organization Needed

Response Deadline: November 1, 2024

As the current Technical Advisor for TC 113 TAG will be stepping down at the end of this year, the USNC is looking for a new Technical Advisor (s) to take on this USNC TAG Technical Advisory role beginning January 1, 2025.

If individuals are interested in the position of USNC TAG Technical Advisor for the USNC TAG to IEC/TC 113, they are invited to contact Betty Barro at bbarro@ansi.org by November 1st, 2024.

Please see the scope for the IEC/ TC 113 below:

Scope: TC 113 - Nanotechnology for electrotechnical products and systems

Standardization of the technologies relevant to electrotechnical products and systems in the field of nanotechnology in close cooperation with other committees of IEC and ISO

International Organization for Standardization (ISO)

Call for comment on ISO/IEC Guide 59:2019

Comment Deadline: October 18, 2024

ISO has initiated a systematic review of ISO/IEC Guide 59:2019 – “ISO and IEC recommended practices for standardization by national bodies”, which has the following scope statement:

This document provides recommended standardization practices that are intended to support the application of the following:

- *the WTO TBT Committee decision on principles for the development of international standards, guides and recommendations (G/TBT/9, 13 November 2000);*
- *the WTO TBT Agreement’s Code of Good Practice for the Preparation, Adoption and Application of Standards (Annex 3 of the 1995 WTO TBT Agreement).*

This document is intended to be used by the national members of ISO and IEC, hereafter referred to as national bodies.

ANSI, is seeking U.S. Stakeholders’ input on ISO/IEC Guide 59:2019 to help ANSI determine if ANSI should vote revise, reconfirm as is, or withdraw the standard. Anyone wishing to review ISO/IEC Guide 59:2019 can request a copy by contacting ANSI’s ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on **Friday, October 18, 2024**.

Call for comment on ISO/IEC Guide 63:2019

Comment Deadline: October 18, 2024

ISO has initiated a systematic review of ISO/IEC Guide 63:2019 – “Guide to the development and inclusion of aspects of safety in International Standards for medical devices”, which has the following scope statement:

This document provides requirements and recommendations to writers of medical device standards on the inclusion of aspects related to safety in International Standards, based on well-established risk management concepts and methodology.

This document is applicable to any aspect related to the safety of people, property, the environment, or a combination of these.

In this document, the term “product” includes a medical device or a system consisting of one or more medical devices, possibly combined with non-medical devices.

ANSI, is seeking U.S. Stakeholders’ input on ISO/IEC Guide 63:2019 to help ANSI determine if ANSI should vote revise, reconfirm as is, or withdraw the standard. Anyone wishing to review ISO/IEC Guide 63:2019 can request a copy by contacting ANSI’s ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on **Friday, October 18, 2024**.

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 183 – Copper, lead, zinc and nickel ores and concentrates

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 183 – *Copper, lead, zinc and nickel ores and concentrates* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by Australia (SA).

ISO/TC 183 operates under the following scope:

Standardization in the field of copper, lead, zinc and nickel ores and concentrates and smelter residues, including sampling, chemical analysis and physical testing.

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

Call for U.S. TAG Administrator

ISO/TC 225 – Market, opinion and social research

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 225 – *Market, opinion and social research* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by Spain (UNE).

ISO/TC 225 operates under the following scope:

Standardization of the requirements for organizations and professionals conducting market, opinion and social research.

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

Call for U.S. TAG Administrator

ISO/TC 244 – Industrial furnaces and associated processing equipment

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 244 – *Industrial furnaces and associated processing equipment* and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by Japan (JISC).

ISO/TC 244 operates under the following scope:

Standardization of the requirements for industrial thermoprocessing equipment (e.g. heated enclosures such as furnaces, ovens, kilns, lehrs and dryers) and associated processing equipment. The scope includes, but is not limited to, requirements for safety, energy efficiency (including exergy), design, construction, operation, processes and quality control of processed material.

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

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 268 – Sustainable cities and communities

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 268 – *Sustainable cities and communities*, or any of the active Subcommittees, and therefore ANSI is not a member of these committees.

The Secretariats for the committees are held by:

ISO/TC 268 – *Sustainable cities and communities*: France (AFNOR)

ISO/TC 268/SC 1 – *Smart community infrastructures*: Japan (JISC)

ISO/TC 268/SC 2 – *Sustainable cities and communities - Sustainable mobility and transportation*: Japan (JISC)

ISO/TC 268 operates under the following scope:

Standardization in the field of Sustainable Cities and Communities will include the development of requirements, frameworks, guidance and supporting techniques and tools related to the achievement of sustainable development considering smartness and resilience, to help all Cities and Communities and their interested parties in both rural and urban areas become more sustainable.

Note: TC 268 will contribute to the UN Sustainable Development Goals through its standardization work.

The proposed series of International Standards will encourage the development and implementation of holistic and integrated approaches to sustainable development and sustainability.

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

Call for U.S. TAG Administrator

ISO/TC 268 – Sustainable cities and communities

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 268 – *Sustainable cities and communities*, or any of the active Subcommittees, and therefore ANSI is not a member of these committees.

The Secretariats for the committees are held by:

ISO/TC 268 – *Sustainable cities and communities*: France (AFNOR)

ISO/TC 268/SC 1 – *Smart community infrastructures*: Japan (JISC)

ISO/TC 268/SC 2 – *Sustainable cities and communities - Sustainable mobility and transportation*: Japan (JISC)

ISO/TC 268 operates under the following scope:

Standardization in the field of Sustainable Cities and Communities will include the development of requirements, frameworks, guidance and supporting techniques and tools related to the achievement of sustainable development considering smartness and resilience, to help all Cities and Communities and their interested parties in both rural and urban areas become more sustainable.

Note: TC 268 will contribute to the UN Sustainable Development Goals through its standardization work.

The proposed series of International Standards will encourage the development and implementation of holistic and integrated approaches to sustainable development and sustainability.

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

RadiusXR

Public Review: July 22 to October 22, 2024

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 af
to ANSI/ASHRAE Standard 15-2022**

First Public Review Draft

**Proposed Addendum af to
Standard 15-2022, Safety Standard
for Refrigeration Systems**

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

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

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

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

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

FOREWORD

This proposed addendum is in response to CMP 0015-001 to ASHRAE Standard 15, and better aligns the definitions of evaporator and condenser.

It should also be noted that Addendum c revises the definition of refrigerating system to refrigeration system. That change is not reflected in this proposal.

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (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 af to Standard 15-2022

Modify Section 3 as follows. The remainder of Section 3 remains unchanged.

3. DEFINITIONS

3.1 Defined Terms

[...]

condenser: ~~that~~the part of the *refrigerating system* where *refrigerant* is liquefied by the removal of heat.

[...]

evaporator: ~~that~~the part of the *refrigerating system* ~~designed to vaporize liquid refrigerant to produce refrigeration where refrigerant is vaporized by the addition of heat.~~

[...]



BSR/ASHRAE Addendum **z
to ANSI/ASHRAE Standard 15-2022**

First Public Review Draft

Proposed Addendum **z to
Standard 15-2022, Safety Standard
for Refrigeration Systems**

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

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

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

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

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

FOREWORD

This proposed addendum better harmonizes the requirements for Group A2L refrigerants in Sections 7.6 and 7.7. It specifically better aligns the requirements on refrigerant charge limits and ventilation. Changes related to Addendum e of the 2022 edition of ASHRAE Standard 15 are also noted, as they affect the same section.

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

Addendum z to Standard 15-2022

Modify Section 7.7 as follows. The remainder of Section 7.7 remains unchanged.

7.7* Group A2L Refrigerants for Refrigeration Systems Other Than Human Comfort. *High-probability systems using Group A2L refrigerants for other than human comfort applications shall comply with Sections 7.7.1 through ~~7.7.5~~7.7.4.*

7.7.1 Refrigerant Charge Limits. *Refrigerant charge shall be limited as follows:*

a. Refrigeration systems containing a releasable refrigerant charge more than $0.141 \times LFL$ (lb) ($4 \times LFL$ [kg]) in an independent circuit shall not be installed within 20 ft (6 m) of an open flame.

[...]

7.7.2 Refrigerant ~~Concentration~~Quantity Limits

~~7.7.2.1 Occupied spaces shall comply with Section 7.3.~~

~~7.7.2.2 Non-occupied spaces with refrigerant containing equipment, including but not limited to piping or tubing, shall comply with Section 7.3 except as permitted by Section 7.7.5.~~

7.7.2.1 Where a high-probability refrigeration system using Group A2L refrigerants has either

a. air circulation initiated by a refrigerant detector in compliance with Section 7.6.2.4 or

b. continuous air circulation.

EDVC shall be calculated in accordance with Section 7.6.1.1.

7.7.2.2 For any high-probability refrigeration system not meeting the requirements of Section 7.7.2.1, EDVC shall be calculated in accordance with Section 7.3.1.

7.7.2.3 Mechanical ventilation for refrigerant safety mitigation shall comply with section 7.6.4.

[...]

~~7.7.5 Compressors and Pressure Vessels Located Indoors. For refrigeration compressors and pressure vessels located in an indoor space that is accessible only during service and maintenance, it shall be permissible to exceed maximum refrigerant charge calculated in accordance with Section 7.3, provided a mechanical ventilation system is used to prevent exceeding the RCL and all of the following provisions are met:~~

~~a. The releasable refrigerant charge of the largest independent circuit shall not exceed $9.2 \times LFL$ (lb) ($260 \times LFL$ [kg]). Releasable charges greater than $9.2 \times LFL$ (lb) ($260 \times LFL$ [kg]) shall comply with the machinery room requirements of Section 8.11.~~

~~b. A mechanical ventilation system shall be provided that will mix air with leaked refrigerant and remove it from the space where the equipment is located. The space shall be provided with an exhaust fan. The exhaust fan shall remove air from the space where the equipment is located in accordance with Section 8.11.11.4.~~

~~c. The space and mechanical ventilation system is in compliance with Section 7.6.4(b) through (e) and Section 7.6.4(i).~~

~~d. Electric motors driving fans shall not be placed inside the exhaust ducts; fan rotating elements shall be nonferrous or nonsparking, or the casing shall consist of or be lined with such material.~~

[...]

Note to reader: Addendum e to the 2022 edition of ASHRAE Standard 15 also made changes to the charging statement to Section 7.7. When first implementing the changes from Addendum e, this proposed addendum would read as follows:

7.7* High-Probability Commercial Refrigeration Systems using Group A2L Refrigerants. *High-probability systems* using Group A2L refrigerants for commercial refrigeration applications within the scope of UL 60335-2-89⁷/CSA C22.2 No. 60335-2-89⁸ shall comply with this section.

7.7.1 Refrigerant Charge Limits. Refrigerant charge shall be limited as follows:

a. Refrigeration systems containing a [releasable refrigerant charge](#) more than $0.141 \times LFL$ (lb) ($4 \times LFL$ [kg]) in an independent circuit shall not be installed within 20 ft (6 m) of an open flame.

[...]

7.7.2 Refrigerant ~~Concentration~~Quantity Limits

~~7.7.2.1 Occupied spaces shall comply with Section 7.3.~~

~~7.7.2.2 Non-occupied spaces with refrigerant containing equipment, including but not limited to piping or tubing, shall comply with Section 7.3 except as permitted by Section 7.7.5.~~

[7.7.2.1](#) Where a high-probability refrigeration system using Group A2L refrigerants has either

[a. air circulation initiated by a refrigerant detector in compliance with Section 7.6.2.4 or](#)

[b. continuous air circulation,](#)

[EDVC shall be calculated in accordance with Section 7.6.1.1.](#)

[7.7.2.2](#) For any high-probability refrigeration system not meeting the requirements of Section 7.7.2.1, [EDVC shall be calculated in accordance with Section 7.3.1.](#)

[7.7.2.3](#) Mechanical ventilation for refrigerant safety mitigation shall comply with section 7.6.4.

[...]

~~7.7.5 Compressors and Pressure Vessels Located Indoors.~~ For refrigeration compressors and pressure vessels located in an indoor space that is accessible only during service and maintenance, it shall be permissible to exceed maximum refrigerant charge calculated in accordance with Section 7.3, provided a mechanical ventilation system is used to prevent exceeding the RCL and all of the following provisions are met:

~~a. The releasable refrigerant charge of the largest independent circuit shall not exceed $9.2 \times LFL$ (lb) ($260 \times LFL$ [kg]). Releasable charges greater than $9.2 \times LFL$ (lb) ($260 \times LFL$ [kg]) shall comply with the machinery room requirements of Section 8.11.~~

~~b. A mechanical ventilation system shall be provided that will mix air with leaked refrigerant and remove it from the space where the equipment is located. The space shall be provided with an exhaust fan. The exhaust fan shall remove air from the space where the equipment is located in accordance with Section 8.11.11.4.~~

~~c. The space and mechanical ventilation system is in compliance with Section 7.6.4(b) through (e) and Section 7.6.4(i).~~

~~d. Electric motors driving fans shall not be placed inside the exhaust ducts; fan rotating elements shall be nonferrous or nonsparking, or the casing shall consist of or be lined with such material.~~

[...]



**BSR/ASHRAE/ASHE Addendum k
to ANSI/ASHRAE/ASHE Standard 170-2021**

Public Review Draft

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

Third Public Review (August 2024)
(Draft shows Proposed Changes to Current Standard)

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

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BSR/ASHRAE/ASHE Addendum k to ANSI/ASHRAE/ASHE Standard 170-2021, *Ventilation of Health Care Facilities*

Third Public Review Draft

(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 proposed addendum clarifies that this section applies to the central systems that provide cooling or heating by changing the name of the section. It adds requirement for cooling reserve capacity in addition to the heating reserve capacity for spaces already listed in this section. This provides guidance to designers to a minimum reserve capacity required to start with and engage with the facility on what their operational needs are. The addendum also takes out the onsite fuel requirement from 6.1.2.1 so that the exception to 6.1.2.1 does not apply to it anymore. Its added back in 6.1.2.2 as its own requirement. The addendum removes the lower limit of 400 ton cooling load as the starting point for considering any reserve capacity for cooling in Inpatient and Residential Health Care facilities.

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

Revise Section 3 as shown below.

~~**essential accessories:** those components of a system, required to allow proper operation of that system, that are reasonably subject to mechanical failure (e.g., pumps, fans, control air compressors). Humidifiers, controls, and tanks are not included in this definition.~~

~~**Heating and Cooling Central Systems:** Systems that provide heating or cooling fluid for distribution via pumps or pressure to more than a single air distribution system in the facility.~~

Revise Section 6.1.2 as shown below.

6.1.2 Heating and Cooling ~~Sources~~ Central Systems

~~**6.1.2.1:** For facilities that have spaces listed in Sections 7.1, 8.1 and 9.1 of this standard; design the heating and cooling central systems Provide heat sources and essential accessories in number and arrangement sufficient to accommodate the facility needs (reserve capacity), even when any one of the heat-sources or essential accessories is not operating due to a breakdown failure or routine maintenance. The capacity of the remaining source or sources shall be sufficient to provide for domestic hot water, sterilization, dietary purposes, and to provide heating for operating, delivery, birthing, labor, recovery, emergency, intensive care, nursery, and resident care areas, and inpatient/resident rooms. Fuel sufficient to support the owner's facility operation plan upon loss of fuel service shall be provided on site. The reserve capacity shall be a minimum of 50% of the peak heating and cooling design loads, or as required by Owner's Project Requirements (OPR) or Operational Plan.~~

BSR/ASHRAE/ASHE Addendum k to ANSI/ASHRAE/ASHE Standard 170-2021, *Ventilation of Health Care Facilities*

Third Public Review Draft

Informative Note: The 50% reserve capacity is not intended to indicate individual equipment quantity and size but rather when the largest piece of equipment fails, what remains can satisfy the 50% of the design cooling or heating load.

Exception to 6.1.2.1: Reserve capacity for heating is not required if the ASHRAE 99% heating dry-bulb temperature for the facility is greater than or equal to 25°F(-4°C).

~~6.1.2.2 Inpatient and Residential Health Care Spaces.~~ ~~For central cooling systems greater than 400 tons (1407 kW) peak cooling load, the number and arrangement of cooling sources and essential accessories shall be sufficient to support the owner's facility operation plan upon a breakdown or routine maintenance of any one of the cooling sources.~~

6.1.2.2: For facilities that have spaces listed in Sections 7.1 and 9.1 of this standard; provide fuel/energy storage to ensure facility heating and cooling operation for a minimum of 24 hours for the reserve design capacity upon loss of primary-energy source.

Informative Notes:

1. Refer to NFPA-99 for emergency power requirements.
2. Facilities should evaluate water storage capacity for heating and cooling systems based on their operational needs.



**BSR/ASHRAE/ASHE Addendum j
to ANSI/ASHRAE/ASHE Standard 189.3-2021**

Public Review Draft

**Proposed Addendum j to
Standard 189.3-2021, Design,
Construction, and Operation of
Sustainable High-Performance
Health Care Facilities**

**(Draft shows Proposed Changes to Previous Addendum)
Second Publication Public Review, Independent Substantive Changes**

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FOREWORD

Material and product resilience is important in all types of healthcare facilities, because of infection risk based on pre-mature failure or inappropriate specification for the application based on the cleaning, sanitizing, and disinfecting requirements of healthcare spaces. This change requires the Materials section with subsequent recommendations to the Operations and Indoor Environmental Quality sections. New references are added for the user to comply with specifically rated cleaning products.

The second public review of this draft addresses comments from the first public review and clarifies the requirements for scope 3 emissions, finish schedules, and plans for addressing allergens from cleaning products in sensitive care populations.

Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (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 j to Standard 189.3-2021

Modify Section 3 as follows. The remainder of Section 3 remains unchanged.

Definitions

...

High Touch Surfaces: a frequently touched surface within a healthcare setting. Reference: Centers for Disease Control and Prevention: <https://www.cdc.gov/hai/prevent/resource-limited/high-touch-surfaces.html>

Fomite: a high touch surface (e.g., door levers, chair arm, cubicle curtain, bedrail, light switch, etc.) that may be contaminated with infectious pathogens and serve as a means for transmission.

...

Modify Section 8 as follows. The remainder of Section 8 remains unchanged.

8.4.2.7 [JO] Exposure and care population. For sensitive and/or vulnerable care populations being treated in healthcare settings, document a plan for addressing allergen / asthma triggers that addresses filtration types for ventilation, any operable windows and locations, and cleaning/disinfecting practices. comply with Allergy Standards Ltd (ASL) or equivalent standards for products specified.

Modify Section 9 as follows. The remainder of Section 9 remains unchanged.

9.6 Material Resilience

9.6.1 High Touch Surfaces (Fomites), Floors, and Wall Finish Selection. Surface and material selection for healthcare environments shall be based on anticipated product service life, durability, cleaning, sanitizing, and disinfecting methods, and application conforming to the *owner's project requirements (OPR)*.

9.6.1.1 Performance Metric. Surfaces and materials shall meet *OPR* performance characteristics and criteria that

address risks identified in the safety risk assessment completed as part of the functional programming process. The assessment includes material selection criteria and product service life completed in accordance with the Facility Guidelines Institute's *Guidelines for Design and Construction of Hospitals, Guidelines for Design and Construction of Outpatient Facilities*, and *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*.

9.6.1.2 Documentation. ~~Product and finish specifications and schedules~~ Product specifications and finish schedules shall be provided in construction/contract documentation that include the cleaning, sanitizing, and/or disinfecting manufacturer recommendations based on the documented requirements in the *OPR* from the completed safety risk assessment.

Informative Note: The colors, textures, and patterns of surface materials should be evaluated according to *patient* and *resident*, staff, and visitor safety based on demographic and diagnosis of *patient* or *resident*. The impact of the Centers for Disease Control and Prevention (CDC) required frequency methods and chemicals used for cleaning, sanitizing, and disinfecting surfaces in healthcare environments should be evaluated in the planning and design of healthcare settings to enhance maintenance and meet product life-cycle performance. Use of minimum performance testing standards (e.g., ASTM standards) can verify if a product meets specific performance criteria. When selecting surfaces, materials, and products, third-party independent testing can assure that they meet necessary code and anticipated product service life requirements.

9.7.2 Reusable Goods. For *building projects*, there shall be an area that serves the entire building and is designed for the collection and storage of discarded but clean items in good condition for materials and products that have not been breached nor considered infectious or hazardous waste. If periodic pickups by charitable organizations or others are arranged, notices shall be posted.

Informative Note: Products that do not have a breached surface should be evaluated for re-use and/or refurbishment for landfill avoidance. Re-use and refurbishment of stored materials and products, including those that are componentized, should be inventoried within dedicated storage areas for future use (e.g. furniture, casework, and durable medical equipment).

Modify Section 10 as follows. The remainder of Section 10 remains unchanged.

10.9.5 Building Green Cleaning Plan. A green cleaning plan shall be developed for the *building project* in compliance with Green Seal Standard GS-42 and Centers for Disease Control and Prevention requirements to maintain infection control. US Environmental Protection Agency (EPA) Design for the Environment (DfE) Certified Disinfectants and EPA's Safer Choice Chemicals (or equivalent jurisdiction) to be utilized if they meet the efficacy requirements for disinfection based on pathogen. *Note:* EPA Registration Numbers are used to identify active ingredients for disinfection.

Exception to 10.9.5: *Dwelling units of a building project.*

10.9.5.1 Chemical Storage. ~~Based on care population, e~~ Chemical storage to shall be secured.

10.9.5.2 Environmental services processes and procedures. Evaluate cleaning methods to reduce chemical exposure to building occupants (e.g., reduction or elimination of stripping and waxing flooring, products that are the least caustic for disinfection efficacy based on pathogen, etc.)

10.9.5.3 [JO] Scope 3 emissions. Identify and evaluate ~~operational~~ Scope 3 operational emissions to reduce ~~operational carbon~~ greenhouse gas emissions and improve overall environmental impacts.

BSR/ASHRAE/ASHE Addendum j to ANSI/ASHRAE/ASHE Standard 189.3-2021, *Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities*

Second Public Review Draft; Independent Substantive Changes

Modify Section 10 as follows. The remainder of Section 10 remains unchanged.

10.11[JO] Service Life Plan

10.11.1 Minimum performance standards. For high touch surfaces and materials, minimum performance standards (e.g., ASTM, ANSI, etc.) for cleaning, sanitizing, and disinfecting shall be included in the operation and maintenance (O&M) documentation based on specifications completed in the *OPR* and finish documentation required in Section 9.6.1.2.

10.11.2 Waste and end of life plan. For the service life plan, surfaces, materials, and products that have been breached and considered infectious or hazardous waste must be disposed of according to applicable regulations. Products that do not have a breached surface to be evaluated for re-use and/or refurbishment for landfill avoidance.

Modify Section 11 as follows. The remainder of Section 11 remains unchanged.

11.3.4 Solid Waste

11.3.4.1 Storage and Collection of Waste Streams—Focus on Segregation and Minimization.

New building projects shall be provided with space inside the building dedicated to the collection, separation, and storage of all recycling, HIPAA records, donation and reuse items, and universal waste recycling, including batteries, fluorescent lamps (tube, compact fluorescent, and HID), and electronics in accordance with FGI *Guidelines for Design and Construction of Hospitals*, Section 2.1-5.4; *Guidelines for Design and Construction of Outpatient Facilities*, Section 2.1-5; *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.1-3.8; and *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities*, Section 2.1-7.2.

11.3.4.2 Breached surfaces, materials, and products. Re-used items shall not include materials and products that have been breached or considered infectious or hazardous waste.

Modify Section 11 as follows. The remainder of Section 11 remains unchanged.

11.4.2.6 Chemical sensitivities. For sensitive and/or vulnerable care populations being treated in healthcare settings, document a plan for addressing allergen / asthma triggers that addresses filtration types for ventilation, any operable windows and locations, and cleaning/disinfecting practices. ~~comply with Allergy Standards Ltd (ASL) or equivalent standards for products specified.~~

Modify Section 12 with new references as follows:

12. Normative References

<p>Allergy Standards Ltd (ASL) Trinity Enterprise Campus, Grand Canal Quay, D02 RP44, Ireland +353 1 675 5678 +1 212 252 2109 www.allergystandards.com</p>	<p>Allergy Standards</p>	<p>11.4.2.6</p>
<p>U.S. Environmental Protection Agency (USEPA) Office of Pesticide Programs (Mail Code 7506C)</p>	<p>DfE- Certified Disinfectants : https://www.epa.gov/pesticide-labels/dfc-certified-disinfectants</p>	<p>10.9.5</p>

BSR/ASHRAE/ASHE Addendum j to ANSI/ASHRAE/ASHE Standard 189.3-2021, *Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities*

Second Public Review Draft; Independent Substantive Changes

1200 Pennsylvania Ave., NW Washington DC
20460

Office of Pollution Prevention & Toxics
(Mail Code 7406-M)

SaferChoice: 10.9.5
<https://www.epa.gov/saferchoice/products>

U.S. Department of Health and Human
Services

Centers for Disease Control and Prevention
(CDC)

Healthcare Infection Control Practices
Advisory Committee

1600 Clifton Rd.

Atlanta, GA 30033, United States

1800 CDC INFO 800-232-4636

<http://www.cdc.gov>

Appendix C – Example of high-touch 3.1
surfaces in a specialized patient area

<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/index.html>

<https://www.cdc.gov/hai/prevent/resource-limited/high-touch-surfaces.html>



**BSR/ASHRAE/IES Addendum ah
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum ah to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

**First Public Review (September 2024)
(Draft Shows Proposed Changes to Current Standard)**

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FOREWORD

A recent proposal suggested the removal of the names of specific simulation programs from the standard. These names are no longer useful since the modeling industry has expanded and matured and understands the available software. In addition, inconsistencies between these parallel sections were identified, and changes were made to make them more consistent. The sentences concerning how components are modeled were updated to read better and be self-consistent.

This addendum impacts an optional performance path in the standard designed to provide increased flexibility, which was not subjected to a cost-effectiveness analysis.

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Addendum ah to 90.1-2022

12.4.1 Simulation Program. The *simulation program* shall be a computer-based program for the analysis of *energy* consumption in *buildings*. ~~For components that cannot be modeled by the *simulation program*, the~~ The exceptional calculation methods requirements in Section 12.4.5 shall be used for components that cannot be modeled by the *simulation program*. The *simulation program* shall include calculation methodologies for all other *building* components being modeled.

Exception to 12.4.1: When approved by the ~~adopting authority~~ AHJ, a separate computer-based program shall be permitted to be used to calculate *on-site renewable energy*.

Informative Note: ASHRAE Standing Standard Project Committee 90.1 recommends that the *simulation program* implement the rules of Section 12 that *control* simulation inputs and outputs be adopted for the purposes of easier use and simpler compliance.

C3.1 Simulation Program. The *simulation program* shall be a computer-based software program for the analysis of energy consumption in *buildings*. The *simulation program* shall include calculation methodologies for the *building* components being modeled.

Informative Note: ~~Examples of *simulation programs* include, but are not limited to, EnergyPlus and DOE 2.~~

G2.2 Simulation Program. The *simulation program* shall be a computer-based program for the analysis of energy consumption in *buildings* (a program such as, but not limited to, DOE 2, BLAST, or EnergyPlus). ~~The *simulation program* shall include calculation methodologies for the *building* components being modeled. For components that cannot be modeled by the *simulation program*, the~~ The exceptional calculation methods requirements in Section G2.5 shall be used for components that cannot be modeled by the *simulation program*. The *simulation program* shall include calculation methodologies for all other *building* components being modeled.

Informative Note: For the ease of use and consistent application, the *simulation program* should automatically implement the requirements of this appendix to generate the baseline design and *proposed design* models based on the user model of the *proposed design*.



**BSR/ASHRAE/IES Addendum ak
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum ak to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

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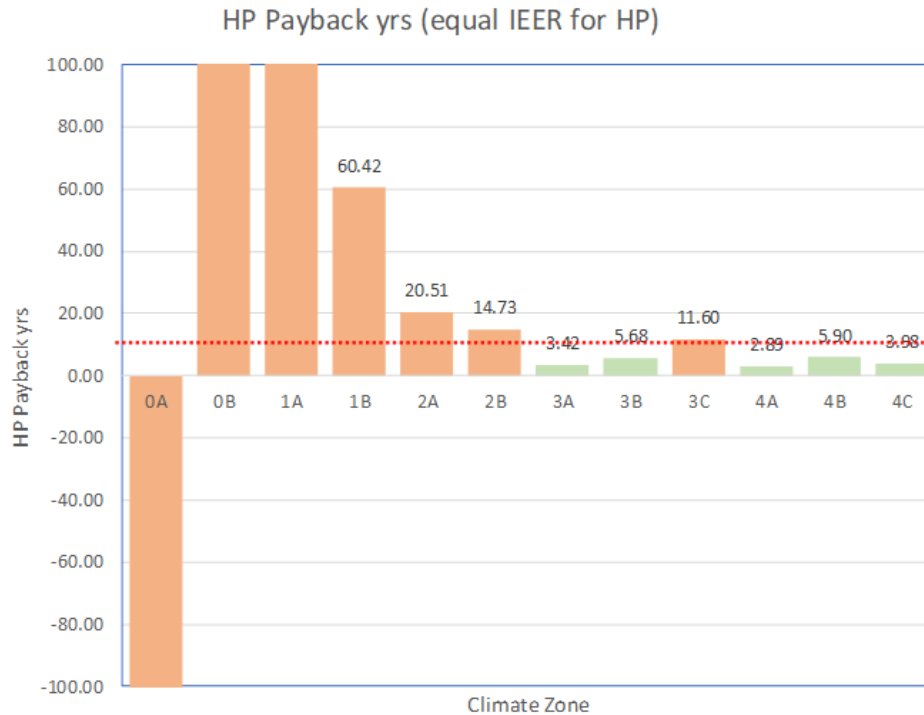
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FOREWORD

Section 12 requires that when the proposed design is a single-zone HVAC systems using electricity for heating, the baseline HVAC system must be a packaged heat pump. But there is no such requirement in Section 6 so it is possible to comply prescriptively using a single-zone AC unit with electric resistance heat. If the AC unit already has compressor-based cooling, it can be readily converted to a heat pump at relatively low cost. Depending on the design, this can reduce the efficiency in cooling, which is why the cooling efficiencies in Table 6.8.1 for non-DOE covered heat pumps is lower than that for cooling-only or gas furnace heating AC units. Because of this reduction in efficiency, using these larger heat pumps in cooling dominated climates can result in higher overall energy costs and poor payback periods. For DOE covered equipment, the efficiencies are the same, requiring that manufacturers compensate for 4-way valve losses etc. with addition heat transfer area or other design options.

Life cycle cost analysis shows the following for DOE-covered heat pumps with a cooling capacity of not less than 65,000 Btu/h for the prototype small office building assuming no outdoor air economizers since units are largely below the economizer threshold:



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Addendum ak to 90.1-2022

Modify Sections 6.3.2 c and e. as follows:

c. Cooling (if any) shall be provided by a unitary packaged or split-system air conditioner that is either air-cooled or evaporatively cooled, with *efficiency* meeting the requirements shown in Table 6.8.1-1 (air conditioners), Table 6.8.1-2 (heat pumps), or Table 6.8.1-4 (packaged *terminal units*, ~~and~~ single-packaged vertical units, ~~and~~ room air conditioners and heat pumps) for the applicable *equipment* category. Cooling *equipment* shall also comply with Section 6.4.1.4.

e. Heating (if any) shall be provided by a unitary packaged or split-system heat pump that meets the applicable efficiency requirements shown in Table 6.8.1-2 (heat pumps) or Table 6.8.1-4 (packaged terminal units, ~~and~~ single-packaged vertical air conditioners, and room air conditioners and heat pumps), a fuel-fired furnace that meets the applicable efficiency requirements shown in Table 6.8.1-5 (furnaces, duct furnaces, and unit heaters), ~~an electric resistance heater~~, or a baseboard system connected to a boiler that meets the applicable efficiency requirements shown in Table 6.8.1-6 (boilers). Heating equipment shall also comply with Section 6.4.1.4.

Exceptions to 6.3.2(e):

1. Where air conditioners with a rated cooling capacity of not less than 65,000 Btu/h are used, electric resistance heating shall be allowed in Climate Zones 0A, 0B, 1A, 1B, 2A, and 2B.
2. Supplemental electric resistance heating in the HVAC zone shall be permitted where the heating system is a heat pump.
3. Uncooled spaces shall be permitted to use electric resistance heating.
4. Electric radiant heating shall be permitted in spaces with a ceiling height of not less than 15 feet.

Add Section 6.5.12 as follows:

6.5.12 HVAC zones cooled by a single-zone unitary packaged, split-system, packaged terminal, or room air conditioner shall not use electric resistance heating.

Exceptions to 6.5.12:

1. Supplemental electric resistance heating in the HVAC zone shall be permitted where the heating system is a heat pump.
2. Air conditioners with a rated cooling capacity of not less than 65,000 Btu/h in climate zones 0A, 0B, 1A, 1B, 2A, and 2B.
3. Electric radiant heating shall be permitted in spaces with a ceiling height of not less than 15 feet.



**BSR/ASHRAE/IES Addendum aq
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum aq to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

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FOREWORD

This proposal increases the required on-site rated capacity from 0.5 W/sf to 0.75 W/sf. The changes made here are to ASHRAE Std 90.1-2022 including addendum K. This proposal fixes unit conversion errors in Table 10.5.1.3 and defines the units used in equation for TRE_{OFF} , the total off-site renewable energy. This proposal also updates the reference to the Green-e standard for qualifying RECs to its latest version.

A cost-effectiveness evaluation was conducted comparing the installed cost of a photovoltaic system with a capacity of 0.75 W/sf applied to the areas of the three largest floors for the ASHRAE prototypes for all climate zones. The first cost of the photovoltaic system divided by the annual operating cost savings was less than the scalar ratio threshold and thus was cost-effective. The energy cost savings value is conservative as it does not include any value for electricity that might be exported.

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Addendum aq to 90.1-2022

Modify Section 10.5 as shown

10.5 Prescriptive Compliance Path

10.5.1 Renewable Energy Resources. Buildings shall be served by *renewable energy resources* in accordance with either Section 10.5.1.1 or Section 10.5.1.2 or a combination thereof in accordance with Section 10.5.1.2.

Exceptions to 10.5.1:

1. Buildings or additions in which the sum of the *gross conditioned floor area* of the three largest floors of the building or addition is less than 10,000 ft² (930 m²).
2. Alterations.
3. Projects meeting the requirements of Section 10.5.1.4.

10.5.1.1 On-Site Renewable Energy Capacity. The building *site* shall have *equipment for on-site renewable energy* with a rated output capacity of not less than ~~0.50~~ 0.75 W/ft² or ~~4.7~~ 2.6 Btu/h/ft² (8.1 W/m²) multiplied by the sum of the *gross conditioned floor area* for all floors up to the three largest floors.

[Note: I-P edition will have two capacity values as shown above. SI will only include the 8.1 W/m²]

Exceptions to 10.5.1.1: Buildings complying with Section 10.5.1.3 and not less than one of the following:

1. Buildings located where an unshaded flat plate collector oriented toward the equator and tilted at an angle

from horizontal equal to the latitude receives an annual daily average incident solar radiation less than 1.1 kBtu/ft²·day.

2. *Buildings* where more than 80% of the *roof* area is covered by any combination of planters, vegetated *space*, *skylights*, occupied *roof* deck, or *equipment* other than renewable energy systems.
3. *Buildings* where more than 50% of *roof* area is shaded from direct-beam sunlight by natural objects or by *structures* that are not part of the *building* for more than 2500 annual hours between 8:00 a.m. and 4:00 p.m.

Table 10.5.1.3 Annual Off-Site Renewable Energy Requirement (I-P)

Climate Zone	Annual Off-Site Renewable Energy, kWh/W or kBtu/(Btu/h)
1A, 2B, 3B, 4B 5B and 3C	1.75 (5.971)
0A, 0B, 1B, 2A,3A and 6B	1.55 (5.289)
4A, 4C, 5A, 5C, 6A, and 7, and 8	1.35 (4.606)

Table 10.5.1.3 Annual Off-Site Renewable Energy Requirement (SI)

Climate Zone	Annual Off-Site Renewable Energy, kWh/W
1A, 2B, 3B, 4B 5B and 3C	1.75
0A, 0B, 1B, 2A,3A and 6B	1.55
4A, 4C, 5A, 5C, 6A, and 7, and 8	1.35

10.5.1.2 Off-Site Community Renewable Energy. Renewable energy shall be procured for the *building* from a local *community renewable energy facility* in accordance with Sections 10.5.1.3. The *community renewable energy facility* shall be located within the same electric utility provider service territory as the *site* and comply with one or more of the following:

- a. The *community renewable energy facility* is located within the same county or an adjacent county.
- b. The *community renewable energy facility* is located within 60 mi (100 km) of the *site*.

10.5.1.3 Off-Site Renewable Energy Procurement. Off-site renewable energy shall be procured for *buildings* in accordance with Sections 10.5.1.3.1 and 10.5.1.3.2 and shall be not less than the total off-site renewable energy determined as follows:

$$TRE_{OFF} = [(REN_{OFF} \times 0.50 \text{ W/ft}^2 \times FLRA) - IRE_{ON}] \times 15$$

(I-P edition)

$$TRE_{OFF} = ([0.75 \text{ W/ft}^2 \times FLRA] - IRE_{ON}) \times REN_{OFF} \times 15$$

or

$$TRE_{OFF} = ([2.6 \text{ Btu/h/ft}^2 \times FLRA] - IRE_{ON}) \times REN_{OFF} \times 15$$

where

- TRE_{OFF} = total off-site renewable energy to be procured in kWh or kBtu
- REN_{OFF} = annual off-site renewable energy requirement of renewable system capacity from Table 10.5.1.3, kWh/W per year or kBtu/(Btu/h) per year
- FLRA = the sum of the *gross conditioned floor area* of the three largest floors, ft²
- IRE_{ON} = ~~annual~~ *on-site renewable energy generation installed capacity in W or Btu/h quantity* in accordance with Section 10.5.1.1

(SI edition)

$$TRE_{OFF} = \frac{[(8.1 \text{ W/m}^2 \times FLRA] - IRE_{ON}) \times REN_{OFF} \times 15}{1000}$$

where

- TRE_{OFF} = total off-site renewable energy to be procured in kWh
- REN_{OFF} = annual off-site renewable energy requirement ~~of renewable system capacity~~ from Table 10.5.1.3, kWh/W per year
- FLRA = the sum of the *gross conditioned floor area* of the three largest floors, m²
- IRE_{ON} = ~~annual on-site renewable energy generation~~ installed capacity in W ~~quantity in accordance with Section 10.5.1.1~~

10.5.1.3.1 Off-Site Renewable Energy Procurement Paths. The *building* owner shall procure and be credited for not less than the total amount of off-site renewable energy required by Section 10.5.1.3, using one or more of the following:

- a. A *community renewable energy facility* for projects complying with Section 10.5.1.2.
- b. A *physical renewable energy power purchase agreement* for projects qualifying for an exception to Section 10.5.1.1.
- c. A *financial renewable energy power purchase agreement* for projects qualifying for an exception to Section 10.5.1.1.
- d. An off-site renewable energy system owned by the *building* property owner for projects qualifying for an exception to Section 10.5.1.1.

Generation sources shall be located where the energy can be delivered to the building *site* by any of the following:

- a. Direct connection to the off-site renewable energy facility.
- b. The local utility or distribution entity.
- c. An interconnected electrical or pipeline network where energy delivery capacity between the generator and the building *site* is available.

10.5.1.3.2 Off-Site Renewable Energy Contract Terms. The total off-site renewable energy shall be delivered or credited to the building *site* under an energy contract with a duration of not less than ten years. The contract shall be structured to survive a partial or full transfer of ownership of the *building* property.

10.5.1.4 Renewable Energy Certificate Purchase. Where it can be demonstrated to the code official that the requirements of Sections 10.5.1.1 through 10.5.1.3 or a combination of the three cannot be met, either in part or full, and prior to the issuance of the certificate of occupancy, the *building* owner shall document a contract for delivery of *renewable energy certificates* certified in compliance with the Green-e® Renewable Energy Standard for Canada and the United States, or an equivalent *approved* standard, equal to three times the amount of total off-site renewable energy calculated in accordance with Section 10.5.1.3.

Informative Note: For building projects located in nations other than Canada or the United States, use the Green-e® Standard for that nation, or equivalent *approved* standard.

10.5.1.5 Energy Certificate Documentation. The property owner or owner's authorized agent shall demonstrate that for an *on-site renewable energy system* or off-site renewable energy *system* required by Section 10.5.1, either no *RECs* are associated with the renewable energy system, or the following provisions for *RECs* have been met:

- a. The *RECs* are retained and retired by or on behalf of the property owner or tenant for a period of not less than ten years.
- b. The *RECs* are created within a 12-month period of the use of the *REC*.
- c. The *RECs* are from a generating asset placed in service no more than five years before the issuance of the *building's* certificate of occupancy.

Modify Section 13 as shown.

13. NORMATIVE REFERENCES

<u>Reference</u>	<u>Section</u>
<u>Green-e® c/o Center for Resource Solutions 1012 Torney Ave., Second Floor, San Francisco, CA 94129</u>	
<u>Green-e® Version 4.3 (2024)</u>	<u>10.5.1.4</u>
<u>Green-e Renewable Energy Standard for Canada and the United States</u>	



**BSR/ASHRAE/IES Addendum ar
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum ar to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

**First Public Review (September 2024)
(Draft Shows Proposed Changes to Current Standard)**

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

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FOREWORD

This addendum requires that an ECB and Appendix G analysis be conducted using actual utilities rates or supply contracts from utilities or energy suppliers versus average EIA rates when available. Actual utility rate schedules often include demand charges which can significantly impact the annual energy cost of a project, especially projects incorporating load management energy efficiency measures. Utility rates are typically available from provider's website. Select rates may also be found at https://openei.org/wiki/Utility_Rate_Database

Note that the standard does not guarantee the prediction of actual building operational costs.

This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost-effectiveness analysis.

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Addendum ar to 90.1-2022

Definitions:

~~*purchased energy rates: costs for units of energy or power purchased at the building site. These costs may include energy costs as well as costs for power demand as determined by the adopting authority. The tariff, published rate, or contract for energy to be used at the building site, including fixed charges, energy unit costs, and demand charges that can vary by quantity, time of use, or season.*~~

.....

12.4.3.2 Annual Energy Costs. The *design energy cost* and *energy cost budget* shall ~~be determined using rates for~~ use the applicable published *purchased energy rates* for the project (such as electricity, gas, oil, propane, steam, and chilled water) that are approved by the adopting authority.

Exception to 12.4.3.2:

1. For projects in the United States (US), where it can be demonstrated to the AHJ that applicable published energy rates are unavailable, the most recent state average annual *energy prices* published by the U.S. Energy Information Administration (EIA) for commercial customers or an approved alternative shall be used.
2. Where applicable published *purchased energy rates* are unavailable for projects outside of the US, an approved alternative shall be used.

Where *on-site renewable energy* or *site-recovered energy* is in excess of what is required in the *budget building design* by Table 12.5.1, the *budget building design* shall be based on the *energy source* used as the backup *energy source*, or electricity if no backup *energy source* has been specified. Where the *proposed design* includes *on-site electricity generation systems* other than *on-site renewable energy systems*, the baseline design shall include the same generation systems excluding its *site-recovered energy*.

.....

Table 12.5.1 Modeling Requirements for Calculating Design Energy Cost and Energy Cost Budget

Proposed Design (Column A) Design Energy Cost (DEC)	Budget Building Design (Column B) Energy Cost Budget (ECB)
.....	
2. Additions and Alterations	
<p>It is acceptable to demonstrate compliance using <i>building</i> models that exclude parts of the <i>existing building</i>, provided all of the following conditions are met:</p> <ol style="list-style-type: none"> a. Work to be performed under the current permit application in excluded parts of the <i>building</i> shall meet the requirements of Sections 5 through 10. b. Excluded parts of the <i>building</i> are served by <i>HVAC systems</i> that are entirely separate from those serving parts of the <i>building</i> that are included in the <i>building</i> model. c. Design <i>space</i> temperature and <i>HVAC system</i> operating <i>set points</i> and schedules on either side of the boundary between included and excluded parts of the <i>building</i> are identical. d. If a declining block or similar utility rate is being used in the analysis and the When excluded and included parts of the <i>building</i> are on the same utility meter, the <u><i>purchased energy rates</i></u> shall reflect the utility block or rate for the building plus the addition. 	<p>Same as <i>proposed design</i>.</p>

.....

G2.1 Performance Calculations. The *proposed building performance* and *baseline building performance* shall be calculated using the following:

- a. The same simulation program
- b. The same weather data
- c. The same *purchased energy rates*

.....

G2.4.2 Annual Energy Costs.

- a. The *design energy cost* and *baseline energy cost* shall use the applicable published ~~be determined using either actual rates for purchased energy rates for the project, or state average energy prices published by U.S. DOE's Energy Information Administration (EIA) for commercial building customers, but rates from different sources may not be mixed in the same project.~~

Exceptions to (a):

1. Where applicable published *purchased energy rates* are unavailable in the United States (US), state average *energy prices* published by the U.S. Energy Information Administration (EIA) for commercial *building* customers or an approved alternative shall be used.
2. Where applicable published *purchased energy rates* are unavailable for projects outside of the US, an approved alternative shall be used.
3. Where the proposed design utilizes purchased hot water, steam, or chilled water, such projects shall be modeled as using purchased electricity or gas in accordance with the "Proposed Building Performance" column of Table G3.1(10)(e), G3.1(10)(f), G3.1(11)(g). ~~Where natural gas must be modeled in the baseline following Tables G3.1.1-2 or G3.1.1-3 but is not available at the building site, the state average energy prices published by EIA shall be used for natural gas, and either the actual rates published by~~

~~the utility serving the building or state average energy prices published by EIA shall be used for electricity.~~

- ~~b. Where *on-site renewable energy* or *site-recovered energy* is used, the *base-line building design* shall be based on the *energy source* used as the backup *energy source*, or the *baseline system energy source* in that category if no backup *energy source* has been specified, except where the *base-line energy source* is prescribed in Tables G3.1.1-2 and G3.1.1-3.~~
- ~~c. Where the *proposed design* includes *on-site electricity generation systems* other than *on-site renewable energy systems*, the *baseline design* shall include the same *generation systems* excluding its *site-recovered energy*.~~

~~**Informative Note:** The above provision allows users to gain credit for features that yield load management benefits. Where such features are not present, users can simply use state average unit prices from EIA, which are updated annually and readily available on EIA’s website (www.eia.gov).~~

.....

Table G3.1 Modeling Requirements for Calculating Proposed Building Performance and Baseline Building Performance

Proposed Building Performance	Baseline Building Performance
.....	
2. Additions and Alterations	
<p>It is acceptable to predict performance using <i>building</i> models that exclude parts of the <i>existing building</i>, provided that all of the following conditions are met:</p> <ul style="list-style-type: none"> a. Work to be performed in excluded parts of the <i>building</i> shall meet the requirements of Sections 5 through 10. b. Excluded parts of the <i>building</i> are served by <i>HVAC systems</i> that are entirely separate from those serving parts of the <i>building</i> that are included in the <i>building</i> model. c. Design <i>space</i> temperature and <i>HVAC system</i> operating <i>set points</i> and schedules on either side of the boundary between included and excluded parts of the <i>building</i> are essentially the same. d. If a declining block or similar utility rate is being used in the analysis and the When excluded and included parts of the <i>building</i> are on the same utility meter, the <i>purchased energy rates</i> shall reflect the utility block or rate for the building plus the addition. 	<p>If the proposed <i>design</i> excludes parts of the <i>existing building</i>, the <i>baseline building design</i> shall exclude them as well.</p> <p>When modeled, unmodified <i>existing building</i> components shall follow the same rules as new and modified <i>building</i> components.</p>



**BSR/ASHRAE/IES Addendum av
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

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FOREWORD

The purpose of this proposal is to clarify existing building envelope alteration provisions in Section 5.1.4 and improve upon similar updates to the 2024 IECC Chapter 5 (existing buildings). The existing list of exceptions in Section 5.1.4 are in some cases exceptions and in other cases requirements. The list of exception items are incomplete or lacking appropriate triggers for when alteration requirements should or should not apply, and to what degree. This proposal is intended to re-format the provisions to address alteration requirements, exceptions, triggers, and allowances to better accommodate alterations for various building thermal envelope assemblies while promoting energy efficiency improvements. It also seeks to provide flexibility in allowing deviating from the provisions for new construction by way of an “approved” design to accommodate existing building conditions that may sometimes inhibit full compliance with the envelope requirements for new construction (similar to the approach already used with roof replacements).

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Addendum av to 90.1-2022

Revise as follows (new definition):

Approved: Acceptable to the *authority having jurisdiction*.

Revise as follows:

5.1.4 Alterations to Building Envelopes. *Alterations to the building envelope in accordance with Section 4.2.1.3(a) shall comply with this section. ~~the requirements of Section 5.2 for insulation, air leakage, and fenestration applicable to those specific portions of the building that are being altered.~~ Building envelope alterations shall not increase the energy use of the building.*

Informative Note: Where an *approved* design is referenced in Section 5.1.4, it is a design for a *building envelope alteration* that is sufficiently documented by a qualified entity such that the *authority having jurisdiction* can make a determination of the design's compliance with the intent of this section.

Exceptions to 5.1.4: The following *alterations* need not comply with these requirements, provided such *alterations* will not increase the *energy use of the building*:

1. ~~Installation of storm windows or glazing panels over existing glazing, provided the storm window or glazing panel contains a low emissivity coating. However, a low emissivity coating is not required where the existing glazing already has a low emissivity coating. Installation is permitted to be either on the inside or outside of the existing glazing.~~
2. ~~Replacement of glazing in existing sash and frame, provided the *U factor* and *SHGC* will be equal to or lower than before the glass replacement.~~
3. ~~Alterations to roof, wall, or floor cavities that are insulated to full depth with insulation having a minimum nominal value of R 3.0/in.~~
4. ~~Alterations to walls and floors, where the existing structure is without framing cavities and no new framing cavities are created.~~
5. ~~Roof recovering.~~
6. ~~Roof replacements, where the existing roof insulation is integral to or is located below the roof deck.~~
7. ~~Roof replacement, provided the area of the replacement roof covering complies with the opaque element requirements for roofs in Tables 5.5-0 through 5.5-8 and Section 5.5.3.1.4.~~
8. ~~Replacement of existing doors that separate a conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided that an existing vestibule that separates a conditioned space from the exterior shall not be removed.~~
9. ~~Replacement of existing fenestration, provided that the area of the replacement fenestration does not exceed 25% of the total fenestration area of an existing building and that the *U factor* and *SHGC* will be equal to or lower than before the fenestration replacement.~~

5.1.4.1 Roof, ceiling, and attic alterations. Alterations to the *roof*, ceiling, or attic shall comply with the following as applicable:

1. Alterations of Roof Construction Below the Roof Deck: Insulation shall be installed where existing insulation below the *roof deck* or on an *attic envelope floor* does not comply with the insulation requirements of Section 5.2. Insulation installed in existing *roof cavities* is not required to be increased where insulated to the full depth excluding space required for *roof ventilation*. Where such full-depth insulation is less than 75% of the *rated R-value of insulation* required by Section 5.2, compliance shall be determined by an *approved design* minimizing deviation from the insulation requirements of Section 5.2.

2. Roof Replacement or Roof Recovering:

~~2.1 5.1.4.1~~ Roof Replacement for Roofs with Insulation Entirely Above Deck: Roof replacement for roofs with insulation entirely above deck shall comply with Section 5.5.3.1 and shall not be required to comply with the requirements of Section 5.4.3., and shall not increase the energy use of the building. Where the insulation requirements in Section 5.5.3.1.1 cannot be met due to existing roof conditions, the roof replacement shall be in accordance with an approved design minimizing deviation from the approved construction documents and insulation requirements of Section 5.2., which shall include:

- a. a roof inspection report documenting existing roof conditions and
- b. a roof design minimizing deviation from the requirements of Section 5.5.3.1.1.

Informative Note: The proposed roof design should be prepared by an approved entity capable of determining whether the design complies with the requirements of Section 5.1.4.1 to the extent practical.

2.2 Roof Replacement for Roofs where All Insulation is Integral to or Located Below the Roof Deck: Compliance with Section 5.2 shall not be required and the replacement roof surface shall comply with Section 5.5.3.1.4.

2.3 Roof Recovering: Compliance with Section 5.2 shall not be required and the recovered roof surface shall comply with Section 5.5.3.1.4.

5.1.4.2 Fenestration Alterations. Alterations of fenestration shall comply with the following as applicable:

1. Added Fenestration Area: The addition of new vertical fenestration area or skylight area that results in total building vertical fenestration area or skylight area less than or equal to the maximum permitted by Section 5.5.4.2 shall comply with Section 5.4.2 and Sections 5.5.4.1 through 5.5.4.6, or with Section 5.6. Addition of new vertical fenestration area or skylight area that results in total building vertical fenestration area or skylight area greater than the maximum permitted by Section 5.5.4.2 shall comply with Section 5.5.4.2 for the space adjacent to the new vertical fenestration or skylight only, or comply with Section 5.6.

2. Replacement Fenestration: Where replacement of existing fenestration is more than 25% of the total fenestration area of an existing building, replacement fenestration shall comply with Sections 5.4.2, 5.5.4.1, 5.5.4.3, 5.5.4.4, and 5.5.4.6, or with Section 5.6. Where replacement of existing fenestration is not more than 25% of the total fenestration area of an existing building, compliance with Section 5.5.4 shall not be required for the replacement fenestration provided the U-factor and SHGC is equal to or lower than before the fenestration replacement.

3. Replacement Glazing: Compliance with Sections 5.4.2 and 5.5.4 shall not be required for the replacement of glazing in existing sash and frame, provided the U-factor and SHGC is equal to or lower than before the glazing replacement.

4. Replacement Doors: Replacement of existing doors that separate a conditioned space from unconditioned space shall not require the installation of a vestibule or revolving door, provided that an existing vestibule that separates a conditioned space from unconditioned space is not removed.

5. Storm Windows or Glazing Panels over Existing Glazing: Installation of storm windows or glazing panels over the inside or outside of existing glazing shall be permitted and shall include a low-emissivity coating where not already present on the existing glazing.

5.1.4.3 Above-grade Wall Alterations. Alterations to *above-grade walls* shall comply with the following as applicable:

1. Wall Cavities Exposed: Insulation shall be installed where existing insulation in the *wall cavity* does not comply with the insulation requirements of Section 5.2. Insulation installed in existing *wall cavities* is not required to be increased where insulated to the full depth. Where such full-depth insulation results in less than 75% of the *rated R-value of insulation* required by Section 5.2 for the *wall cavity*, compliance shall be determined by an *approved design* minimizing deviation from the insulation requirements.

2. Exterior Wall Covering Removed and Fenestration Replaced: Where exterior *wall coverings* are removed and the vertical fenestration is replaced for not less than one entire side of a *building*, *continuous insulation* shall be installed in the altered portions where required by Section 5.2 or an *approved design* minimizing deviation from the insulation requirements. *Continuous insulation* is not required where the *wall cavities* contain insulation that satisfies the insulation requirements of Section 5.2.

3. Other Wall Alterations: For other *wall alterations* where the extent of the *alteration* or existing *wall* conditions prevent full compliance with the insulation requirements of Section 5.2, the *wall alteration* shall be constructed in accordance with an *approved design* minimizing deviation from the insulation requirements.

5.1.4.4 Envelope Floor Alterations. Where *envelope floor cavities* are exposed prior to or during *alteration* of an *envelope floor* assembly, such cavities shall be insulated in accordance with Section 5.2, or an *approved design* that minimizes deviation from the insulation requirements. Insulation installed in existing *envelope floor cavities* is not required to be increased where insulated to the full depth. Where such full-depth insulation results in less than 75% of the *rated R-value of insulation* required by Section 5.2, compliance shall be determined by an *approved design* minimizing deviation from the insulation requirements.

5.1.4.5 Below-grade Wall Alterations. Where *below-grade walls* are altered to expose cavities, enclose existing cavities, or add finish and framing materials other than paint or similar coatings, they shall be insulated in accordance with Section 5.2, or an *approved design* that minimizes deviation from the insulation requirements.

5.1.4.6 Air Barrier. *Building envelope* assemblies altered in accordance with Section 5.1.4 shall have a *continuous air barrier* installed in accordance with Section 5.4.3.2 or an *approved design*. The air barrier shall be made continuous with an existing air barrier where present in adjacent assemblies provided access is unobstructed. Measurement of *air leakage* in accordance with Section 5.4.3.1.4 shall not be required.



**BSR/ASHRAE/IES Addendum az
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

**Proposed Addendum az to
Standard 90.1-2022, Energy Standard
for Sites and Buildings Except Low-
Rise Residential Buildings**

**First Public Review (September 2024)
(Draft Shows Proposed Changes to Current Standard)**

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

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

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(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

This addendum is proposed to assist ANSI/ASHRAE/IES Standard 90.1-2025 to achieve its organizational objectives of reducing energy use and direct and indirect greenhouse gas emissions by preparing newly constructed buildings and supporting automobile parking facilities for the widespread adoption of electric vehicles (EVs) by assuring efficient charging sessions, power export readiness, and flexible load management via electrical infrastructure. This addendum includes new definitions and Chapter 8 mandatory provisions.

Efficient Charging Sessions

While charging, the charging system draws $250\text{ W}\pm$ in addition to the amount of power that is transferred to the battery, reducing the efficiency of charging sessions. At a given circuit ampacity, higher voltage Level 2 charging sessions enable higher charging powers that reduce charging times. Level 2 ($\geq 208\text{ V}$) charging sessions are nearly three times faster than Level 1 (120V) charging sessions, saving $250\text{ Wh}\pm$ for each charging hour reduced. If 12K annual mileage requires 10 kWh in daily recharging energy, a Level 2 charging session eliminates at least 6.4 hours of vehicle charging overhead power per day, saving 900 kWh/year per parking space. See 8.4.5.1.a. below.

Power Export Readiness

In the near future, vehicles and their batteries may contribute power to building or grid needs when they comply with the upcoming SAE standards for AC bidirectional power transfer. When a non-residential project includes EV charging, the infrastructure branch-circuit topology and conductors should be ready by utilizing dedicated branch circuits with conductors sized to match the expected SAE bidirectional power transfer levels from light-duty vehicles. See 8.4.5.1.b. below.

Flexible Load Management Readiness

When a project includes EV charging, the infrastructure should be ready to support demand management to reduce greenhouse gas emissions and manage peak demand charges where applicable. To achieve this, EV charger must be network-connected and ready to be controlled by the building management system or a grid services provider. Nearly all EVSE or controlled receptacles suitable for commercial or high-rise residential use will utilize some form of connectivity for session management and customer billing. See 8.4.5.1.c. below.

[OBJ]

Cost Effectiveness

The scalar ratio is cost positive when EV Spaces are charging vehicles at least 10% of the year. The social cost of carbon approach is cost positive when EV Spaces are charging vehicles at least 6% of the year.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (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 az to 90.1-2022

3. DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

[...]

Electric vehicle (EV): an automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from: a building electrical service, *EVSE*, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Plug-in hybrid electric vehicles are electric vehicles having a second source of motive power.

Electric vehicle supply equipment (EVSE): equipment for power transfer including the ungrounded, grounded and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, personal protection system and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring power between the premises wiring and the *electric vehicle*.

Electric vehicle space (EV space): a parking space that is provided with a dedicated means of power transfer between an *EV* and power supply for the purpose of charging *EV* batteries.

3.3 Abbreviations and Acronyms

[...]

<u><i>EV</i></u>	<u><i>electric vehicle</i></u>
<u><i>EVSE</i></u>	<u><i>electric vehicle supply equipment</i></u>

8.2 Compliance Paths.

8.4 Mandatory Provisions

[...]

8.4.5 Minimum Requirements for AC Electric Vehicle Spaces. *Electric vehicle spaces* shall comply with all of the following:

- a. Branch circuits serving *EV spaces* shall have a rated voltage of not less than 208 V.
- b. In *buildings* other than multifamily, branch circuits serving charging of *electric vehicles* shall have conductors sized to deliver a continuous duty load of not less than 6.6 kVA to each *EV space* and circuit protection sized to serve the load.
- c. In *buildings* other than multifamily, *EVSE* shall be capable of being controlled by a building management system or grid services aggregator.

1 S400 Standard for Professional Cleaning, Maintenance, and Restoration 2 of the Commercial Built Environment

3
4 Second Limited Public Review (September 2024)

5
6 (Draft shows Proposed Changes to Current Standard)

7
8 **Note to Reviewers:** *These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions). 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.*

9 10 11 12 **Important Definitions**

13
14 For the practical purposes of this document, it was deemed appropriate to highlight and distinguish the critical remediation methods and procedures from the less critical, by characterizing the former as the perceived and recommended “standard of care.” The IICRC S400 consensus body interprets the “standard of care” to be: practices that are common to reasonably prudent members of the trade who are recognized in the industry as qualified and competent. Notwithstanding the foregoing, this Standard is not intended to be either exhaustive or inclusive of all pertinent requirements, methods, or procedures that might be appropriate on a particular cleaning project. Ultimately, it is the responsibility of the cleaning manager or business owner technician to verify on a case-by-case basis that application of this Standard is appropriate.

22 23 **B Definitions**

24
25 ~~**Other Potentially Infectious Materials (OPIM):** any body fluid that is visibly contaminated with blood such as urine, feces, and vomit, and in situations where it is difficult or impossible to differentiate between body fluids (e.g., semen, vaginal secretions, saliva in dental procedures). Additionally, OPIM encompasses any unfixed human or animal tissue or organ (excluding intact skin), whether living or deceased.~~

29
30 **Personal Protective Equipment (PPE):** comprises garments and equipment (e.g., coveralls, gloves, boots, masks, respirators, face shields, fall protection, goggles, and other specialized equipment tailored to specific hazards and work conditions) determined by the hazard assessment and offers protection to minimize exposure to hazards that cause workplace injuries and illnesses for all potential exposures to the body.

34
35 **Soil:** accumulation of unwanted debris including but not limited to dust, litter, spills, smudges, fingerprints, and blemishes.

36 37 38 **1 Principles of Cleaning**

39
40 Management of cleaning operations *should* implement the following key elements as components of cleaning program’s written scope of work and specifications for each facility or area;

- 41
42 ▪ written cleaning procedures for each cleaning process (i.e., Standard Operating Procedures (SOPs));
- 43 ▪ specification of cleaning agents, equipment, and supplies;
- 44 ▪ monitoring of cleaning outcomes;
- 45 ▪ documentation and implementation of necessary modifications; and
- 46 ▪ ~~Integrated Pest Management (IPM) plan.~~

47 48 **2.2 Communication**

49
50 An open discussion of the cleaning activities *should* be established among all Materially Interested Parties (MIPs) to ensure quality operations, identify deficiencies, eliminate conflicts, and develop ways to improve operations.

51 52 53 **2.4 Documentation for Cleaning Operations**

55 ~~Documentation of~~ Cleaning operations' policies and procedures, ~~contracts, or projects~~ shall include, but are not
 56 limited to:

- 57
- 58 ▪ all applicable federal, state, provincial, and local laws and regulations;
- 59 ▪ required insurance coverages;
- 60 ▪ workplace health and safety regulations;
- 61 ▪ employee complaint policies;
- 62 ▪ workplace violence, safety, security, and harassment policies;
- 63 ▪ work schedule and rest period policies;
- 64 ▪ equal employment opportunity policies;
- 65 ▪ written hazard communication program (HAZCOM);
 - 66 ○ written respirator program; and
 - 67 ○ written exposure control plan.
- 68 ▪ hearing conservation program;
- 69 ▪ fire protection plan;
- 70 ▪ emergency action plans and procedures (e.g., inclement weather, emergency shelters); and
- 71 ▪ discrimination policies.

72

73 4.4 Restroom Cleaning

74

75 Restroom cleaning may require different cleaning chemicals for different surfaces and fixtures. Cleaning operations
 76 should ensure that the chemicals they use are compatible. Cleaning operations should exercise caution when using
 77 chemicals (e.g., oxidizers, acids) on the surfaces they clean as well as with the adjacent areas (e.g., carpet, stone).
 78

79 4.3.1 Application of Sanitizer or Disinfectant to Environmental Surfaces

80

81 SOPs *should* include, but not be limited to the following:

- 82
- 83 ▪ clean surfaces prior to the application of sanitizer or disinfectant, if required;
- 84 ▪ use clean equipment, supplies, and materials (e.g., towels, wipes, solutions, tools); and
- 85 ▪ identifying and complying with the manufacturer's instructions and specified dwell time.

86

87 4.6 Window and Glass Cleaning

88

89 Windows and glass (reflective surfaces, plastics, films, coatings) are used in a variety of forms throughout a
 90 commercial facility. All applicable safety regulations for window and glass cleaning *shall* be followed. Window and
 91 glass cleaning and maintenance *should* be performed in accordance with the scope of work, specifications, and
 92 manufacturer guidelines. The expected outcome *should* be that window and glass are free of streaks, ~~scratches,~~
 93 spots, residues, and soils.

94

95 5 Cleaning Equipment and Tools, Materials, Chemicals, and Supplies

96

97 All equipment and tools, materials, chemicals, and supplies *should* be used and maintained according to the
 98 manufacturer's instructions.

99

100 5.1 Equipment and Tools

101

102 Automatic and autonomous machines (e.g., co-bots, robots) are available in various sizes and styles to assist with
 103 cleaning operations. ~~The expected outcome should be the removal of soil and appearance enhancement.~~

104

105 5.3 Cleaning Chemical Products

107 Chemical products are approved consumable items that are replaced or replenished when depleted.
 108 Chemicals pose a wide range of acute and chronic health hazards. Worker training *shall* be provided if the
 109 cleaning chemicals are hazardous. This training *shall* be provided before the worker begins using the cleaner.
 110

111 Cleaning products and processes from specific categories *should* be selected for each cleaning task and utilized
 112 for their intended purpose. These may include, but are not limited to:

- 113
- 114 ▪ detergents;
- 115 ▪ alkaline, acidic, or neutral products;
- 116 ▪ solvent based products;
- 117 ▪ abrasive products;
- 118 ▪ odor counteractants;
- 119 ~~▪ disinfectants and sanitizers;~~
- 120 ▪ enzymes;
- 121 ▪ adsorbent and absorbent powdered and granular compounds;
- 122 ▪ specialty products (e.g., furniture polish, stainless steel polish, metal cleaner);
- 123 ~~▪ engineered water;~~
- 124 ▪ high-pressure; and
- 125 ▪ steam units.

126

127 **6.2 Correcting Cleaning Deficiencies**

128

129 Cleaning deficiencies are identified via workplace inspections, customer and occupant feedback, or third-party
 130 auditors. Cleaning and quality deficiencies *should* be corrected (e.g., missed trash, soiled surfaces), as follows:

- 131
- 132 ▪ adjust cleaning frequencies, time allotments, processes, and procedures;
- 133 ▪ evaluate equipment, materials, and supplies;
- 134 ▪ check the cleaning technician's performance;
- 135 ▪ review training and re-training needs; and
- 136 ▪ implement a quality improvement program.

137

138 **7.6 Changes to Scope of Work**

139

140 Changes to the original scope of work may be needed due to identified limitations, complexities, or complications.
 141 All changes *should* be approved by, documented, and communicated to Materially Interested Parties (MIPs).
 142

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NSF/ANSI Standard for Plastics —

Plastics Piping System Components and Related Materials

9 Quality assurance

9.10 Product-specific quality assurance requirements

Tables 9.2 through 9.40 provide product-specific quality assurance requirements.

Table 9.11a
PEX, PE-RT, PE-water, PE-storm sewer pipe and tubing test frequency

Test	PEX	PE-RT	PE (water)	PE (storm sewer)
dimension				
pipe OD or ID	2 h	2 h	2 h	2 h
pipe wall thickness (minimum and maximum)	2 h	2 h	2 h	2 h
burst pressure ^{a,b}	24 h ^c	24 h	24 h	24 h
hydrostatic pressure	annually	annually	—	—
density	annually	annually	annually	annually
melt flow	—	—	annually ^d	—
degree of cross-linking ^{de} (gel content)	weekly	—	—	—
ESCR	annually	—	—	—
bent tube sustained pressure (hot / cold)	annually	—	—	—
elevated temperature sustained pressure 80 °C (176 °F)	—	—	semiannually	—
sustained pressure	annually	—	—	—
excessive temperature and pressure capability of tubing and pipe	annually	annually ^{ef}	—	—
stiffness	—	—	—	annually
flattening	—	—	—	annually
impact	—	—	—	weekly
ring tensile	—	—	annually ^d	—
carbon black dispersion	—	—	annually ^d	—
inside surface ductility	—	—	annually ^d	—

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Issue 145, Revision 1 (August 2024)

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Table 9.11a
PEX, PE-RT, PE-water, PE-storm sewer pipe and tubing test frequency

Test	PEX	PE-RT	PE (water)	PE (storm sewer)
product standard(s)	ASTM F876, ASTM F877, ASTM F2788, ASTM F2929, ASTM F3253, AWWA C904, ^{fg} CSA B137.5	ASTM F2623, ASTM F2769, CSA B137.18 ^{gh}	ASTM D2239, ASTM D2737, ASTM D3035, ASTM F714, AWWA C901, ^{hi} AWWA C906, ^{ij} CSA B137.1 ^{gh,k}	ASTM F2306

^a If one material is continuously used in several machines or sizes, then when a steady-state operation is obtained on each machine, sample selection shall be from a different extruder each day and rotated in sequence among all machines or sizes.

^b Burst test for pipe sizes 24 to 63 in are tested once per week.

^c Daily burst testing for PEX tubing shall be conducted for each material being extruded at either 180 °F or 200 °F depending on the temperature specified by the manufacturer.

^d Melt flow, ring tensile, carbon black dispersion, and inner surface ductility only apply to CSA B137.1.

^{de} Degree of cross-linking samples shall be taken from normal production after the point in the process where the cross-linking reaction is nominally complete.

^{ef} Excessive temperature only applies to ASTM F2769.

^{fg} Pipe and tubing compliant to AWWA C904 shall follow the QC requirements of AWWA C904.

^{gh} Burst pressure is not required for pipe listed to CSA B137.1 and CSA B137.18.

^{hi} Pipe and tubing compliant to AWWA C901 shall follow the QC requirements of AWWA C901.

^{ij} Pipe and tubing compliant to AWWA C906 shall follow the QC requirements of AWWA C906.

^k Pipe and tubing compliant to CSA B137.1 shall follow the pipe sampling and test requirements of Clause 5.3 of CSA B173.1.

Rationale: The proposed changes add consistency with updates to CSA B137.1:23. Specifically, the changes reflect the addition of Clause 6.3 (inside surface ductility), Clause 5.3 (pipe sampling and testing), and Table 12 (PE pipe or tubing sampling and testing schedule) to CSA B137.1:23.

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NSF/ANSI 53:

Drinking Water Treatment Units — Health Effects

⋮

7 Elective performance claims – Test methods

⋮

7.3 Mechanical filtration reduction claims

⋮

7.3.2 Cyst reduction

The system shall be tested using one of the following options:

- live *Cryptosporidium parvum* oocysts (see Section 7.3.2.1); or
- polystyrene microspheres (see Section 7.3.2.2).

7.3.2.1 Live *Cryptosporidium parvum* oocyst reduction

7.3.2.1.1 Live *Cryptosporidium parvum* oocyst reduction claim

The system shall reduce the number of live *C. parvum* oocysts from an influent challenge of at least 50,000 (5×10^4) oocysts per liter by at least 99.95% at every individual unit effluent sample point when tested in accordance with Section 7.3.2.1. The *C. parvum* oocysts shall be from a calf source. The viability shall be > 50% determined by excystation.¹¹ The oocysts shall be stored with 1,000 IU/mL penicillin and 1,000 µg/mL streptomycin at 4 °C (39 °F) and shall be used within 8 wk of collection. A lab may use oocysts beyond 8 wk after collection if an extended expiration time is provided and validated by the vendor or validated and appropriately approved by the lab. The live *C. parvum* oocysts shall not be inactivated by any means including chemical or UV irradiation prior to passing through the test system.

NOTE — It has been reported that the oocyst wall of viable oocysts may **can** deform. Excystation is performed as an indication of the potential of the oocyst wall to deform and is not done to measure the infectivity of the organism.

⋮

Rationale:

- ***Lab validations of different lots of *C. parvum* stock from different vendors showed that its shelf life met or exceeded the expiration date, which was longer than 8 weeks. The study investigated excystation rate monthly post shedding and other health indicators such as oocyst concentration and morphology.***
- ***The note is updated because “may” indicates a permission and “can” a possibility.***

⋮

¹¹ The in vitro excystation method is specified in *Development of a Test to Assess Cryptosporidium parvum Oocysts Viability: Correlation with Infectivity Potential*. American Water Works Association Research Foundation. <www.waterrf.org>

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Normative Annex 1

Test method for detecting and enumerating *Cryptosporidium parvum* oocysts

N-1.1 Reagents

- formaldehyde solution, 37% w/w;
- ethanol, 95%;
- glycerol;
- phosphate buffered saline (PBS) – a stock solution shall be prepared by dissolving 80 g sodium chloride (NaCl), 2 g potassium dihydrogen phosphate (KH₂PO₄), 29 g hydrated disodium hydrogen phosphate (Na₂HPO₄·12H₂O), and 2 g potassium chloride (KCl) in water to a final volume of 1 L. A working solution shall be prepared from the stock solution by diluting 1 volume of the stock with 9 volumes of water. The pH shall be adjusted using a pH meter to 7.4 with 0.1 N HCl or 0.1 N NaOH before use;
- ethanol / glycerol series – a series of solutions shall be prepared in a 5% glycerol / reagent water solution so that the final ethanol concentration is 10%, 20%, 40%, 80%, and 90.2% (see Table N-1.1);
- DABCO-glycerol mounting medium (2%) – 2 g 1,4 diazabicyclo [2.2.2] octane shall be added to 95 mL of prewarmed glycerol using a magnetic stirring bar on a heating stir plate. The final volume shall be adjusted to 100 mL with additional glycerol. This solution shall be dated and stored at room temperature and shall be discarded after 6 mo;
- bovine serum albumin (BSA) (1%) – 1.0 g BSA shall be sprinkled into 85 mL PBS working solution, pH 7.4. The crystals shall be allowed to fall before stirring into solution with a magnetic stir bar. The volume shall be adjusted to 100 mL with PBS after the crystals have dissolved. This solution shall be dated and stored at 4 °C (39 °F) and shall be discarded after 6 mo;
- normal goat serum (NGS);
- a 5-carboxy-fluorescein-labeled monoclonal antibody for *Cryptosporidium* oocysts;
- *C. parvum* oocysts (live) — at least 50% viability shall be verified by the supplier or laboratory via excystation analysis.¹¹ The oocysts shall be stored with 1,000 IU/mL penicillin and 1,000 µg/mL streptomycin at 4 °C (39 °F) and shall be used within 8 wk of collection. A lab may use oocysts beyond 8 wk after collection if an extended expiration time is provided and validated by the vendor or validated and appropriately approved by the lab; and
- polyoxyethylene sorbitan mono-oleate (0.01%).

Rationale:

- **Lab validations of different lots of *C. parvum* stock from different vendors showed that its shelf life met or exceeded the expiration date, which was longer than 8 weeks. The study investigated excystation rate monthly post shedding and other health indicators such as oocyst concentration and morphology.**
- **The excystation method is added for consistency with Section 7.3.2.1.1.**

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NSF/ANSI Standard
for Health Sciences –

Dietary Supplements

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•
•

2 Normative references

The following documents contain provisions that, through reference in this text, constitute provisions of this standard. At the time this standard was written, the editions indicated were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the most recent edition of the document indicated below.

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•
•

AHP, American Herbal Pharmacopoeia and Therapeutic Compendium

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Ashwagandha Root*, April 2000~~^{Error!}
~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Astragalus Root*, August 1999~~^{Error!}
~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Bilberry Fruit*, 2001~~^{Error!} ~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Black Cohosh Root*, 2002~~^{Error!}
~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Black Haw Bark*, June 2000~~^{Error!}
~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Chaste Tree Fruit*, 2001~~^{Error!} ~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Cramp Bark*, February 2000~~^{Error!}
~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Cranberry*, 2002~~^{Error!} ~~Bookmark not defined.~~

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Dang Gui Root*, 2003~~^{Error!} ~~Bookmark not defined.~~

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~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Echinacea Purpurea Root*, 2004~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Ginkgo Leaf*, 2003~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Goldenseal*, 2001~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Hawthorn Berry*, June 1999~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Hawthorn Leaf with Flower*, February 1999~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Reishi Mushroom*, September 2000~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *St. John's Wort*, July 1997~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Schisandra Berry*, October 1999~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Valerian Root*, April 1999~~^{Error! Bookmark not defined.}

~~AHP, American Herbal Pharmacopoeia and Therapeutic Compendium, *Willow Bark*, December 1999~~^{Error! Bookmark not defined.}

AHPA, *Herbs of Commerce*, 2nd Edition, 2000.¹

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AOAC, *Official Methods of Analysis*, 20th Edition (2016)²

~~AOAC, *Guidelines for Single Laboratory Validation of Chemical Methods for Dietary Supplements and Botanicals*, 2002~~²

AOAC/FDA, *Bacteriological Analytical Manual*, (BAM) 8th edition, 1998^{2,3}

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FDA, *Food Code 20172022 Recommendations of the United States Public Health Service Food and Drug Administration*³

¹ American Herbal Products Association. 8630 Fenton Street, Suite 918, Silver Spring, MD 20910. <www.ahpa.org>

² AOAC International. 2275 Research Boulevard, Suite 300, Rockville, MD 20850-3250. <www.aoac.org>

³ U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration. 10903 New Hampshire Ave, Silver Spring, MD 20993. <www.fda.gov><<https://www.fda.gov/food/laboratory-methods-food/bacteriological-analytical-manual-bam>>

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Food Allergy Safety, Treatment, Education, and Research (FASTER) Act of 2021, Public Law 117-11¹⁰

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International Code of Botanical Nomenclature (Vienna Code), 2006 *International Code of Nomenclature for algae, fungi, and plants*⁴

3 Definitions

Terms used in this standard that have special technical meaning are defined here.

~~3.1~~ ~~active ingredient: The principal ingredient identified in a product's name or on its principal display panel.~~

~~3.4 batch or lot: A specific quantity of a finished product or other material that is intended to have uniform character and quality, within specified limits, or is produced according to a single manufacturing order during the same cycle of manufacture.~~ a specific quantity of a dietary supplement that is uniform, that is intended to meet specifications for identity, purity, strength, and composition, and that is produced during a specified time period according to a single manufacturing record during the same cycle of manufacture.

~~3.9 component: An ingredient intended for use in the manufacture of a dietary ingredient or dietary supplement, including those that may not appear in such finished product.~~ any substance intended for use in the manufacture of a dietary supplement, including those that may not appear in the finished batch of the dietary supplement. Component includes dietary ingredients (as described in section 201(ff) of the Federal Food, Drug, and Cosmetic Act) and other ingredients.

~~3.11.1 Class I (dietary ingredient): An added nutrient.~~ a nutrient that is added or whose content is adjusted or controlled.

⁴ Turland, N. J., Wiersema, J. H., Barrie, F. R., Greuter, W., Hawksworth, D. L., Herendeen, P. S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K., May, T. W., McNeill, J., Monro, A. M., Prado, J., Price, M. J. & Smith, G. F. (eds.) 2018: *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Glashütten: Koeltz Botanical Books. DOI <https://doi.org/10.12705/Code.2018>.

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3.13 dry weight basis: A basis for expressing the measurement results for a substance in a material after subtracting the moisture content from the mass of the material, e.g., 1 g of a material that has a moisture content of 10% would have a dry weight of 0.9 g as determined using the equation:

$$C_{dry} = C_{wet} \times \frac{100}{100 - \text{moisture}}$$

The dry weight is then used to correct the results from another analysis such as HPLC analysis.

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~~**3.18 in-process material:** A material fabricated, compounded, blended, ground, extracted, sifted, sterilized, derived by chemical reaction, or processed in any other way that is produced for, and used in, the preparation of a dietary ingredient or supplement prior to packaging as ready for sale.~~

~~**3.19 lot number:** A distinctive combination of letters, numbers, or symbols, or any combination thereof from which the complete history of the manufacture, processing, packaging, holding, and distribution of a batch or lot of a finished dietary ingredient, dietary supplement, or other material can be determined.~~

3.X lot: a batch, or a specific identified portion of a batch, that is uniform and that is intended to meet specifications for identity, purity, strength, and composition; or, in the case of a dietary supplement produced by continuous process, a specific identified amount produced in a specified unit of time or quantity in a manner that is uniform and that is intended to meet specifications for identity, purity, strength, and composition.

~~**3.20 major food allergen:** In accordance with the FDA's Food Allergen Labeling and Consumer Protection Act of 2004,³ and for the purposes of this standard, major food allergens are considered milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, and soybeans. Highly purified oils are exempt by law. In accordance with the Food Allergy Safety, Treatment, Education, and Research (FASTER) Act of 2021, and for the purposes of this standard, major food allergens are considered milk, eggs, fish, crustacean shellfish, tree nuts, peanuts, wheat, soybeans, and sesame. Highly purified oils are exempt by law."~~

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~~**3.25 pest:** An objectionable animal or insect, e.g., bird, rodent, insect, or larva.~~

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~~**3.30 quality control system:** A planned systematic procedure for taking all actions necessary to produce consistent, unadulterated dietary ingredients or dietary supplements.~~

~~**3.31 quality control unit:** A person or organizational element designated by a firm to be responsible for duties relating to quality control operations.~~

3.XX reportable food: an article other than an infant formula for which there is a reasonable probability that the use of or exposure to such article of food will cause serious adverse health consequences or death.

~~**3.32 representative sample:** A sample that consists of a number of units that are drawn based on rational criteria, such as random sampling, and is intended to ensure that the sample accurately portrays the material being sampled.~~

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~~**3.33 rework:** Clean, unadulterated material that has been removed from processing for reasons other than unsanitary conditions, or that has been successfully reconditioned by reprocessing, and that is suitable for use in the manufacture of a dietary product.~~

~~**3.34 specifications:** The quality parameters to which the products or materials shall conform and that serve as a basis for quality evaluation.~~

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4 Labeling and literature requirements

~~Product labels shall declare the identity of dietary ingredient(s) or marker constituent(s) included in the product. The quantity of dietary ingredient claimed on the label shall correspond to the quantity of the dietary ingredient per serving; if the claimed nutrient is only a part of the source component, then the amount shall correspond to the claimed part of the component. Labels of products other than proprietary blends shall declare the quantity of each dietary ingredient or marker constituent, which shall be labeled by common name according to the Merck Index¹⁹ or in accordance with the appropriate regulatory agency guidance when available. Labels of products containing botanicals shall include the part of the plant from which the ingredients are derived. Common names of botanicals shall be in accordance with the most current versions of *Herbs of Commerce or the International Code of Botanical Nomenclature*.¹⁵ The amount of active or desired ingredient shall be listed in addition to the total amount of the ingredient. Product literature.~~

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

NSF/ANSI Standard
for GMP for Over-the-Counter Drugs –

Good Manufacturing Practices for Over-the-Counter Drugs

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4 Audit requirements

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4.2 Leadership

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4.2.9 QA operations determine if all specifications have been met (raw material, components, in-process, final product specifications) and assign batch disposition (approve / release or reject) on each finished batch for distribution. [21 CFR § 211.22 & 21 CFR § 211.192, 21 CFR § 211.176]

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BSR/UL 644, Standard for Container Assemblies for LP-Gas

The following is being proposed:

1. **Updating Standard to align with ULSE Style Manual**
2. **Adding requirements for actuated liquid withdrawal excess-flow valves**
3. **Revising Section 11, Filler Valves and Vapor-Return Valves, by adding other valve types as options for container assemblies**

PROPOSAL**INTRODUCTION****1 Scope**

1.2 Container assemblies covered by these requirements are those using fuel storage tanks having a water capacity of 4000 gallons (15.14 m³) or less and designed and used only for delivery of fuel in the gaseous phase, but they may also incorporate a liquid take-off in addition to a vapor take-off. This standard does not cover liquid supply to systems or liquid withdrawal, except for actuated liquid withdrawal excess flow valve connections, from these or any other containers.

2 Components

~~2.1 Except as indicated in 2.2, a component of a product covered by this standard shall comply with the requirements for that component. See Appendix A for a list of standards covering components used in the products covered by this standard. 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 A component shall be used in accordance with its rating established for the intended conditions of use.~~

4 ~~Undated references~~ Referenced publications

4.2 The following publications are referenced in this Standard:

ASME B1.20.1, Pipe Threads, General Purpose, Inch

[ASME B36.10M, Welded and Seamless Wrought Steel Pipe](#)

[ASME BPVC \(ASME Code\), Boiler and Pressure Vessel Code of the American Society of Mechanical Engineers](#)

[NFPA 58, Liquefied Petroleum Gas Code](#)

[UL/ULC 125, Standard for Flow Control Valves for Anhydrous Ammonia and LP-Gas](#)

[UL 132, Standard for Safety Relief Valves for Anhydrous Ammonia and LP-Gas](#)

[UL 144, Standard for LP-Gas Regulators](#)

[UL 565, Standard for Liquid-Level Gauges for Anhydrous Ammonia and LP-Gas](#)

[UL 569, Standard for Pigtails and Flexible Hose Connectors for LP-Gas](#)

[UL 2227, Standard for Overfilling Prevention Devices](#)

CONSTRUCTION

6 Containers

Table 6.2
Dimensions of welded and seamless wrought steel pipe

Size – nominal, inches	Outside diameter, inches (mm)		Identification		Wall thickness, inch (mm)	
			Extra strong standard type	Schedule no.		
1/2	0.840	21.34	STD	40	0.109	2.77
			XS	80	0.147	3.73
3/4	1.050	26.67	STD	40	0.113	2.87
			XS	80	0.154	3.91
1	1.315	33.40	STD	40	0.133	3.38
			XS	80	0.179	4.55
1-1/4	1.660	42.16	STD	40	0.140	3.56
			XS	80	0.191	4.85
1-1/2	1.900	48.26	STD	40	0.145	3.68
			XS	80	0.200	5.08
2	2.375	60.33	STD	40	0.154	3.91
			XS	80	0.218	5.54

Size – nominal, inches	Outside diameter, inches (mm)		Identification		Wall thickness,	
			Extra strong standard type	Schedule no.	inch	(mm)
2-1/2	2.875	73.03	STD	40	0.203	5.16
			XS	80	0.276	7.01

NOTE – The dimensions referred to in this table are taken from ~~The Standard for~~ Welded and Seamless Wrought Steel Pipe, ~~ANSI/ASME~~ B36.10M.

6.5 An opening in a container for connection of a valve or other accessory, except for a bolt-on type of liquid-level gauge connection, shall be threaded in accordance with ~~the Standard for~~ Pipe Threads, General Purpose, Inch, ANSI/ASME B1.20.1.

8 Safety-Relief Valves

8.1 A container shall be provided with one or more spring-loaded safety-relief valves to safeguard against excessive pressure. The safety relief valve shall comply with the requirements in UL 132.

9 Excess-Flow Valves

9.1 An excess-flow check valve in combination with a vapor-return valve shall operate at a pressure differential of not more than 20 pounds per square inch gauge (psig) (138 kPa). All other excess-flow valves shall operate at a pressure differential of not more than 15 psig (103 kPa). The excess flow valve shall comply with the requirements in UL/ULC 125.

10 Liquid-Level Gauging Devices

10.1 A container assembly shall be provided with a fixed liquid-level gauging device to indicate the maximum permissible filling level of the container during a filling operation. A variable type liquid-level gauge may be provided in addition to the fixed-tube type. The liquid level gauge shall comply with the requirements in UL 565.

11 Filler Valves and Vapor-Return Valves

11.1 A container assembly shall be provided with a double backflow check, manual shutoff valve with backflow check, or backflow check with overfilling prevention device filler valve. This valve is required, but is not prohibited from being a part of a multipurpose valve. The valves shall comply with the requirements in UL/ULC 125 and overfilling prevention devices shall comply with UL 2227.

12 Service Line Shutoff Valves

12.1 A service line outlet of a container assembly shall be controlled by a manually operated shutoff valve with an attached handwheel. The valves shall comply with the requirements in UL/ULC 125.

12A Actuated Liquid Withdrawal Excess-Flow Valves

12A.1 A container assembly with water capacity greater than 124 lbs shall be provided with an actuated liquid withdrawal excess-flow valve. The valves shall comply with the requirements in UL/ULC 125.

13 Regulators

13.2 A regulator, if included as part of the container assembly, shall be rigidly supported and shall be attached directly to the outlet of the service line shutoff valve, or shall be connected to the shutoff valve by a pigtail. The regulator shall comply with the requirements in UL 144 and the pigtail shall comply with the requirements in UL 569.

Appendix A

Standards for Components

Standards under which components of the products covered by this standard are evaluated include the following:

~~Title of Standard — UL Standard Designation~~

~~Flow Control Valves for Anhydrous Ammonia and LP Gas — UL 125~~

~~Liquid Level Gauges for Anhydrous Ammonia and LP Gas — UL 565~~

~~LP Gas Regulators — UL 144~~

~~Pigtails and Flexible Hose Connectors for LP Gas — UL 569~~

~~Safety Relief Valves for Anhydrous Ammonia and LP Gas — UL 132~~

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BSR/UL 817, Standard for Safety for Cord Sets and Power-Supply Cords**1. Addition of New 9.9.8 and Revised Appendix A to Align with Requirements Related to Reese's Law in UL 4200A****PROPOSAL**

9.9 Devices employing remote control features

(9.9.1 through 9.9.7 omitted for brevity)

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

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

b) The appliance is intended for household use.

Appendix A – Component Standards Reference List

A1.1 The UL standards listed below are used for evaluation of components and features of products covered by this standard. These standards shall be considered to refer to the latest edition and all amendments published to that edition.

Note from the TC Project Manager – Table shortened for brevity

Component Type	US/UL
Printed-Wiring Boards	UL 796
<u>Products Incorporating Button Batteries or Coin Cell Batteries</u>	<u>UL 4200A</u>
Protectors, Supplementary, for Use in Electrical Equipment	UL 1077

2. Addition of SS2-50R for RV Cord Sets, Revised 10.11.1 and 10.11.4**PROPOSALS**

10.11.1 A cord set for use with a recreational vehicle shall consist of an attachment plug and a length of flexible cord connected to a single outlet cord connector that complies with 10.11.2 – 10.11.4. The attachment plug and flexible cord employed shall comply with the requirements in 10.3.3 and 10.3.2.1, respectively. The markings on the flexible cord shall comply with 25.1. A special-use cord set for use with a recreational vehicle shall not employ a through-cord switch.

10.11.4 The cord connector shall be of a locking-type, L5-15, L5-20, L5-30, or ~~SS2-50~~ L5-50, L5-60, L6-15, L6-20, L6-30, L6-50, L6-60, L7-15, L7-20, L7-30, L7-50, L7-60, L8-20, L8-30, L8-50, L8-60, L9-20, L9-30, L9-50, L9-60, or L14-20, L14-30, L14-50, L14-60 configuration identical in ratings to the attachment plug attached to the supply end of the cord set. The cord connector shall be molded of butyl rubber, neoprene, or polyvinyl chloride (or other equivalent materials) and shall be molded to the flexible cord so that it adheres tightly to the jacket of the cord at the point at which the cord enters the connector body (see 11.11). If a right-angle body is used, the configuration shall be oriented so that the grounding member is the member farthest from the point of cord entry.

BSR/UL 962A, Standard for Safety for Furniture Power Distribution Units

1. Class 2 Markings Alignment with UL 1310

PROPOSAL

53.25 The output Class 2 connectors shall be marked with one of the following as identified in (a) – (c). The markings identified in (a) – (c) shall be permanently marked and visible after installation of the FPDU enclosure or cover. ~~of receptacles with Class 2 integral power supplies or located on the face of an FPDU with Class 2 integral supplies shall be permanently marked with one of the following:~~

- a) “Class 2” and electrical rating;
- b) “Class 2”; or
- c) Electrical rating.

~~The output electrical rating shall be permanently marked and visible after installation of the FPDU enclosure or cover.~~ The output electrical rating may be expressed in amperes and voltage, or wattage or in volt-ampere.

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BSR/UL 2438, Standard for Safety for Outdoor Seasonal-Use Cord-Connected Wiring Devices

Addition of Section 13A and Revised Appendix A, to Align with Requirements Related to Reese's Law in UL 4200A

PROPOSALS

13A Button batteries or coin cell batteries

13A.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more button batteries or coin cell batteries shall comply with the Standard for Products Incorporating Button Batteries or Coin Cell Batteries, UL 4200A, if the appliance or any accessory:

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

APPENDIX A

Standards for Components

Standards under which components of the products covered by this standard are evaluated include the following:

Title of Standard – UL Standard Designation

Note from the TC Project Manager: This list is shortened for brevity.

Printed-Wiring Boards – UL 796

Products Incorporating Button Batteries or Coin Cell Batteries – UL 4200A

Protectors, Supplementary, for Use in Electrical Equipment – UL 1077

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