

CONTENTS

American National Standards

Project Initiation Notification System (PINS) 2

Call for Comment on Standards Proposals 7

Final Actions - (Approved ANS) 29

Call for Members (ANS Consensus Bodies) 36

American National Standards (ANS) Process 42

Accreditation Announcements (Standards Developers) 43

ANS Under Continuous Maintenance 45

ANSI-Accredited Standards Developer Contacts 46

International Standards

ISO and IEC Draft Standards 49

ISO and IEC Newly Published Standards 53

International Organization for Standardization (ISO) 55

Information Concerning

Registration of Organization Names in the United States 56

Proposed Foreign Government Regulations 57

Standards Action Publishing Calendar 58

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.

ADA (Organization) (American Dental Association)

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

National Adoption

BSR/ADA Standard No. 30-202x, Dentistry - Zinc Oxide-Eugenol Cements and Non-Eugenol Zinc Oxide Cements (identical national adoption of ISO 3107:2022 and revision of ANSI/ADA Standard No. 30-2013 (R2018))

Stakeholders: Manufacturers, dentists.

Project Need: The goal of this project is to update the current ANSI/ADA Standard No. 30/ISO 3107:2011 to incorporate the minor revisions made in the ISO 3107:2022 standard.

Interest Categories: Consumer, General Interest, Products.

Scope: This standard specifies the requirements and test methods for zinc oxide–eugenol or zinc oxide–non-eugenol cements supplied as two separate components that may be either powder/liquid or paste/paste and are suitable for use in the oral cavity.

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

Karl Best; kbest@ahrinet.org | 2311 Wilson Boulevard, Suite 400 | Arlington, VA 22201-3001 www.ahrinet.org

Revision

BSR/AHRI Standard 400-202x (SI/I-P), Performance Rating of Liquid-to-Liquid Heat Exchangers (revision, redesignation and consolidation of ANSI/AHRI Standard 400 (I-P)-2015, ANSI/AHRI Standard 401 (SI)-2015)

Stakeholders: Groups and individuals known to be, or who have indicated that they are directly and materially affected by the standard, including manufacturers, testers, regulators, trade or professional organizations, and associations representing consumers.

Project Need: The purpose of this standard is to establish for liquid-to-liquid heat exchangers: definitions; test requirements; rating requirements; minimum data requirements for published ratings; marking and nameplate data; and conformance conditions. This project will consolidate AHRI standard 401 into AHRI standard 400 (creating a joint-unit standard)

Interest Categories: Component Manufacturer, General Interest, Product Manufacturer and Testing Laboratory.

Scope: This standard applies to Liquid to Liquid Heat Exchangers which includes the following types of heat exchangers: Plate heat exchangers, Shell-and-tube heat exchangers, Shell-and-coil heat exchangers and Shell-and-U-Tube heat exchangers.

AMCA (Air Movement and Control Association)

Shruti Kohli-Bhargava; shrutik@amca.org | 30 West University Drive | Arlington Heights, IL 60004-1893 www.amca.org

Revision

BSR/AMCA 99-202x, Standards Handbook (revision of ANSI/AMCA 99-2016)

Stakeholders: Fan, damper, louver and HVAC manufacturers, product consumers, purchasers, testing laboratories, consultants, building engineers, regulatory bodies.

Project Need: A review of the standard, including currently used definitions, terms and symbols, is necessary to make this standard relevant for its usage in other AMCA standards and publications, and in the industry.

Interest Categories: Government Agency; Compliance; Testing Laboratory; Technical Manager; User/ Purchaser; Academic Expert; Other Expert; General Interest.

Scope: The purpose of this standard is to serve as a repository of reference material that supports all other AMCA publications and standards.

AMCA (Air Movement and Control Association)

Shruti Kohli-Bhargava; shrutik@amca.org | 30 West University Drive | Arlington Heights, IL 60004-1893 www.amca.org

Revision

BSR/AMCA 210/ASHRAE 51-202x, Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating (revision and redesignation of ANSI/AMCA 210-2016, ANSI/ASHRAE 51-2016)

Stakeholders: Fan manufacturers, building owners or engineers, testing laboratories, fan equipment specifiers, fan engineers, HVAC professionals, product consumers, purchasers, consultants, regulatory bodies.

Project Need: This project is needed to complete the review of the Standard in accordance with our procedures. We must review a project every 5 years.

Interest Categories: Government Agency; Compliance; Testing Laboratory; Technical Manager; User/ Purchaser; Academic Expert; Other Expert; General Interest.

Scope: This standard establishes uniform test methods for a laboratory test of a fan or other air moving device to determine its aerodynamic performance in terms of airflow rate, pressure developed, power consumption, air density, speed of rotation and efficiency for rating or guarantee purposes.

BHMA (Builders Hardware Manufacturers Association)

Michael Tierney; mtierney@kellencompany.com | 17 Faulkner Drive | Niantic, CT 06357 www.buildershardware.com

Revision

BSR/BHMA A156.4-202x, Standard for Door Controls - Closers (revision of ANSI/BHMA A156.4-2019)

Stakeholders: Manufacturers, builders, architects, specifiers, consumers, test labs, retailers.

Project Need: Five year update

Interest Categories: User, Producer, Test Lab, Government, General Interest.

Scope: This Standard contains requirements for door closers surface mounted, concealed in the door, overhead concealed and concealed in the floor. Also included are pivots for floor closers. Criteria for conformance include cycle, operational, closing force and finish tests. Optional tests which shall be specified separately are also included.

BHMA (Builders Hardware Manufacturers Association)

Karen Bishop; Kbishop@kellencompany.com | 355 Lexington Avenue, 15th Floor | New York, NY 10017-6603 www.buildershardware.com

Revision

BSR/BHMA A156.14-202x, Standard for Sliding and Folding Door Hardware (revision of ANSI/BHMA A156.14-2019)

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

Project Need: Adding additional product functions/ types and test methods and other information.

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

Scope: This Standard establishes requirements for Sliding and Folding Door Hardware. Cycle tests, abuse, durability static load, smoothness, static friction, kinetic friction and finish tests are included. Hardware for light to very heavy doors is covered including both residential and industrial applications.

BHMA (Builders Hardware Manufacturers Association)

Michael Tierney; mtierney@kellencompany.com | 17 Faulkner Drive | Niantic, CT 06357 www.buildershardware.com

Revision

BSR/BHMA A156.27-202x, Power and Manual Operated Revolving Pedestrian Doors (revision of ANSI/BHMA A156.27-2019)

Stakeholders: Manufacturers, builders, architects, specifiers, consumers, test labs, retailers

Project Need: Five year update

Interest Categories: User, Producer, Test Lab, Government, General Interest.

Scope: Requirements in this standard apply to power operated revolving type doors which rotate automatically when approached by pedestrians, some small vehicular use, and manual revolving type doors for pedestrians. Included are provisions to reduce the chance of user injury and entrapment.

BHMA (Builders Hardware Manufacturers Association)

Michael Tierney; mtierney@kellencompany.com | 17 Faulkner Drive | Niantic, CT 06357 www.buildershardware.com

Revision

BSR/BHMA A156.31-202x, Standard for Electric Strikes and Frame Mounted Actuators (revision of ANSI/BHMA A156.31-2019)

Stakeholders: Manufacturers, builders, architects, specifiers, consumers, test labs, retailers

Project Need: Five-year update.

Interest Categories: User, Producer, Test Lab, Government, General Interest.

Scope: ANSI/BHMA A156.31 establishes requirements for Electric Strikes and Frame Mounted Actuators, and includes operational and finish tests.

BHMA (Builders Hardware Manufacturers Association)

Karen Bishop; Kbishop@Kellencompany.com | 355 Lexington Avenue, 15th Floor | New York, NY 10017-6603 www.buildershardware.com

Revision

BSR/BHMA A156.33-202x, Standard for Internally Powered Architectural Hardware Devices (revision of ANSI/BHMA A156.33-2019)

Stakeholders: Consumers, door and hardware manufacturers, building and construction.

Project Need: Adding additional product functions/types and test methods and other information.

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

Scope: This Standard establishes methods for verifying manufacturer's claims for principle battery performance in different use models for various types of internally powered architectural hardware. This Standard applies to both commercial and residential products. †

MTS (Institute for Market Transformation to Sustainability)

Michael Italiano; mike@sustainableproducts.com | 1511 Wisconsin Avenue, NW | Washington, DC 20007 www.sustainableproducts.com

New Standard

BSR/MTS 1-202x, Integrative Process for Properties and Communities (new standard)

Stakeholders: Environmental.

Project Need: Integrative Process has been documented to reduce project change orders by 90% and construction costs by 1% - 10%.

Interest Categories: Architects, Designers, Planners, Engineers.

Scope: Integrative Process describes the steps taken with property owners and key community constituents to design, construct and operate green, sustainable, and regenerative projects including when to conduct decision-making workshops.

NEMA (ASC C136) (National Electrical Manufacturers Association)

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

Revision

BSR C136.15-202X, Roadway and Area Lighting Equipment - Luminaire Field Identification (revision of ANSI C136.15-2020)

Stakeholders: Luminaire manufacturers, utilities, end users.

Project Need: Revise this document to limit to address label visible print area concerns and placement of QR codes on Roadway and Area Lighting Equipment.

Interest Categories: ANSI Producer Luminaire, ANSI Producer Other, ANSI Producer Polls, ANSI User, ANSI General Interest

Scope: The intent of this standard is to provide a simple, uniform method for identifying the type and wattage rating of a luminaire used for roadway and area lighting.

SCTE (Society of Cable Telecommunications Engineers)

Kim Cooney; kcooney@scte.org | 140 Philips Rd | Exton, PA 19341 www.scte.org

Revision

BSR/SCTE 102-202x, Cable Retention Force Testing of Trunk & Distribution Connectors (revision of ANSI/SCTE 102-2016)

Stakeholders: Cable Telecommunications industry.

Project Need: Update current technology.

Interest Categories: user, producer, general interest.

Scope: The purpose of this document is to define a standard test procedure to prepare, test and document the retention forces of a given connector/cable assembly, as whole or separate components

Call for Comment on Standards Proposals

American National Standards

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

Ordering Instructions for "Call-for-Comment" Listings

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

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

* Standard for consumer products

Comment Deadline: January 15, 2023

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

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

Addenda

BSR/ASHRAE Addendum i to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4-2019)

This addendum updates the Normative References from Standard 90.4 2019.

[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: January 15, 2023

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/ICC/IES/USGBC Addendum ah to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This addendum provides some corrections, revisions, and clarity to some sections and deletes others. • Exception to 7.4.1.1: The name of the referenced Green-e standard has changed. An informative note has been added for building projects outside of U.S. and Canada. • Section 7.4.2.5 Air Curtains. This has been deleted because it is covered by ASHRAE Standard 90.1. • Section 7.4.2.9 Building Envelope Trade-Off Option. The provision has been clarified. • 7.4.3.1.1 Water-Cooled Centrifugal Chiller Packages Efficiency Adjustment. This has been deleted because it is covered by ASHRAE Standard 90.1. • 7.4.3.10 Mechanical System Performance Path. This is new to ASHRAE 90.1-2022. • Table C1.1, 5. Building Envelope penetrations. The revision is made to make the performance path agree with the prescriptive path, which was not done when the requirement was added to the standard.

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

Addenda

BSR/ASHRAE/ICC/IES/USGBC Addendum ak to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This addendum aligns with the requirements proposed for EPD disclosure in Addendum z. The requirements include a minimum number of procured products to meet GWP limits set at 125% of the industry-wide EPD average. A jurisdiction-determined percentage of the cost of procured products must have a global warming potential (GWP) less than 125% of the industry average. In addition to the jurisdiction-determined percentage, a minimum of 10 building products, and all of the building products representing not less than 5% of the total cost of building materials, must meet the 125% GWP targets. This addendum is to be added before the current section 9.4 Material Selection. The numbering and ordering of Section 9 was modified as an editorial change in Addendum u, which removed the prescriptive and performance paths from the section.

[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: January 15, 2023

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/ICC/IES/USGBC Addendum am to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This addendum cleans up Section 4.1 by removing text that is not needed. In earlier versions of 189.1, Section 4.1 described the use of prescriptive and performance options for compliance that were patterned on Standard 90.1. Only Section 7 still maintains the alternatives of prescriptive and performance paths, and the use of those alternatives is fully described within Section 7.2.

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

Addenda

BSR/ASHRAE/ICC/IES/USGBC Addendum t to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This is the 2nd public review of addendum t, independent substantive changes, which adds an exception to the renewable energy requirement for greenhouses and grow facilities dedicated to food for human consumption.

[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>

AWWA (American Water Works Association)

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

Addenda

BSR/AWWA C300a-202x, Addendum to C300-22, Reinforced Concrete Pressure Pipe, Steel-Cylinder Type (addenda to ANSI/AWWA C300-2022)

The intent of this addendum to provide updated requirements for the type of cement used in the manufacture of reinforced concrete pressure pipe.

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

Send comments (copy psa@ansi.org) to: Paul Olson; polson@awwa.org

AWWA (American Water Works Association)

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

Addenda

BSR/AWWA C302a-202x, Addendum to C302-22, Reinforced Concrete Pressure Pipe, Noncylinder Type (addenda to ANSI/AWWA C302-2022)

The intent of this addendum to provide updated requirements for the type of cement used in the manufacture of reinforced concrete pressure pipe.

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

Send comments (copy psa@ansi.org) to: Paul Olson; polson@awwa.org

Comment Deadline: January 15, 2023

NSF (NSF International)

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

Revision

BSR/NSF 6-202x (i21r1), Dispensing Freezers (revision of ANSI/NSF 6-2021)

This standard contains requirements for the following equipment: dispensing freezers that process and freeze previously pasteurized product (e.g., soft ice cream, ice milk, yogurt, malts, custards) and dispense it directly into the consumer's container; dispensing freezers that dispense premanufactured frozen product (e.g., ice cream) directly into the consumer's container; and batch dispensing freezers.

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

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

NSF (NSF International)

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

Revision

BSR/NSF 40-202x (i54r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2022)

This Standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1,514 Lid (400 gal/d) and 5,678 Lid (1,500 gal/d). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard. System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

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

Send comments (copy psa@ansi.org) to: Jason Snider; jsnider@nsf.org

NSF (NSF International)

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

Revision

BSR/NSF 40-202x (i55r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2022)

This standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1,514 LPD (400 GPD) and 5,678 LPD (1,500 GPD). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this standard.

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

Send comments (copy psa@ansi.org) to: Jason Snider; jsnider@nsf.org

NSF (NSF International)

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

Revision

BSR/NSF 41-202x (i14r1), Non-Liquid Saturated Treatment Systems (revision of ANSI/NSF 41-2018)

This standard contains minimum requirements for treatment systems that do not utilize a liquid saturated media as a primary means of storing or treating human excreta or human excreta mixed with other organic household materials. It addresses treatment systems that treat both solid and liquid waste, as well as those that only treat solid waste.

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

Send comments (copy psa@ansi.org) to: Jason Snider; jsnider@nsf.org

Comment Deadline: January 15, 2023

NSF (NSF International)

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

Revision

BSR/NSF 44-202x (i52r2), Residential Cation Exchange Water Softeners (revision of ANSI/NSF 44-2021)

The manual, auto-initiated, and demand-initiated regeneration (DIR) residential cation exchange water softeners addressed by this standard are designed 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 hardness affecting the aesthetic quality of water.

[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 48105-9723 | jsnider@nsf.org, www.nsf.org

Revision

BSR/NSF 46-202x (i45r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2021)

This standard is intended for use with components and devices not covered by other NSF wastewater standards. Components and devices covered by this Standard are intended for use with greywater or blackwater, or both.

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

Send comments (copy psa@ansi.org) to: Jason Snider; jsnider@nsf.org

NSF (NSF International)

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

Revision

BSR/NSF 62-202x (i46r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2021)

This standard establishes minimum materials, design and construction, and performance requirements for point-of-use and point-of-entry drinking water distillation systems and the components used in these systems. Distillation systems covered by this standard are designed to reduce specific chemical contaminants from potable drinking water supplies. Systems covered under this standard may also be designed to reduce microbiological contaminants, including bacteria, viruses, and cysts, from potable drinking water supplies. It is recognized that a system may be effective in controlling one or more of these contaminants, but systems are not required to control all.

[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 177-202x (i13r1), Shower Filtration Systems - Aesthetic Effects (revision of ANSI/NSF 177-2019)

It is the purpose of this Standard to establish minimum performance requirements for shower filtration systems including substance reduction performance, materials safety, and design, construction, and structural performance. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners.

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

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

Comment Deadline: January 15, 2023

NSF (NSF International)

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

Revision

BSR/NSF 245-202x (i34r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2022)

This standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities of 1,514 LPD (400 GPD) to 5,678 LPD (1,500 GPD) that are designed to provide reduction of nitrogen in residential wastewater.

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

Send comments (copy psa@ansi.org) to: Jason Snider; jsnider@nsf.org

NSF (NSF International)

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

Revision

BSR/NSF 350-202x (i76r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2022)

This standard contains minimum requirements for onsite residential and commercial water reuse treatment systems. Systems include greywater treatment systems; residential wastewater treatment systems; and commercial treatment systems.

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

Send comments (copy psa@ansi.org) to: Jason Snider; jsnider@nsf.org

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 79-202x, Standard for Safety for Power-Operated Pumps for Petroleum Dispensing Products (revision of ANSI/UL 79-2021)

The following topics are being proposed: (1) Editorial corrections and (2) Clarification of low temperature test for composite elastomeric parts

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

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

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, <https://ulse.org/>

Revision

BSR/UL 498D-202x, Standard for Safety for Attachment Plugs, Cord Connectors and Receptacles with Arcuate (Locking Type) Contacts (revision of ANSI/UL 498D-2021)

This revision of ANSI/UL 498D expands requirements for Weather-Resistant Receptacles.

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

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

Comment Deadline: January 15, 2023

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, <https://ulse.org/>

Revision

BSR/UL 498F-202x, Standard for Safety for Plugs, Socket-Outlets and Couplers with Arcuate (Locking Type) Contacts (revision of ANSI/UL 498F-2021)

This revision of ANSI/UL 498F expands requirements for Weather-Resistant Receptacles.

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

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

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 60079-5-202x, Standard for Safety for Explosive Atmospheres - Part 5: Equipment Protection by Powder Filling q (revision of ANSI/UL 60079-5-2016 (R2020))

1. Revisions to Incorporate Amendment 1 into UL 60079-5 adoption IEC60079-5, Ed. 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/Home/ProposalsDefault.aspx>.

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, <https://ulse.org/>

Revision

BSR/UL 62986-202x, Standard for Safety for Plugs, Socket-Outlets and Couplers with Arcuate Contacts (revision of ANSI/UL 62986-2021)

This revision of ANSI/UL 62986 expands requirements for Weather-Resistant Receptacles.

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

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

Comment Deadline: January 30, 2023

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 014-202x, Standard for Friction Ridge Examination Training Program (new standard)

This document provides the requirements for a forensic service provider's (FSP's) training program for friction ridge examiners and includes learning outcomes for the trainee. This document does not provide lesson plans, practical exercises, or performance measures for successful completion of each module. Individual sections only apply to trainees who perform those job functions.

Single copy price: Free

Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: <https://www.aafs.org/academy-standards-board>

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

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 015-202x, Standard for Examining Friction Ridge Impressions (new standard)

This document specifies the minimum requirements for conducting friction ridge examinations. It includes the overarching examination framework as well as specific requirements for each component of any examination process. This document includes minimum requirements for conducting, documenting, and justifying examinations based on clearly demonstrable and articulable criteria. This document does not address how each requirement should be achieved. This document does not address specific requirements for quality assurance/quality control of the examination process.

Single copy price: Free

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

Comment Deadline: January 30, 2023

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 143-202x, Standard for Technical Review in Friction Ridge Examination (new standard)

This document specifies minimum requirements for technical review of friction ridge impression examinations.

This document does not address administrative review, verification, or testimony monitoring.

Single copy price: Free

Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: <https://www.aafs.org/academy-standards-board>

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

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 145-202x, Standard for Consultation during Friction Ridge Examination (new standard)

This standard sets documentation, quality, and consultant requirements for consultations during friction ridge examinations. This document does not apply to conflict resolution.

Single copy price: Free

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Order from: Document will be provided electronically on AAFS Standards Board website (www.aafs.org/academy-standards-board) free of charge.

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

AAMI (Association for the Advancement of Medical Instrumentation)

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | cmaguwah@aami.org, www.aami.org

Reaffirmation

BSR/AAMI/ISO 10993-11-2017 (R202x), Biological Evaluation of Medical Devices - Part 11: Tests for Systematic Toxicity (reaffirm a national adoption ANSI/AAMI/ISO 10993-11-2017)

The document specifies requirements and gives guidance on procedures to be followed in the evaluation of the potential for medical device materials to cause adverse systemic reactions.

Single copy price: \$212.00 (\$121.00 with AAMI membership)

Obtain an electronic copy from: cmaguwah@aami.org

Send comments (copy psa@ansi.org) to: Chenai Maguwah; cmaguwah@aami.org

Comment Deadline: January 30, 2023

ASABE (American Society of Agricultural and Biological Engineers)

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

National Adoption

BSR/ASABE/ISO 21191-202x MONYEAR, Equipment for crop protection - Closed transfer systems (CTS) - Performance specifications (identical national adoption of ISO 21191:2021)

This document specifies operator and environment-related safety requirements and the means of their verification for the design and construction of closed transfer systems (CTS) for liquid formulations of plant protection products (PPP) in 1 l to 20 l containers. The standard specifies the type of information on safe working practices including information about residue risks and specifies the maximum potential contamination during any single transfer operation as well as CTS manufacturer requirements for the equipment and the user's manual.

Single copy price: \$75.00

Obtain an electronic copy from: walsh@asabe.org

Order from: Jean Walsh; walsh@asabe.org

Send comments (copy psa@ansi.org) to: Jean Walsh; walsh@asabe.org

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE AD17225-4-FEB2018 (R202x), Solid biofuels - Fuel specifications and classes - Part 4: Graded wood chips (reaffirm a national adoption ANSI/ASABE AD17225-4-FEB2018)

Part 4: Graded wood chips, is an adoption with deviations of the identically titled ISO AD17225-4:2014 Solid biofuels — Fuel specifications and classes — Part 4: Graded wood chips. This part of ISO 17225 determines the fuel quality classes and specifications of graded and/or processed wood chips. This part of ISO 17225 covers only wood chips produced from the following raw materials (see ISO 17225-1, Table 1): • 1.1 Forest, plantation and other virgin wood • 1.2 By-products and residues from wood processing industry • 1.3.1 Chemically untreated used wood

Single copy price: \$72.00

Obtain an electronic copy from: brace@asabe.org

Order from: Walter Brace; brace@asabe.org

Send comments (copy psa@ansi.org) to: Walter Brace; brace@asabe.org

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

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

Addenda

BSR/ASHRAE Addendum c to Standard 145.2-202x, Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices (addenda to ANSI/ASHRAE Standard 145.2-2011)

This addendum provides a standard laboratory test method for assessing the performance of gas-phase air cleaning devices.

Single copy price: \$35.00

Obtain an electronic copy from: <http://www.ashrae.org/standards-research-technology/public-review-drafts>

Order from: standards.section@ashrae.org

Send comments (copy psa@ansi.org) to: <http://www.ashrae.org/standards-research-technology/public-review-drafts>

Comment Deadline: January 30, 2023

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/ICC/IES/USGBC Addendum ag to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This addendum updates LPDs based on a comprehensive review of all inputs to more closely match the IES recommended practices for task and circulation illuminance values. This proposal also updates the additional lighting power allowances to reflect ornamental, and display lighting efficacies. Additionally, the credit for institutional tuning (now called high-end trim tuning) is removed as the credit for this control strategy is used for claiming the additional efficiency points in Section 11 of ASHRAE 90.1 and it would be less confusing to have this credit in one place and not two. The enforcement structure the requirements have not changed.

Single copy price: \$35.00

Obtain an electronic copy from: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

Send comments (copy psa@ansi.org) to: <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/ICC/IES/USGBC Addendum ai to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This addendum modifies Section 7 of ASHRAE 189.1, the energy efficiency section, which is in addition to or supersedes the requirements in ASHRAE 90.1. This proposal updates ASHRAE 189.1 to account for the changes to ASHRAE 90.1-2022 which will have a new additional efficiency energy credit section (addendum ap). This proposal is an add-on to the prescriptive path.

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: January 30, 2023

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/ICC/IES/USGBC Addendum aj to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

This addendum adds Section 7.5.2.2 as a jurisdictional option along with normative Appendix M. If adopted by an AHJ, this section would supplement Section 7.5.2.1 and allow the electricity greenhouse gas emissions of both the proposed design and the baseline building to be calculated using long-run marginal emission rates (LRMER). GHG emissions from direct use of fossil fuels and thermal energy in buildings would continue to be calculated using the procedures in Section 7.5.2.1.

Single copy price: \$35.00

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

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

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section II-202x, Part A - Ferrous Material Specifications; Part B - Nonferrous Material Specifications; Part D - Materials Properties (revision of ANSI/ASME BPVC Section II-2021)

Section II of the Boiler and Pressure Vessel Code provides material specifications for base metallic materials and material design values and limits and cautions on the use of materials

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Colleen Rodrigues; obrienc@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section II-202x, Part C - Specifications for Welding Rods, Electrodes, and Filler Metals (revision of ANSI/ASME BPVC Section II-2021)

Section II, Part C, contains material specifications, most of which are identical to corresponding specifications published by AWS and other recognized national or international organizations. All adopted specifications are either reproduced in the Code, where permission to do so has been obtained from the originating organization, or so referenced, and information about how to obtain them from the originating organization is provided.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Ray Rahaman; rahamanr@asme.org

Comment Deadline: January 30, 2023

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section III-202x, Rules for Construction of Nuclear Facility Components (revision of ANSI/ASME BPVC Section III-2021)

The rules of Section III constitute requirements for the design, construction, stamping, and overpressure protection of items used in nuclear power plants and other nuclear facilities. Section III consists of the following divisions: (a) Division 1. Metallic vessels, heat exchangers, storage tanks, piping systems, pumps, valves, core support structures, supports, and similar items. (b) Division 2. Concrete containment vessels. (c) Division 3. Metallic containment systems for storage or transportation of spent nuclear fuel and high level radioactive materials and waste. (f) Division 4. Fusion Energy Devices (e) Division 5. High Temperature Reactors

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Adam Maslowski; maslowskia@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section IV-202x, Rules for Construction of Heating Boilers (revision of ANSI/ASME BPVC Section IV-2021)

The rules of this Section of the Code cover minimum construction requirements for the design, fabrication, installation, and inspection of steam heating, hot water heating, hot water supply boilers that are directly fired with oil, gas, electricity, coal, or other solid or liquid fuels, and for operation at or below the pressure and temperature limits set forth in this document. Similar rules for potable water heaters are also included."

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Carlton Ramcharan; ramcharranc@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section XII-202x, Rules for Construction and Continued Service of Transport Tanks (revision of ANSI/ASME BPVC Section XII-2021)

The rules of this Section constitute requirements for construction and continued service of pressure vessels for the transportation of dangerous goods via highway, rail, air, or water. Construction is an all-inclusive term comprising materials, design, fabrication, examination, inspection, testing, certification, and over-pressure protection. Continued service is an all inclusive term referring to inspection, testing, repair, alteration, and recertification of a transport tank that has been in service.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Jihoon Oh; ohj@asme.org □

Comment Deadline: January 30, 2023

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section XIII-202x, Rules for Overpressure Protection (revision of ANSI/ASME BPVC Section XIII-2021)

The rules of this section provide the requirements for the overpressure protection of pressurized equipment such as boilers, pressure vessels, and piping systems. Overpressure protection methods include: (1) releasing excess pressure by use of pressure relief devices (2) applying controls to prevent an increase in pressure (overpressure protection by system design) (3) using a combination of (1) and (2)."

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Colleen Rodrigues; obrienc@asme.org

ASTM (ASTM International)

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

Revision

BSR/ASTM E2404-202x, Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facings and Veneers, to Assess Surface Burning Characteristics (revision of ANSI/ASTM E2404-2017)

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

Single copy price: Free

Obtain an electronic copy from: accreditation@astm.org

Order from: accreditation@astm.org

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

B11 (B11 Standards, Inc.)

P.O. Box 690905, Houston, TX 77269 | cfelinski@b11standards.org, <https://www.b11standards.org/>

Revision

BSR/B11.17-202x, Safety Requirements for Horizontal Extrusion Press Systems (revision of ANSI B11.17-2004 (R2015))

The requirements of this standard apply only to those horizontal powered presses that extrude metals by means of applying sufficient pressure to an individual metal billet, confined within a container, to force the metal to be extruded through the configured openings of a die, and includes any other equipment and the system(s) used in the press production operation. attached to the press that are directly or indirectly controlled by the press operations controller. The horizontal extrusion press system, hereafter referred to as a press system, is a system that functions to extrude metals horizontally either by the direct or indirect process. It includes components necessary to handle and process metals from the loading mechanism through the platen exit or external butt shear through the process of cooling.

Single copy price: \$79.00

Obtain an electronic copy from: dfelinski@b11standards.org

Send comments (copy psa@ansi.org) to: Chris Felinski; cfelinski@b11standards.org

Comment Deadline: January 30, 2023

BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

Revision

BSR/BHMA A156.10-202x, Standard for Power Operated Pedestrian Doors (revision of ANSI/BHMA A156.10-2017)

Scope Requirements in this Standard apply to power operated doors for pedestrian use which open automatically when approached by pedestrians and some small vehicular traffic or by a knowing act. Included are provisions to reduce the chance of user injury or entrapment. Power operated doors for industrial or trained traffic are not covered in this Standard.

Single copy price: \$36.00

Obtain an electronic copy from: mtierney@kellencompany.com

Order from: Michael Tierney; mtierney@kellencompany.com

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

BHMA (Builders Hardware Manufacturers Association)

355 Lexington Avenue, 15th Floor, New York, NY 10017-6603 | Kbishop@Kellencompany.com, www.buildershardware.com

Revision

BSR/BHMA A156.25-202x, Standard for Electrified Locking Devices (revision of ANSI/BHMA A156.25-2018)

This Standard establishes requirements for the locking devices, whose mechanical aspects are described in the applicable BHMA product Standards; in addition, where the input or controlling device or both are an integral part of the locking device, they shall also be tested with the locking device covered by this Standard. This Standard includes requirements for cyclical, security, operational, strength, and environmental tests for these products.

Single copy price: \$36.00 (non-member); \$18.00 (BHMA member)

Obtain an electronic copy from: KBishop@Kellencompany.com

Order from: KBishop@Kellencompany.com

Send comments (copy psa@ansi.org) to: Karen Bishop; Kbishop@Kellencompany.com

CSA (CSA America Standards Inc.)

178 Rexdale Boulevard, Toronto, Ontario M9W 1R3, Ontario M9W 1R3 | peter.glowacki@csagroup.org, www.csagroup.org

Reaffirmation

BSR/CSA C22.2 No. 336-2018 (R202x), Particular requirements for rechargeable battery-operated commercial robotic floor treatment machines with traction drives (reaffirmation of ANSI/CSA C22.2 No. 336-2018)

This Standard deals with the safety requirements of rechargeable battery-operated commercial robotic floor treatment machines with traction drive intended for indoor use in accordance with CSA C22.1, Canadian Electric Code, Part I, in Canada, and with the National Electrical Code, NFPA 70 in the U.S., the rated voltage of the battery being not more than 75 V dc.

Single copy price: Free

Obtain an electronic copy from: peter.glowacki@csagroup.org

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

Comment Deadline: January 30, 2023

CSA (CSA America Standards Inc.)

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

Reaffirmation

BSR/CSA Z741-2012 (R202x), Geological storage of carbon dioxide (reaffirmation of ANSI/CSA Z741-2012 (R2018))

a) establishes requirements and recommendations for the geological storage of carbon dioxide. The purpose of these requirements is to promote environmentally safe and long-term containment of carbon dioxide in a way that minimizes risks to the environment and human health. (b) is primarily applicable to saline aquifers and depleted hydrocarbon reservoirs and does not preclude its application to storage associated with hydrocarbon recovery. (c) includes, but is not limited to, the safe design, construction, operation, maintenance, and closure of storage sites. (d) provides recommendations for the development of management documents, community engagement, risk assessment, and risk communication.

Single copy price: \$158.00 CAD

Obtain an electronic copy from: tosan.okorosobo@csagroup.org

Send comments (copy psa@ansi.org) to: Tosan Okorosobo; tosan.okorosobo@csagroup.org

EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, www.esda.org

Revision

BSR/EOS ESD S11.4-202X, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items - Static Control Bags (revision of ANSI/ESD S11.4-2013)

This document applies to bags used to package electronic devices and assemblies. It does not address bags for volatile materials, chemicals, explosives, or munitions. NOTE: Some bag applications may require the consideration of additional material or cleanliness controls, including particle level, nonvolatile residue, ionic substances, outgassing, or polycarbonate stress. These parameters are beyond the scope of this standard.

Single copy price: \$145.00 (List)/115.00 (EOS/ESD Member) (Hard Cover); \$135.00 (List)/\$105.00 (EOS/ESD Member) (Soft Cover)

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl; cearl@esda.org

Send comments (copy psa@ansi.org) to: Christina Earl; info.eoesda@esda.org

Comment Deadline: January 30, 2023

HPS (ASC N13) (Health Physics Society)

950 Herndon Parkway, Suite 450, Herndon, VA 20170 | awride-graney@burkinc.com, www.hps.org

New Standard

BSR N13.50-202x, Radiological Characterization of Low-Level Radioactive and Transuranic Wastes (new standard)

Radiological characterization is the process of identifying and quantifying radionuclides of interest found in solid, liquid, or gaseous matrices. The radionuclide concentrations can be measured either directly from the waste matrix or indirectly from process streams based on representative samples or measurement of the final waste package, and in these cases, using appropriately calibrated measurement systems. Although characterization guidance has been published for assessing building surface and surface soil final status surveys (3), (4), conditions to acquire a representative sample generated from a process stream or nuclear plant radioactive waste system can vary significantly and require alternate guidance. Simple sample and measurement data may not be enough to develop confidence in the results since system designs may not have the capability of sampling until multiple waste types have been transferred to a collection tank or final waste package. Also, merely collecting additional samples to establish representativeness is frequently not possible due to worker dose concerns, the number of samples that may be required or the cost of handling and analysis. Therefore, it is vital to have a robust radioactive waste characterization program to reliably determine radionuclide concentrations, and the physical/chemical properties of the matrix since these results are used to achieve important endpoints, such as verification of nuclear plant (5) and equivalent nuclear facility operations (6), (7), or demonstrating regulatory compliance with transportation (8), (9), (10) and disposal site criteria (11), (12). This standard provides a characterization strategy (13) for controlled processes or nuclear plant radioactive waste management system using data quality objectives (DQO) and accepted methods to consistently achieve these endpoints (Figure 1 1 Radioactive Waste Characterization Flowchart).

Single copy price: \$65.00

Obtain an electronic copy from: awride-graney@burkinc.com

Send comments (copy psa@ansi.org) to: Amy Wride-Graney; awride-graney@burkinc.com

NSF (NSF International)

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

Revision

BSR/NSF 401-202x (i31r1), Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2021)

The point-of-use (POU) and point-of-entry (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 at very low, yet measurable concentrations, but not at definitive concentrations of known health concern.

Single copy price: Free

Obtain an electronic copy from: https://standards.nsf.org/apps/group_public/download.php/67635/401i31r1%20-%20JC%20Memo%20%26%20Ballot.pdf

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

Comment Deadline: January 30, 2023

TIA (Telecommunications Industry Association)

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

Addenda

BSR/TIA 568.1-E-1-202x, Commercial Building Telecommunications Infrastructure Standard - Addendum 1: Balanced Single Twisted-pair Cabling; Cabling Requirements for Wireless Access Points (addenda to ANSI/TIA 568.1-E-2020)

This Addendum adds balanced single twisted-pair cabling. It also adds a requirement for 2 category 6A cables for WAPs(wireless access points) to a requirement to harmonize with recent standards document changes.

Single copy price: \$61.00

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

Order from: Teesha Jenkins; standards-process@tiaonline.org

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

TIA (Telecommunications Industry Association)

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

Addenda

BSR/TIA 4966-A-1-202x, Telecommunications Infrastructure Standard for Educational Facilities - Addendum 1: Balanced Single Twisted-pair Cabling (addenda to ANSI/TIA 4966-A-2022)

This Addendum adds balanced single twisted-pair cabling.

Single copy price: \$61.00

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

Order from: Teesha Jenkins; standards-process@tiaonline.org

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

ULSE (UL Standards & Engagement)

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

Reaffirmation

BSR/UL 4248-12-2018 (R202x), Standard for Fuseholders - Part 12: Class R (reaffirmation of ANSI/UL 4248-12-2018)

1. Reaffirmation and continuance of the Second Edition of the Standard for Fuseholders - Part 12: Class R, UL 4248-12, as an standard.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <https://www.shopulstandards.com/>

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

Comment Deadline: January 30, 2023

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | mitchell.gold@ul.org, <https://ulse.org/>

Revision

BSR/UL 50-202x, Standard for Safety for Enclosures for Electrical Equipment, Non-Environmental Considerations (revision of ANSI/UL 50-2020)

1. The Proposed Fourteenth Edition of the Standard for Safety for Enclosures for Electrical Equipment, Non-Environmental Considerations, UL 50. This standard applies to enclosures for electrical equipment intended to be installed and used in non-hazardous locations in accordance with the Canadian Electrical Code, Part I, CSA C22.1, the provisions of the National Electrical Code, NFPA 70, and the provisions of Mexico's Electrical Installations, NOM-001-SEDE.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <https://www.shopulstandards.com/>

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

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | mitchell.gold@ul.org, <https://ulse.org/>

Revision

BSR/UL 50E-202x, Standard for Safety for Enclosures for Electrical Equipment, Environmental Considerations (revision of ANSI/UL 50E-2020)

Ballot of the following topics: (1) Sealing Compound at Joints or Seams; (2) Adhesives that Bond Surfaces; (3) Addition of Alternate Test Method of Water Exposure and Immersion (Clause 8.16.1.1); (4) Ancillary Rating for Power Wash – PW; (5) Revision of Clause 8.15.2 by Adding Additional References.

Single copy price: Free

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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/Home/ProposalsDefault.aspx>

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 104-202x, Standard for Elevator Door Locking Devices and Door or Gate Closed Detection Means (revision of ANSI/UL 104-2016 (R2020))

This proposal covers the publication of a new Edition of the Standard for Elevator Door Locking Devices and Door or Gate Closed Detection Means, UL 104, as a Bi-National CSA/UL Standard

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <https://www.shopulstandards.com/>

Send comments (copy psa@ansi.org) to: Derrick Martin; Derrick.L.Martin@ul.org

Comment Deadline: January 30, 2023

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | Susan.P.Malohn@ul.org, <https://ulse.org/>

Revision

BSR/UL 2703-202x, Standard for Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules (revision of ANSI/UL 2703-2021)

1. Clarification on aluminum alloys that do not need to be subjected to atmospheric corrosion tests
2. Modification of the static salt spray test to a cyclic salt spray test
3. Additional allowance for the use of bare / uncoated steel posts in PV mounting systems in certain applications

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

Order from: <https://www.shopulstandards.com/>

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

VITA (VMEbus International Trade Association (VITA))

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

Reaffirmation

BSR/VITA 68.0-2017 (R202x), VPX Compliance Channel Standard (reaffirmation of ANSI/VITA 68.0-2017)

VITA 68.0 is the Base Standard of the VITA 68.x family of standards for signal integrity compliance of VPX systems and components. This standard provides an overview of the VITA 68.x family of standards and defines common requirements for VPX modules and VPX backplanes that apply across the range of VITA 68.x standards.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

Send comments (copy psa@ansi.org) to: admin@vita.com

VITA (VMEbus International Trade Association (VITA))

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

Reaffirmation

BSR/VITA 68.1-2017 (R202x), VPX Compliance Channel - Fixed Signal Integrity Budget Standard (reaffirmation of ANSI/VITA 68.1-2017)

This standard defines a VPX compliance channel fixed signal Integrity budget including module performance criteria and common backplane performance criteria required to support multiple fabric types across a range of defined baud rates. This allows backplane developers to design a VITA 68.1 compliant backplane that supports required bit error rates (BER) for multiple fabric types when used with modules that are compliant to VITA 68.1 budget criteria. This also allows module developers to design VITA 68.1 compliant Plug-In Modules that are interoperable with other VITA 68.1 compliant modules when used with a VITA 68.1 compliant backplane. VITA 68.1 defines a single budget encompassing modules and backplanes at various baud rates, with a "large system budget" that supports interoperability of VITA 68.1 compliant modules with any VITA 68.1 compliant backplane, including large slot count backplanes with relatively long traces. VITA 68.1 is part of the VITA 68.x family of standards for signal integrity compliance of VPX systems and components. Please refer to VITA 68.0 for an overview of the VITA 68.x family of standards.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

Send comments (copy psa@ansi.org) to: admin@vita.com

Comment Deadline: February 14, 2023

ASME (American Society of Mechanical Engineers)

Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Reaffirmation

BSR/ASME A112.3.4-2013/CSA B45.9-2018 (R202x), Macerating Toilet Systems and Related Components (reaffirmation of ANSI/ASME A112.3.4-2013/CSA B45.9-2018)

This Standard specifies requirements for materials, construction, performance, testing, and markings for macerating toilet systems and waste-pumping systems for plumbing fixtures. Such systems are intended to collect, grind, and pump, or collect and pump waste from a fixture (e.g., a water closet, lavatory, shower, or bathtub) and pump the waste to the sanitary drainage system.

Single copy price: Free

Order from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy psa@ansi.org) to: Angel Guzman Rodriguez; guzman@asme.org

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME BPVC Section IX-202x, Welding, Brazing and Fusing Qualifications (revision of ANSI/ASME BPVC Section IX-2021)

Section IX of the ASME Boiler and Pressure Vessel Code relates to the qualification of welders, welding operators, brazers, brazing operators, and fusing operators, and the procedures employed in welding, brazing, or plastic fusing in accordance with the ASME Boiler and Pressure Vessel Code and the ASME B31 Code for Pressure Piping.

Single copy price: Free

Order from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy psa@ansi.org) to: Ray Rahaman; rahamanr@asme.org

ULSE (UL Standards & Engagement)

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

New Standard

BSR/UL 795-202x, Standard for Safety for Commercial-Industrial Gas-Fired Package Boilers (new standard)

The following is being proposed: (1) Proposed new edition of the Standard for Commercial-Industrial Gas-Fired Package Boilers, UL 795, as a joint Canada-US standard

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/Home/ProposalsDefault.aspx>

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

Withdrawal of an ANS by ANSI-Accredited Standards Developer

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

ECIA (Electronic Components Industry Association)

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

New Standard

ANSI/EIA 259-A-2017, Rigid Coaxial Transmission Lines and Connectors, 75 Ohms (new standard)

This standard pertains exclusively to gas-filled rigid coaxial transmission lines and their connectors containing electrically transparent supporting structures. This standard does not apply to any semi-flexible transmission lines or connectors.

Send comments (copy psa@ansi.org) to: Questions may be directed to: Laura Donohoe; ldonohoe@ecianow.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.

AAFS (American Academy of Forensic Sciences)

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

New Standard

ANSI/ASB BPR 142-2022, Best Practice Recommendations for the Resolution of Conflicts in Friction Ridge Examination (new standard) Final Action Date: 12/5/2022

New Standard

ANSI/ASB BPR 144-2022, Best Practice Recommendations for the Verification Component in Friction Ridge Examination (new standard) Final Action Date: 12/5/2022

AAMI (Association for the Advancement of Medical Instrumentation)

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | drobertson@aami.org, www.aami.org

New Standard

ANSI/AAMI PB70-2022, Liquid barrier performance and classification of protective apparel and drapes intended for use in health care facilities (new standard) Final Action Date: 12/5/2022

ADA (American Dental Association)

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

National Adoption

ANSI/ADA Standard No. 136-2022, Dentistry - External Tooth Bleaching Products (national adoption of ISO 28399:2021 with modifications and revision of ANSI/ADA Standard 136-2015) Final Action Date: 12/6/2022

Reaffirmation

ANSI/ADA Standard No. 125-2018 (R2022), Manual Interdental Brushes (reaffirm a national adoption ANSI/ADA Standard No. 125-2018) Final Action Date: 12/6/2022

Reaffirmation

ANSI/ADA Standard No. 127-2018 (R2022), Dynamic Loading Test for Endosseous Dental Implants (reaffirm a national adoption ANSI/ADA Standard No. 127-2018) Final Action Date: 12/6/2022

AGSC (Auto Glass Safety Council)

20 PGA Drive, Suite 201, Stafford, VA 22554 | kbimber@glass.com, www.agsc.org

New Standard

ANSI/AGSC/NWRD/ROLAGS 002-2022, Auto Glass Safety Council/National Windshield Repair Division/Repair of Laminated Auto Glass Standard 002 (new standard) Final Action Date: 12/8/2022

API (American Petroleum Institute)

200 Massachusetts Avenue NW, Washington, DC 20001-5571 | fusarop@api.org, www.api.org

Reaffirmation

ANSI/API RP 3000-2014 (R2022), Classifying and Loading of Crude Oil into Rail Tank Cars (reaffirmation of ANSI/API RP 3000-2014) Final Action Date: 12/5/2022

ASA (ASC S12) (Acoustical Society of America)

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

Reaffirmation

ANSI/ASA S12.71-2018 (R2022), Performance Criteria for Systems that Estimate the Attenuation of Passive Hearing Protectors for Individual Users (reaffirmation of ANSI/ASA S12.71-2018) Final Action Date: 12/8/2022

ASA (ASC S3) (Acoustical Society of America)

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

Reaffirmation

ANSI/ASA S3.36-2012 (R2022), Specification for a Manikin for Simulated in-situ Airborne Acoustic Measurements (reaffirmation of ANSI/ASA S3.36-2012 (R2018)) Final Action Date: 12/8/2022

Reaffirmation

ANSI/ASA S3.50-2013 (R2022), Method for Evaluation of the Intelligibility of Text-to-Speech Synthesis Systems (reaffirmation of ANSI/ASA S3.50-2013 (R2018)) Final Action Date: 12/12/2022

ASME (American Society of Mechanical Engineers)

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

New Standard

ANSI/ASME B5.64-2022, Methods for the Performance Evaluation of Single Axis Linear Positioning Systems. (new standard) Final Action Date: 12/5/2022

Revision

ANSI/ASME NM-2-2022, Fiber-Reinforced Thermosetting-Resin Piping Systems (revision of ANSI/ASME NM-2-2020) Final Action Date: 12/5/2022

Revision

ANSI/ASME PTC 10-2022, Performance Test Code on Axial and Centrifugal Compressors (revision of ANSI/ASME PTC 10-1997 (R2014)) Final Action Date: 12/12/2022

ASTM (ASTM International)

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

Reaffirmation

ANSI/ASTM E2988-2017 (R2022), Practice for Specimen Preparation and Mounting of Flexible Fibrous Glass Insulation for Metal Buildings to Assess Surface Burning Characteristics (reaffirmation of ANSI/ASTM E2988-2017) Final Action Date: 11/22/2022

Reaffirmation

ANSI/ASTM F905-2004 (R2022), Practice for Qualification of Polyethylene Saddle-Fused Joints (reaffirmation of ANSI/ASTM F905-2004 (R2018)) Final Action Date: 11/22/2022

Reaffirmation

ANSI/ASTM F1055-2016A (R2022), Specification for Electrofusion Type Polyethylene Fittings for Outside Diameter Controlled Polyethylene and Crosslinked Polyethylene (PEX) Pipe and Tubing (reaffirmation of ANSI/ASTM F1055-2016A) Final Action Date: 11/22/2022

ASTM (ASTM International)

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

Revision

ANSI/ASTM D1494-2022, Test Method for Diffuse Light Transmission Factor of Reinforced Plastics Panels (revision of ANSI/ASTM D1494-2017) Final Action Date: 11/22/2022

Revision

ANSI/ASTM D2239-2022, Specification for Polyethylene (PE) Plastic Pipe (SIDR-PR) Based on Controlled Inside Diameter (revision of ANSI/ASTM D2239-2021) Final Action Date: 11/22/2022

Revision

ANSI/ASTM D2737-2022, Specification for Polyethylene (PE) Plastic Tubing (revision of ANSI/ASTM D2737-2021) Final Action Date: 11/22/2022

Revision

ANSI/ASTM D3035-2022, Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Controlled Outside Diameter (revision of ANSI/ASTM D3035-2021) Final Action Date: 11/22/2022

Revision

ANSI/ASTM D5319-2022, Specification for Glass-Fiber Reinforced Polyester Wall and Ceiling Panels (revision of ANSI/ASTM D5319-2017) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E1354-2022c, Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter (revision of ANSI/ASTM E1354-2022B) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E1623-2022a, Test Method for Determination of Fire and Thermal Parameters of Materials, Products, and Systems Using an Intermediate Scale Calorimeter (ICAL) (revision of ANSI/ASTM E1623-2022) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E2335-2022, Guide for Laboratory Monitors (revision of ANSI/ASTM E2335-2017) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E2404-2022, Practice for Specimen Preparation and Mounting of Textile, Paper or Polymeric (Including Vinyl) and Wood Wall or Ceiling Coverings, Facings and Veneers, to Assess Surface Burning Characteristics (revision of ANSI/ASTM E2404-2017) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E2599-2022, Practice for Specimen Preparation and Mounting of Reflective Insulation, Radiant Barrier and Vinyl Stretch Ceiling Materials for Building Applications to Assess Surface Burning Characteristics (revision of ANSI/ASTM E2599-2018) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E2652-2022, Test Method for Assessing Combustibility of Materials Using a Tube Furnace with a Cone-shaped Airflow Stabilizer, at 750C (revision of ANSI/ASTM E2652-2019) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E2690-2022, Practice for Specimen Preparation and Mounting of Caulks and Sealants to Assess Surface Burning Characteristics (revision of ANSI/ASTM E2690-2017B) Final Action Date: 11/22/2022

ASTM (ASTM International)

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

Revision

ANSI/ASTM E2965-2022a, Test Method for Determination of Low Levels of Heat Release Rate for Materials and Products Using an Oxygen Consumption Calorimeter (revision of ANSI/ASTM E2965-2022) Final Action Date: 11/22/2022

Revision

ANSI/ASTM E3048-2022a, Test Method for Determination of Time to Burn-Through Using the Intermediate Scale Calorimeter (ICAL) Radiant Panel (revision of ANSI/ASTM E3048-2022) Final Action Date: 11/22/2022

Revision

ANSI/ASTM F1412-2022, Specification for Polyolefin Pipe and Fittings for Corrosive Waste Drainage Systems (revision of ANSI/ASTM F1412-2016) Final Action Date: 11/22/2022

ATIS (Alliance for Telecommunications Industry Solutions)

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

Stabilized Maintenance

ANSI/ATIS 0300232-2012 (S2022), Human-to-Machine Interface Specification for Telecommunications Management (stabilized maintenance of ANSI/ATIS 0300232-2012 (R2017)) Final Action Date: 12/6/2022

AVIXA (Audiovisual and Integrated Experience Association)

11242 Waples Mill Road, Suite 200, Fairfax, VA 22030 | lovercash@avixa.org, www.avixa.org

New Standard

ANSI/AVIXA A103.01-2022, Measurement and Classification of Spectral Balance of Sound Systems in Listener Areas (new standard) Final Action Date: 12/12/2022

Revision

ANSI/AVIXA A102.01-2022, Measurement and Classification of Audio Coverage Uniformity in Listener Areas (revision and redesignation of ANSI/INFOCOMM A102.01-2017) Final Action Date: 12/12/2022

HL7 (Health Level Seven)

3300 Washtenaw Avenue, Suite 227, Ann Arbor, MI 48104 | Karenvan@HL7.org, www.hl7.org

Reaffirmation

ANSI/HL7 V2 XML, R2-2012 (R2022), HL7 Version 2: XML Encoding Rules, Release 2 (reaffirmation of ANSI/HL7 V2 XML, R2-2012) Final Action Date: 12/5/2022

Reaffirmation

ANSI/HL7V3IG SOA KM INFOBUTTON, R1-2013 (R2022), HL7 Version 3 Implementation Guide: Context-Aware Knowledge Retrieval (Infobutton) - Service-Oriented Architecture Implementation Guide, Release 1 (reaffirmation of ANSI/HL7V3IG SOA KM INFOBUTTON, R1-2013) Final Action Date: 12/5/2022

ICC (International Code Council)

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

Revision

ANSI/CSA B805/ICC 805-2022, Rainwater Harvesting Systems (revision of ANSI/CSA B805/ICC 805-2018) Final Action Date: 12/8/2022

IES (Illuminating Engineering Society)

120 Wall Street, Floor 17, New York, NY 10005-4001 | pmcgillicuddy@ies.org, www.ies.org

Revision

ANSI/IES RP-37-2022, Recommended Practice: Lighting Airport Environments (revision of ANSI/IES RP-37-2020)
Final Action Date: 12/8/2022

NEMA (ASC C12) (National Electrical Manufacturers Association)

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

New Standard

ANSI C12.30-2022, Test Requirements for Meters Equipped with Service Switches (new standard) Final Action Date: 12/5/2022

NEMA (ASC C136) (National Electrical Manufacturers Association)

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

New Standard

ANSI C136.56-2022, Roadway and Area Lighting Equipment - Standard Finishes (new standard) Final Action Date: 12/8/2022

New Standard

ANSI C136.57-2022, Wall Pack Luminaires for Exterior Lighting (new standard) Final Action Date: 12/8/2022

Revision

ANSI C136.53-2022, Roadway and Area Lighting Equipment - Enclosed Pendant Mounted Luminaires (revision of ANSI C136.53-2017) Final Action Date: 12/8/2022

NSF (NSF International)

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

Revision

ANSI/NSF 2-2022 (i43r2), Food Equipment (revision of ANSI/NSF 2021) Final Action Date: 12/2/2022

Revision

ANSI/NSF 4-2022 (i34r1), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2020) Final Action Date: 12/2/2022

Revision

ANSI/NSF 25-2022 (i22r1), Vending Machines for Food and Beverages (revision of ANSI/NSF 25-2021) Final Action Date: 12/4/2022

Revision

ANSI/NSF 53-2022 (i150r1), Drinking Water Treatment Units - Health Affects (revision of ANSI/NSF 53-2021) Final Action Date: 12/5/2022

Revision

ANSI/NSF 58-2022 (i103r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2021) Final Action Date: 12/4/2022

NSF (NSF International)

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

Revision

ANSI/NSF 170-2022 (i23r2), Glossary of Food Equipment Terminology (revision of ANSI/NSF 170-2021) Final Action Date: 12/5/2022

Revision

ANSI/NSF 416-2022 (i5r1.1), Sustainability Assessment for Water Treatment Chemical Products (revision of ANSI/NSF 416-2017) Final Action Date: 11/23/2022

Revision

ANSI/NSF 455-2-2022 (i42r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 12/5/2022

Revision

ANSI/NSF 455-2-2022 (i50r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 12/6/2022

Revision

ANSI/NSF 455-3-2022 (i38r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2021) Final Action Date: 12/8/2022

Revision

ANSI/NSI 373-2022 (i7r1), Sustainable Production of Natural Dimension Stone (revision of ANSI/NSI 373-2022) Final Action Date: 10/24/2022

SCTE (Society of Cable Telecommunications Engineers)

140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

Reaffirmation

ANSI/SCTE 38-7-2017 (R2022), Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-Transponder-Interface-Bus (TIB)-MIB Management Information Base (MIB) Definition (reaffirmation of ANSI/SCTE 38-7-2017) Final Action Date: 12/5/2022

Reaffirmation

ANSI/SCTE 38-8-2017 (R2022), Hybrid Fiber/Coax Outside Plant Status Monitoring SCTE-HMS-DOWNLOAD-MIB Management Information Base (MIB) Definition (reaffirmation of ANSI/SCTE 38-8-2017) Final Action Date: 12/8/2022

Reaffirmation

ANSI/SCTE 38-10-2017 (R2022), Outside Plant Status Monitoring SCTE-HMS-RF-AMPLIFIER-MIB Management Information Base (MIB) Definition (reaffirmation of ANSI/SCTE 38-10-2017) Final Action Date: 12/5/2022

Reaffirmation

ANSI/SCTE 38-11-2017 (R2022), HMS Headend Management Information Base (MIB) SCTE-HMS-HEADENDIDENT-MIB (reaffirmation of ANSI/SCTE 38-11-2017) Final Action Date: 12/5/2022

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | jeffrey.prusko@ul.org, <https://ulse.org/>

New Standard

ANSI/UL 1337-2022, Standard for Safety for LP-Gas, Natural Gas, and Manufactured Gas Devices for Engine Fuel Systems (new standard) Final Action Date: 12/7/2022

ULSE (UL Standards & Engagement)

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

Revision

ANSI/UL 448-2022, Standard for Centrifugal Stationary Pumps for Fire-Protection Service (August 26, 2022)
(revision of ANSI/UL 448-2020) Final Action Date: 12/7/2022

Revision

ANSI/UL 588-2022, Standard for Safety for Seasonal and Holiday Decorative Products (revision of ANSI/UL 588-2021) Final Action Date: 12/6/2022

Revision

ANSI/UL 1557-2022, Standard for Safety for Electrically Isolated Semiconductor Devices (revision of ANSI/UL 1557-2018) Final Action Date: 12/6/2022

Revision

ANSI/UL 2438-2022, Standard for Safety for Outdoor Seasonal-Use Cord-Connected Wiring Devices (revision of ANSI/UL 2438-2014) Final Action Date: 12/6/2022

Revision

ANSI/UL 2901-2022, Standard for Antifreeze Solutions for Use in Fire Sprinkler Systems (July 8, 2022) (revision of ANSI/UL 2901-2019) Final Action Date: 12/6/2022

Revision

ANSI/UL 8750-2022, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2021) Final Action Date: 12/7/2022

Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

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

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

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

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

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

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

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

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

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

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

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

ANSI Accredited Standards Developer

NCPDP - National Council for Prescription Drug Programs

Monday, January 9, 2023 through Friday, February 10, 2023

Enrollment in the **National Council for Prescription Drug Programs (NCPDP) 2023 Consensus Group** opens **Monday, January 9, 2023 and closes at 8:00 p.m. EST on Friday, February 10, 2023**. Information concerning the Consensus Group registration process is available by contacting: Margaret Weiker, National Council for Prescription Drug Programs (NCPDP) | 9240 East Raintree Drive, Scottsdale, AZ 85260 | (480) 477-1000, mweiker@ncdpd.org

STANDARDS:

Audit Transaction Standard – supports an electronic audit transaction that facilitates requests, responses, and final outcomes transmissions for both “Desk Top” claim audits and for in-store audit notices.

Batch Standard Subrogation - provides a uniform approach to efficiently process post-payment subrogation claims and eliminate the numerous custom formats used in the industry today.

Benefit Integration Standard - supports the communication of accumulator data (such as deductible and out of pocket) between Benefit Partners to administer integrated benefits for a member.

Billing Unit Standard - provides a consistent and well-defined billing unit for use in pharmacy transactions. This results in time savings and accuracy in billing and reimbursement.

Financial Information Reporting Standard – provides a process whereby financial information is moved from one PBM to another when a patient changes benefit plans.

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

Manufacturer Rebate Standard – provides a standardized format for the electronic submission of rebate information from Pharmacy Management Organizations (PMOs) to Pharmaceutical Industry Contracting Organizations (PICOs).

Medicaid Pharmacy Encounters Reporting – provides standardization of data content and file layout for reporting of Medicaid Managed Care Organization pharmacy claims to a state agency.

Medicaid Subrogation Standard – provides guidelines for the process whereby a Medicaid agency can communicate to a processor for reimbursement. The state has reimbursed the pharmacy provider for covered services and now is pursuing reimbursement from other payers for these services.

Medical Rebates Data Submission Standard – provides a standardized format for health plans’ rebate submissions to multiple manufacturers throughout the industry. Implementation of the medical also eliminates the need for manufacturers to create internal mapping processes to standardize unique data formats from each health plan or third party administrator.

AAMI (Association for the Advancement of Medical Instrumentation)

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | cmaguwah@aami.org, www.aami.org

BSR/AAMI/ISO 10993-11-2017 (R202x), Biological Evaluation of Medical Devices - Part 11: Tests for Systematic Toxicity (reaffirm a national adoption ANSI/AAMI/ISO 10993-11-2017)

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 | kbest@ahrinet.org, www.ahrinet.org

BSR/AHRI Standard 400-202x (SI/I-P), Performance Rating of Liquid-to-Liquid Heat Exchangers (revision, redesignation and consolidation of ANSI/AHRI Standard 400 (I-P)-2015, ANSI/AHRI Standard 401 (SI)-2015)

AMCA (Air Movement and Control Association)

30 West University Drive, Arlington Heights, IL 60004-1893 | shrutik@amca.org, www.amca.org

BSR/AMCA 99-202x, Standards Handbook (revision of ANSI/AMCA 99-2016)

AMCA (Air Movement and Control Association)

30 West University Drive, Arlington Heights, IL 60004-1893 | shrutik@amca.org, www.amca.org

BSR/AMCA 210/ASHRAE 51-202x, Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating (revision and redesignation of ANSI/AMCA 210-2016, ANSI/ASHRAE 51-2016)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE/ISO 21191-202x MONYEAR, Equipment for crop protection - Closed transfer systems (CTS) - Performance specifications (identical national adoption of ISO 21191:2021)

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 BPVC Section II-202x, Part A - Ferrous Material Specifications; Part B - Nonferrous Material Specifications; Part D - Materials Properties (revision of ANSI/ASME BPVC Section II-2021)

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 BPVC Section II-202x, Part C - Specifications for Welding Rods, Electrodes, and Filler Metals (revision of ANSI/ASME BPVC Section II-2021)

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 BPVC Section IX-202x, Welding, Brazing and Fusing Qualifications (revision of ANSI/ASME BPVC Section IX-2021)

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 BPVC Section XII-202x, Rules for Construction and Continued Service of Transport Tanks (revision of ANSI/ASME BPVC Section XII-2021)

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 BPVC Section XIII-202x, Rules for Overpressure Protection (revision of ANSI/ASME BPVC Section XIII-2021)

BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.4-202x, Standard for Door Controls - Closers (revision of ANSI/BHMA A156.4-2019)

BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.10-202x, Standard for Power Operated Pedestrian Doors (revision of ANSI/BHMA A156.10-2017)

BHMA (Builders Hardware Manufacturers Association)

355 Lexington Avenue, 15th Floor, New York, NY 10017-6603 | Kbishop@Kellencompany.com, www.buildershardware.com

BSR/BHMA A156.14-202x, Standard for Sliding and Folding Door Hardware (revision of ANSI/BHMA A156.14-2019)

BHMA (Builders Hardware Manufacturers Association)

355 Lexington Avenue, 15th Floor, New York, NY 10017-6603 | Kbishop@Kellencompany.com, www.buildershardware.com

BSR/BHMA A156.25-202x, Standard for Electrified Locking Devices (revision of ANSI/BHMA A156.25-2018)

BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.27-202x, Power and Manual Operated Revolving Pedestrian Doors (revision of ANSI/BHMA A156.27-2019)

BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.31-202x, Standard for Electric Strikes and Frame Mounted Actuators (revision of ANSI/BHMA A156.31-2019)

BHMA (Builders Hardware Manufacturers Association)

355 Lexington Avenue, 15th Floor, New York, NY 10017-6603 | Kbishop@Kellencompany.com, www.buildershardware.com

BSR/BHMA A156.33-202x, Standard for Internally Powered Architectural Hardware Devices (revision of ANSI/BHMA A156.33-2019)

EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, www.esda.org

BSR/EOS ESD S11.4-202X, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items - Static Control Bags (revision of ANSI/ESD S11.4-2013)

NSF (NSF International)

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

BSR/NSF 6-202x (i21r1), Dispensing Freezers (revision of ANSI/NSF 6-2021)

NSF (NSF International)

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

BSR/NSF 40-202x (i54r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2022)

NSF (NSF International)

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

BSR/NSF 40-202x (i55r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2022)

NSF (NSF International)

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

BSR/NSF 41-202x (i14r1), Non-Liquid Saturated Treatment Systems (revision of ANSI/NSF 41-2018)

NSF (NSF International)

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

BSR/NSF 44-202x (i52r2), Residential Cation Exchange Water Softeners (revision of ANSI/NSF 44-2021)

NSF (NSF International)

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

BSR/NSF 46-202x (i45r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2021)

NSF (NSF International)

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

BSR/NSF 62-202x (i46r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2021)

NSF (NSF International)

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

BSR/NSF 177-202x (i13r1), Shower Filtration Systems - Aesthetic Effects (revision of ANSI/NSF 177-2019)

NSF (NSF International)

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

BSR/NSF 245-202x (i34r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2022)

NSF (NSF International)

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

BSR/NSF 350-202x (i76r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2022)

NSF (NSF International)

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

BSR/NSF 401-202x (i31r1), Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants (revision of ANSI/NSF 401-2021)

TIA (Telecommunications Industry Association)

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

BSR/TIA 568.1-E-1-202x, Commercial Building Telecommunications Infrastructure Standard - Addendum 1: Balanced Single Twisted-pair Cabling; Cabling Requirements for Wireless Access Points (addenda to ANSI/TIA 568.1-E-2020)

TIA (Telecommunications Industry Association)

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

BSR/TIA 4966-A-1-202x, Telecommunications Infrastructure Standard for Educational Facilities - Addendum 1: Balanced Single Twisted-pair Cabling (addenda to ANSI/TIA 4966-A-2022)

VITA (VMEbus International Trade Association (VITA))

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

BSR/VITA 68.0-2017 (R202x), VPX Compliance Channel Standard (reaffirmation of ANSI/VITA 68.0-2017)

VITA (VMEbus International Trade Association (VITA))

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

BSR/VITA 68.1-2017 (R202x), VPX Compliance Channel - Fixed Signal Integrity Budget Standard (reaffirmation of ANSI/VITA 68.1-2017)

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.standardslearn.org

Accreditation Announcements (Standards Developers)

Approval of Reaccreditation – ASD

ADA (Organization) - American Dental Association

Effective December 9, 2022

The reaccreditation of **ADA - American Dental Association** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ADA (Organization)-sponsored American National Standards, effective **December 9, 2022**. For additional information, please contact: Sharon Stanford, American Dental Association (ADA (Organization)) | 211 East Chicago Avenue, Chicago, IL 60611-2678 | (312) 440-2509, stanfords@ada.org

Approval of Reaccreditation – ASD

AWPA - American Wood Protection Association

Effective December 9, 2022

The reaccreditation of **AWPA - American Wood Protection Association** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on AWPAsponsored American National Standards, effective **December 9, 2022**. For additional information, please contact: Colin McCown, American Wood Protection Association (AWPA) | P.O. Box 361784, Birmingham, AL 35236-1784 | (205) 733-4077, email@awpa.com

Approval of Reaccreditation – ASD

HSI - Healthcare Standards Institute

Effective December 9, 2022

The reaccreditation of **HSI - Healthcare Standards Institute** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on HSI-sponsored American National Standards, effective **December 9, 2022**. For additional information, please contact: Lee Webster,, Healthcare Standards Institute (HSI) | 10231 Kotzebue Street, San Antonio, TX 78217 | (210) 366-0033, lwebster@ingenesis.com

Approval of Reaccreditation – ASD

ITI (INCITS) - InterNational Committee for Information Technology Standards

Effective December 13, 2022

The reaccreditation of **Information Technology Industry Council-sponsored INCITS - InterNational Committee for Information Technology Standards** has been approved by ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ITI (INCITS)-sponsored American National Standards, effective **December 13, 2022**. For additional information, please contact: Lynn Barra, InterNational Committee for Information Technology Standards (ITI (INCITS)) | 700 K Street NW, Suite 600, Washington, DC 20001 | (202) 737-8888, comments@standards.incits.org

Accreditation Announcements (Standards Developers)

Public Review of Revised ASD Operating Procedures

AAFS - American Academy of Forensic Sciences

Comment Deadline: January 17, 2023

The **AAFS - American Academy of Forensic Sciences**, an ANSI Member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on AAFS-sponsored American National Standards, under which it was last reaccredited in 2021. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Teresa Ambrosius, American Academy of Forensic Sciences (AAFS) | 410 North 21st Street, Colorado Springs, CO 80904 | (719) 453-1036, tambrosius@aafs.org

To view/download a copy of the revisions during the public review period, [click URL here:](#)

Please submit any public comments on the revised procedures to AAFS by **January 17, 2023**, with a copy to the ExSC Recording Secretary in ANSI's New York Office (jthompso@ANSI.org)

American National Standards Under Continuous Maintenance

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

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

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

AAMI

Association for the Advancement of
Medical Instrumentation
901 N. Glebe Road, Suite 300
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Darren Robertson
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ADA (Organization)

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211 East Chicago Avenue
Chicago, IL 60611
www.ada.org

Paul Bralower
bralowerp@ada.org

AGSC

Auto Glass Safety Council
20 PGA Drive, Suite 201
Stafford, VA 22554
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AHRI

Air-Conditioning, Heating, and Refrigeration
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AMCA

Air Movement and Control Association
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www.amca.org

Shruti Kohli-Bhargava
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API

American Petroleum Institute
200 Massachusetts Avenue NW
Washington, DC 20001
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ASA (ASC S12)

Acoustical Society of America
1305 Walt Whitman Road, Suite 300
Melville, NY 11747
www.acousticalsociety.org

Raegan Ripley
standards@acousticalsociety.org

ASA (ASC S3)

Acoustical Society of America
1305 Walt Whitman Road, Suite 300
Melville, NY 11747
www.acousticalsociety.org

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standards@acousticalsociety.org

ASABE

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Jean Walsh
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brace@asabe.org

ASHRAE

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ASME

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ASME

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www.asme.org

Terrell Henry
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ASTM

ASTM International
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www.astm.org

Laura Klineburger
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ATIS

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

Drew Greco
dgreco@atis.org

AVIXA

Audiovisual and Integrated Experience
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11242 Waples Mill Road, Suite 200
Fairfax, VA 22030
www.avixa.org

Loanna Overcash
lovercash@avixa.org

AWWA

American Water Works Association
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Denver, CO 80235
www.awwa.org

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B11

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Houston, TX 77269
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BHMA

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BHMA

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CSA

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Cleveland, OH 44131
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CSA

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178 Rexdale Boulevard, Toronto
Ontario M9W 1R3, Ontario M9W 1
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EOS/ESD

ESD Association, Inc.
218 W. Court Street
Rome, NY 13440
www.esda.org

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jkirk@esda.org

HL7

Health Level Seven
3300 Washtenaw Avenue, Suite 227
Ann Arbor, MI 48104
www.hl7.org

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HPS (ASC N13)

Health Physics Society
950 Herndon Parkway, Suite 450
Herndon, VA 20170
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awride-graney@burkinc.com

ICC

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

Karl Aittaniemi
kaittaniemi@iccsafe.org

IES

Illuminating Engineering Society
120 Wall Street, Floor 17
New York, NY 10005
www.ies.org

Patricia McGillicuddy
pmcgillicuddy@ies.org

MTS

Institute for Market Transformation to
Sustainability
1511 Wisconsin Avenue, NW
Washington, DC 20007
www.sustainableproducts.com

Michael Italiano
mike@sustainableproducts.com

NEMA (ASC C12)

National Electrical Manufacturers
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1300 North 17th Street, Suite 900
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Paul Orr
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NEMA (ASC C136)

National Electrical Manufacturers
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SCTE

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ULSE

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ULSE

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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

Anaesthetic and respiratory equipment (TC 121)

ISO/DIS 16571, Systems for evacuation of plume generated by medical devices - 2/24/2023, \$112.00

Equipment for fire protection and fire fighting (TC 21)

ISO/DIS 14520-5, Gaseous fire-extinguishing systems - Physical properties and system design - Part 5: FK-5-1-12 extinguishant - 2/27/2023, \$53.00

Fine Bubble Technology (TC 281)

ISO/DIS 20480-5, Fine bubble technology - General principles for usage and measurement of fine bubbles - Part 5: Shelled fine bubbles - 2/24/2023, \$46.00

Gas cylinders (TC 58)

ISO/DIS 14456, Gas cylinders - Gas properties and associated classification (FTSC) codes - 2/25/2023, \$119.00

Hydrometric determinations (TC 113)

ISO/DIS 19234, Hydrometry - Low cost baffles to aid fish passage on triangular profile gauging weirs - 2/27/2023, \$88.00

Industrial automation systems and integration (TC 184)

ISO/DIS 16400-3, Automation systems and integration - Equipment behaviour catalogues for virtual production system - Part 3: Guideline for construction of equipment instance model - 2/27/2023, \$88.00

Light and Lighting (TC 274)

ISO/CIE DIS 10916, Light and lighting - Energy performance of lighting in buildings - Calculation of the impact of daylight utilization - 2/27/2023, \$155.00

Light metals and their alloys (TC 79)

ISO/DIS 21339, Titanium and titanium alloys - Ti-6Al-4V - Determination of aluminium and vanadium contents - Inductively coupled plasma atomic emission spectrometric method - 2/23/2023, \$58.00

Mechanical vibration and shock (TC 108)

ISO/DIS 10813-1, Vibration generating machines - Guidance for selection - Part 1: Equipment for environmental testing - 2/26/2023, \$98.00

Non-destructive testing (TC 135)

ISO/DIS 5580, Non-destructive testing - Industrial radiographic illuminators - Minimum requirements - 2/25/2023, \$40.00

Paints and varnishes (TC 35)

ISO/DIS 17895, Paints and varnishes - Determination of volatile organic compound (VOC) - Gas-chromatographic method with headspace injection for VOC determination - 2/26/2023, \$62.00

Paper, board and pulps (TC 6)

ISO/DIS 24118-1.3, Paper and board - Stylus contact method - Part 1: Determination of surface roughness - 12/15/2022, \$53.00

Petroleum products and lubricants (TC 28)

ISO/DIS 11158, Lubricants, industrial oils and related products (class L) - Family H (hydraulic systems) - Specifications for categories HH, HL, HM, HV and HG - 2/27/2023, \$82.00

Photography (TC 42)

ISO/DIS 22028-4, Photography and graphic technology - Extended colour encodings for digital image storage, manipulation and interchange - Part 4: European Colour Initiative RGB colour image encoding [eciRGB (2008)] - 2/24/2023, \$71.00

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

ISO/DIS 13265, Thermoplastics piping systems for non-pressure underground drainage and sewerage - Joints for buried non-pressure applications - Test method for the long-term sealing performance of joints with elastomeric seals by estimating the sealing pressure - 2/27/2023, \$62.00

Sustainable development in communities (TC 268)

ISO/DIS 37183, Smart community infrastructures - Smart transportation with the use of face recognition payment (f-payment) - 2/25/2023, \$53.00

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

ISO/DIS 4172, Technical product documentation (TPD) - Construction documentation - Drawings for the assembly of prefabricated structures - 2/24/2023, \$71.00

ISO/DIS 7519, Technical product documentation (TPD) - Construction documentation - General principles of presentation for general arrangement and assembly drawings - 2/24/2023, \$88.00

Terminology (principles and coordination) (TC 37)

ISO/DIS 17651-1, Simultaneous interpreting - Interpreter's working environment - Part 1: Requirements and recommendations for permanent booths - 3/2/2023, \$67.00

ISO/DIS 17651-2, Simultaneous interpreting - Interpreter's working environment - Part 2: Requirements and recommendations for mobile booths - 2/27/2023, \$62.00

Traditional Chinese medicine (TC 249)

ISO/DIS 9109, Traditional Chinese medicine - Rehmannia glutinosa root - 3/2/2023, \$77.00

ISO/DIS 9319, Traditional Chinese medicine - Poria cocos sclerotium - 2/24/2023, \$62.00

ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 4944, Information technology - User interfaces - Evaluating usability of natural user interfaces - 3/2/2023, \$67.00

ISO/IEC DIS 5392, Information technology - Artificial intelligence - Reference architecture of knowledge engineering - 2/27/2023, \$112.00

ISO/IEC DIS 23090-14/DAmD 1, Information technology - Coded representation of immersive media - Part 14: Scene description - Amendment 1: Support for immersive media codecs in scene description - 2/27/2023, \$67.00

ISO/IEC DIS 23090-18/DAmD 1, Information technology - Coded representation of immersive media - Part 18: Carriage of geometry-based point cloud compression data - Amendment 1: Support for temporal scalability - 2/27/2023, \$77.00

IEC Standards**All-or-nothing electrical relays (TC 94)**

94/785/DISH, IEC 61810-1/ISH1 ED4: Interpretation Sheet 1 - Electromechanical elementary relays - Part 1: General and safety requirements, 01/20/2023

94/784/CD, IEC 61810-7-2 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-2: Mechanical tests and weighing, 02/03/2023

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

46C/1242(F)/FDIS, IEC 61156-1 ED4: Multicore and symmetrical pair/quad cables for digital communications - Part 1: Generic specification, 12/30/2022

Capacitors and resistors for electronic equipment (TC 40)

40/2988/CDV, IEC 60393-4 ED3: Potentiometers for use in electronic equipment - Part 4: Sectional specification: Single-turn rotary power potentiometers - Methods and guidance, 03/03/2023

40/2989/CDV, IEC 60938-2-1 ED2: Fixed inductors for electromagnetic interference suppression - Part 2-1: Blank detail specification - Inductors for which safety tests are required - Assessment level D, 03/03/2023

Electric road vehicles and electric industrial trucks (TC 69)

69/872/CD, IEC 63382-1 ED1: Management of Distributed Energy Storage Systems based on Electrically Chargeable Vehicles (ECV-DESS) - Part 1: Definitions, Requirements and Use Cases, 03/03/2023

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

48B/3015/CD, IEC 63171 ED2: Connectors for electrical and electronic equipment - Shielded or unshielded free and fixed connectors for balanced single-pair data transmission with current-carrying capacity - General requirements and tests, 03/03/2023

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

13/1877/CDV, IEC 62056-8-12 ED1: Electricity metering data exchange - The DLMS/COSEM suite - Part 8-12: Communication profile for Low Power Wide Area Networks (LPWAN), 03/03/2023

Evaluation and Qualification of Electrical Insulating Materials and Systems (TC 112)

112/597(F)/FDIS, IEC 62631-3-1 ED2: Dielectric and resistive properties of solid insulating materials - Part 3-1: Determination of resistive properties (DC methods) - Volume resistance and volume resistivity - General method, 12/30/2022

Fibre optics (TC 86)

86B/4692(F)/FDIS, IEC 61300-2-1 ED4: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-1: Tests - Vibration (sinusoidal), 01/06/2023

86B/4704/CD, IEC TS 62005-9-5 ED1: Reliability of fibre optic interconnecting devices and passive optical components - Part 9-5: Reliability qualification for protective housings, 03/03/2023

86B/4705/NP, PNW 86B-4705 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector optical interfaces for enhanced macrobend multimode fibres - Part 3-XX (Rm1): Connector parameters of physically contacting 50 m core diameter fibres - Non-angled 2,5 mm and 1,25 mm diameter cylindrical full zirconia ferrules for reference connection applications, 03/03/2023

86B/4706/NP, PNW 86B-4706 ED1: Fibre optic interconnecting devices and passive components - Connector optical interfaces for enhanced Macro bend multimode fibre - Part 3-XX (Rm12): Connector parameters of physically contacting 50 m core diameter fibres - Non-angled polyphenylene sulphide rectangular ferrules with a single row of 12, 8, 4, or 2 fibres for reference connector applications, 03/03/2023

Flat Panel Display Devices (TC 110)

110/1477/CDV, IEC 63145-22-20 ED1: Eyewear display - Part 22-20: Specific measurement methods for AR type - Image quality, 03/03/2023

Fuses (TC 32)

32C/604(F)/FDIS, IEC 60691 ED5: ThermalLinks - Requirements and application guide, 01/13/2023

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

115/319/DTS, IEC TS 63291-1 ED1: HVDC Grid Systems and connected Converter Stations - Functional Specifications - Part 1: Guidelines, 03/03/2023

115/320/DTS, IEC TS 63291-2 ED1: HVDC Grid Systems and connected Converter Stations - Guideline and Parameter Lists for Functional Specifications - Part 2: Parameter Lists, 03/03/2023

Industrial-process measurement and control (TC 65)

65E/944/CD, IEC 61406-2 ED1: Identification Link - Part 2: Types/Models, Lots/Batches, Items and Characteristics, 03/03/2023

65A/1067/CD, IEC 63303 ED1: Human-Machine Interfaces for Process Automation Systems, 03/03/2023

Insulation co-ordination for low-voltage equipment (TC 109)

109/214/CD, IEC 60664-1/AMD1 ED3: Amendment 1 - Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests, 03/03/2023

Lamps and related equipment (TC 34)

34/991/CDV, IEC 62386-306 ED1: Digital addressable lighting interface - Part 306: Particular requirements - Input devices - General purpose sensor, 03/03/2023

34/1004/FDIS, IEC 62471-7 ED1: Photobiological safety of lamps and lamp systems - Part 7: Light sources and luminaires primarily emitting visible radiation, 01/20/2023

Magnetic components and ferrite materials (TC 51)

51/1427/NP, PNW 51-1427 ED1: High frequency inductive components - Electrical characteristics and measuring methods - Part 3: AC loss measured by sinusoidal wave of inductors for DC-to-DC converters, 03/03/2023

Marine energy - Wave, tidal and other water current converters (TC 114)

114/448A/CD, IEC TS 62600-200 ED2: Marine energy - Wave, tidal and other water current converters - Part 200: Electricity producing tidal energy converters - Power performance assessment, 01/06/2023

Performance of household electrical appliances (TC 59)

59C/282/FDIS, IEC 60379 ED4: Methods for measuring the performance of electric storage water-heaters for household purposes, 01/20/2023

Power electronics (TC 22)

22F/714/CD, IEC 62501 ED2: Voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) power transmission - Electrical testing, 03/03/2023

Semiconductor devices (TC 47)

47F/427/CD, IEC 62047-48 ED1: Semiconductor devices - Micro-electromechanical devices - Part 48: Test method of determining solution concentration by optical absorption using MEMS fluidic device, 03/03/2023

Small power transformers and reactors and special transformers and reactors (TC 96)

96/563/CDV, IEC 61558-2-23 ED3: Safety of transformers, reactors, power supply units and combinations thereof - Part 2 -23: Particular requirements and tests for transformers and power supply units for construction sites, 03/03/2023

Superconductivity (TC 90)

90/498/CD, IEC 61788-27 ED1: Twist pitch measurement of practical superconducting wires - Twist pitch measurement method of NbTi and Nb₃Sn composite superconductors, 03/03/2023

Ultrasonics (TC 87)

87/825/DTS, IEC TS 62903 ED2: Ultrasonics - Measurements of electroacoustical parameters and acoustic output power of spherically curved transducers using the self-reciprocity method, 03/03/2023

Wind turbine generator systems (TC 88)

88/917/CDV, IEC 61400-3-2 ED1: Wind energy generation systems - Part 3-2: Design requirements for floating offshore wind turbines, 03/03/2023

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

JTC1-SC25/3122/CDV, ISO/IEC 14543-5-104 ED1: Information technology - Home Electronic System (HES) architecture - Part 5 -104: Intelligent grouping and resource sharing for HES Class 2 and Class 3 - RA server-based smart lock application, 03/03/2023



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

Fasteners (TC 2)

[ISO 2702:2022](#), Fasteners - Heat treated tapping screws - Mechanical and physical properties, \$73.00

Ferroalloys (TC 132)

[ISO 5451:2022](#), Ferrovanadium - Specification and conditions of delivery, \$73.00

Graphic technology (TC 130)

[ISO 5776:2022](#), Graphic technology - Symbols for text proof correction, \$200.00

Information and documentation (TC 46)

[ISO 15707:2022](#), Information and documentation - International Standard Musical Work Code (ISWC), \$73.00

Internal combustion engines (TC 70)

[ISO 7967-3:2022](#), Reciprocating internal combustion engines - Vocabulary of components and systems - Part 3: Valves, camshaft drives and actuating mechanisms, \$48.00

Nuclear energy (TC 85)

[ISO 11311:2011/Amd 1:2022](#), Nuclear criticality safety - Critical values for homogeneous plutonium-uranium oxide fuel mixtures outside of reactors - Amendment 1: Corrections and clarifications, \$20.00

[ISO 18077:2022](#), Reload startup physics tests for pressurized water reactors, \$175.00

[ISO 18589-2:2022](#), Measurement of radioactivity in the environment - Soil - Part 2: Guidance for the selection of the sampling strategy, sampling and pre-treatment of samples, \$175.00

Paper, board and pulps (TC 6)

[ISO 3688:2022](#), Pulp - Preparation of laboratory sheets for the measurement of optical properties, \$73.00

Plastics (TC 61)

[ISO 171:2022](#), Plastics - Determination of bulk factor of moulding materials, \$48.00

[ISO 1675:2022](#), Plastics - Liquid resins - Determination of density by the pycnometer method, \$48.00

[ISO 6401:2022](#), Plastics - Poly(vinyl chloride) - Determination of residual vinyl chloride monomer using gas-chromatographic method, \$73.00

Quantities, units, symbols, conversion factors (TC 12)

[ISO 80000-1:2022](#), Quantities and units - Part 1: General, \$149.00

Road vehicles (TC 22)

[ISO 6460-3:2007/Amd 2:2022](#), Motorcycles - Measurement method for gaseous exhaust emissions and fuel consumption - Part 3: Fuel consumption measurement at a constant speed - Amendment 2, \$20.00

Security (TC 292)

[ISO 22378:2022](#), Security and resilience - Authenticity, integrity and trust for products and documents - Guidelines for interoperable object identification and related authentication systems to deter counterfeiting and illicit trade, \$149.00

[ISO 22387:2022](#), Security and resilience - Authenticity, integrity and trust for products and documents - Validation procedures for the application of artefact metrics, \$175.00

Ships and marine technology (TC 8)

[ISO 17631:2022](#), Ships and marine technology - Shipboard plans for fire control, damage control, life-saving appliances and means of escape, \$175.00

[ISO 23453:2022](#), Ships and marine technology - Guidelines for the design and manufacture of the hub cap with fins for a fixed-pitch marine propeller, \$73.00

Textiles (TC 38)

[ISO 18264:2022](#), Textile slings - Lifting slings for general purpose lifting operations made from fibre ropes - High modulus polyethylene (HMPE), \$175.00

Thermal insulation (TC 163)

[ISO 24285:2022](#), Thermal insulation for building equipment and industrial installations - Cellular glass products - Specification, \$111.00

ISO Technical Reports

Gears (TC 60)

[ISO/TR 6336-30:2022](#), Calculation of load capacity of spur and helical gears - Part 30: Calculation examples for the application of ISO 6336 parts 1,2,3,5, \$225.00

ISO Technical Specifications

Fire safety (TC 92)

[ISO/TS 23657:2022](#), Reaction to fire test for sandwich panel building systems - Intermediate-scale box test, \$111.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 26563:2022](#), Software and systems engineering - Methods and tools for product line configuration management, \$175.00

IEC Standards

Electrical equipment in medical practice (TC 62)

[IEC 60601-1 Ed. 3.0 b Cor.3:2022](#), Corrigendum 3 - Medical electrical equipment - Part 1: General requirements for basic safety and essential performance, \$0.00

Fibre optics (TC 86)

[IEC 61280-4-1 Ed. 3.0 b Cor.2:2022](#), Corrigendum 2 - Fibre-optic communication subsystem test procedures - Part 4-1: Installed cabling plant - Multimode attenuation measurement, \$0.00

Industrial-process measurement and control (TC 65)

[IEC 62682 Ed. 2.0 b:2022](#), Management of alarm systems for the process industries, \$392.00

[IEC 62682 Ed. 2.0 en:2022 CMV](#), Management of alarm systems for the process industries, \$689.00

International Organization for Standardization (ISO)

ISO Proposal for a New Field of ISO Technical Activity

Dust and Dust Storms

Comment Deadline: December 16, 2022

INSO, the ISO member body for Iran, has submitted to ISO a proposal for a new field of ISO technical activity on Dust and Dust Storms, with the following scope statement:

Standardization in the field of natural dust and dust storm on an urban scale and in industrial towns, excluded artificial/manufactures dust. Standardization and development of international standards includes: terminology, specifications, constituent and size of dust, feature of dust storms and prevent the creation of dust or reduce the risks of natural dust in the areas of Healthcare, safe water, agriculture, transportation etc.

Anyone wishing to review the proposal 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, December 16, 2022.

Registration of Organization Names in the United States

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

When organization names are submitted to ANSI for registration, they will be listed here alphanumerically.

Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

Public Review

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

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

Proposed Foreign Government Regulations

Call for Comment

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

The USA 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 (<https://epingalert.org/>) 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. To register for ePing, please visit: <https://epingalert.org/>

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 available at: <https://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> prior to submitting comments.

For further information about the USA TBT Enquiry Point, please visit:

<https://www.nist.gov/standardsgov/usa-wto-tbt-enquiry-point>

Contact the USA TBT Enquiry Point at (301) 975-2918; E usatbtep@nist.gov or notifyus@nist.gov



2023 Standards Action Publishing | Volume No. 54

*The "Submit End" deadline applies to forms received by Monday, 5:00 PM ET

Based on the dates below, an ANSI-Developer can anticipate that a request made between the SUBMIT START date and the *SUBMIT END 5 PM date will appear in ANSI Standards Action on the SA PUBLISHED date.

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

ISSUE	SUBMIT START	*SUBMIT END 5 PM	SA PUBLISHED	30-DAY PR END	45-DAY PR END	60-DAY PR END
01	12/20/2022	12/26/2022	Jan 6	2/5/2023	2/20/2023	3/7/2023
02	12/27/2022	1/2/2023	Jan 13	2/12/2023	2/27/2023	3/14/2023
03	1/3/2023	1/9/2023	Jan 20	2/19/2023	3/6/2023	3/21/2023
04	1/10/2023	1/16/2023	Jan 27	2/26/2023	3/13/2023	3/28/2023
05	1/17/2023	1/23/2023	Feb 3	3/5/2023	3/20/2023	4/4/2023
06	1/24/2023	1/30/2023	Feb 10	3/12/2023	3/27/2023	4/11/2023
07	1/31/2023	2/6/2023	Feb 17	3/19/2023	4/3/2023	4/18/2023
08	2/7/2023	2/13/2023	Feb 24	3/26/2023	4/10/2023	4/25/2023
09	2/14/2023	2/20/2023	Mar 3	4/2/2023	4/17/2023	5/2/2023
10	2/21/2023	2/27/2023	Mar 10	4/9/2023	4/24/2023	5/9/2023
11	2/28/2023	3/6/2023	Mar 17	4/16/2023	5/1/2023	5/16/2023
12	3/7/2023	3/13/2023	Mar 24	4/23/2023	5/8/2023	5/23/2023
13	3/14/2023	3/20/2023	Mar 31	4/30/2023	5/15/2023	5/30/2023
14	3/21/2023	3/27/2023	Apr 7	5/7/2023	5/22/2023	6/6/2023
15	3/28/2023	4/3/2023	Apr 14	5/14/2023	5/29/2023	6/13/2023
16	4/4/2023	4/10/2023	Apr 21	5/21/2023	6/5/2023	6/20/2023
17	4/11/2023	4/17/2023	Apr 28	5/28/2023	6/12/2023	6/27/2023
18	4/18/2023	4/24/2023	May 5	6/4/2023	6/19/2023	7/4/2023
19	4/25/2023	5/1/2023	May 12	6/11/2023	6/26/2023	7/11/2023
20	5/2/2023	5/8/2023	May 19	6/18/2023	7/3/2023	7/18/2023
21	5/9/2023	5/15/2023	May 26	6/25/2023	7/10/2023	7/25/2023
22	5/16/2023	5/22/2023	Jun 2	7/2/2023	7/17/2023	8/1/2023
23	5/23/2023	5/29/2023	Jun 9	7/9/2023	7/24/2023	8/8/2023
24	5/30/2023	6/5/2023	Jun 16	7/16/2023	7/31/2023	8/15/2023
25	6/6/2023	6/12/2023	Jun 23	7/23/2023	8/7/2023	8/22/2023
26	6/13/2023	6/19/2023	Jun 30	7/30/2023	8/14/2023	8/29/2023
27	6/20/2023	6/26/2023	Jul 7	8/6/2023	8/21/2023	9/5/2023

ISSUE	SUBMIT START	*SUBMIT END 5 PM	SA PUBLISHED	30-DAY PR END	45-DAY PR END	60-DAY PR END
28	6/27/2023	7/3/2023	Jul 14	8/13/2023	8/28/2023	9/12/2023
29	7/4/2023	7/10/2023	Jul 21	8/20/2023	9/4/2023	9/19/2023
30	7/11/2023	7/17/2023	Jul 28	8/27/2023	9/11/2023	9/26/2023
31	7/18/2023	7/24/2023	Aug 4	9/3/2023	9/18/2023	10/3/2023
32	7/25/2023	7/31/2023	Aug 11	9/10/2023	9/25/2023	10/10/2023
33	8/1/2023	8/7/2023	Aug 18	9/17/2023	10/2/2023	10/17/2023
34	8/8/2023	8/14/2023	Aug 25	9/24/2023	10/9/2023	10/24/2023
35	8/15/2023	8/21/2023	Sep 1	10/1/2023	10/16/2023	10/31/2023
36	8/22/2023	8/28/2023	Sep 8	10/8/2023	10/23/2023	11/7/2023
37	8/29/2023	9/4/2023	Sep 15	10/15/2023	10/30/2023	11/14/2023
38	9/5/2023	9/11/2023	Sep 22	10/22/2023	11/6/2023	11/21/2023
39	9/12/2023	9/18/2023	Sep 29	10/29/2023	11/13/2023	11/28/2023
40	9/19/2023	9/25/2023	Oct 6	11/5/2023	11/20/2023	12/5/2023
41	9/26/2023	10/2/2023	Oct 13	11/12/2023	11/27/2023	12/12/2023
42	10/3/2023	10/9/2023	Oct 20	11/19/2023	12/4/2023	12/19/2023
43	10/10/2023	10/16/2023	Oct 27	11/26/2023	12/11/2023	12/26/2023
44	10/17/2023	10/23/2023	Nov 3	12/3/2023	12/18/2023	1/2/2024
45	10/24/2023	10/30/2023	Nov 10	12/10/2023	12/25/2023	1/9/2024
46	10/31/2023	11/6/2023	Nov 17	12/17/2023	1/1/2024	1/16/2024
47	11/7/2023	11/13/2023	Nov 24	12/24/2023	1/8/2024	1/23/2024
48	11/14/2023	11/20/2023	Dec 1	12/31/2023	1/15/2024	1/30/2024
49	11/21/2023	11/27/2023	Dec 8	1/7/2024	1/22/2024	2/6/2024
50	11/28/2023	12/4/2023	Dec 15	1/14/2024	1/29/2024	2/13/2024
51	12/5/2023	12/11/2023	Dec 22	1/21/2024	2/5/2024	2/20/2024
52	12/12/2023	12/18/2023	Dec 29	1/28/2024	2/12/2024	2/27/2024



**BSR/ASHRAE Addendum i
to ANSI/ASHRAE Standard 90.4-2019**

Public Review Draft

Proposed Addendum i to Standard 90.4-2019, *Energy Standard for Data Centers*

**First Public Review (December, 2022)
(Draft Shows Proposed Changes to Current Standard)**

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Foreword

This draft is to update the Normative References in Standard 90.4 2019.

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Addendum i to Standard 90.4-2019

Update Normative References

12. NORMATIVE REFERENCES

Reference	Title	Section
ASHRAE 1791 Tullie Circle, NE, Atlanta, GA 30329-2305 <u>180 Technology Parkway NW</u> <u>Peachtree Corners, GA 30092</u> , United States 1-404-636-8400; www.ashrae.org		3.1.1, 3.2, 4.1.1.1, 4.1.1.2, 4.1.1.3, 4.1.1.4, 4.1.1.5, 4.2.1.1, 4.2.1.2, 4.2.1.3, 4.2.2.1, 4.2.2.2, 4.2.2.3, 4.2.3, 4.2.4, 4.2.5, 4.2.5.1, 5.2.1, 6.1.1, 6.1.1.3.1, 6.4.2, 7.2.1, 8.1.1, 9.2.1, 10.2.1, 11.3, Table B-1, Table B-2, Table B-3, Figure C-1
ANSI/ASHRAE/IES Standard 90.1 (<u>2019</u> 2022)	Energy Standard for Buildings Except Low-Rise Residential Buildings	
ANSI/ASHRAE Standard 169 (<u>2013</u> 2022)	Climatic Data for Building Design Standards	Table 6.5
<i>Thermal Guidelines for Data Processing Environments</i>	4 th Edition	6.5.1

R.S. Briggs, R.G. Lucas, and Z.T. Taylor (paper)	Climate Classification for Building Energy Codes and Standards Part 1—Thermal Guidelines for Data Processing Environments	
<u>U.S. Securities and Exchange Commission (SEC)</u> <u>100 F Street, NE</u> <u>Washington, DC 20549, United States</u> www.sec.gov		
Release No. 34-47638; File No. S7-32-02	The Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System, April 7, 2003	3.2
National Fire Protection Association (NFPA) 1 Battery March Park, P.O. Box 9101 Quincy, MA 02269-9101, United States		
NFPA 7 Article 645 NFPA 70 Article 708 (2008)	Critical Operations Power Systems (COPS)	3.2
NFPA 70 (2014/2020)	National Electrical Code	3.2, 8.4.1.4
Telecommunications Industry Association <u>1310 North Courthouse Rd.</u> <u>Suite 890</u> <u>2500 Wilson Boulevard</u> Arlington, VA 22201, United States		
ANSI/TIA 942-2012 (2014)b 2017	Telecommunication Infrastructure Standard for Data Centers	3.2
U.S. Government Publishing Office (GPO) 732 North Capitol St. NW, Washington, DC		
47 CFR Chapter 1	Federal Communications Commission	3.2
Communications Act of 1934, Title II	Common Carriers	3.2
Pub. L. No. 109-58 (2005)	Energy Policy Act of 2005 (EPAct)	6.4.1, 8.4.1.9

Public Review Draft

Proposed Addendum ah to Standard 189.1-2020

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (December, 2022)
(Draft Shows Proposed Changes to Current Standard)

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Foreword

This addendum provides some corrections, revisions, and clarity to some sections and deletes others.

- *Exception to 7.4.1.1: The name of the referenced Green-e standard has changed. An informative note has been added for building projects outside of U.S. and Canada.*
- *Section 7.4.2.5 Air Curtains. This has been deleted because it is covered by ASHRAE Standard 90.1 which is more accurate and comprehensive and has been updated. We also need to delete the referenced standard from Chapter 11.*
- *Section 7.4.2.9 Building Envelope Trade-Off Option. The provision has been clarified.*
- *7.4.3.1.1 Water-Cooled Centrifugal Chiller Packages Efficiency Adjustment. This has been deleted because it is covered by ASHRAE Standard 90.1, which is more accurate and has been updated.*
- *7.4.3.10 Mechanical System Performance Path. This is new to ASHRAE 90.1-2022. It is a mechanical system tradeoff path and incorporates the Total System Performance Ratio (TSPRp). Similar to how the Building Envelope Trade-off path is handled in Standard 189.1, the Total System Performance Ratio (TSPRp) from ASHRAE Standard 90.1 would need to be modified in order to be used to comply with Standard 189.1.*
- *Table C1.1, 5. Building Envelope penetrations. The revision is made to make the performance path agree with the prescriptive path, which was not done when the requirement was added to the standard.*

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189.1-2020 Addendum ah

Revise as follows (sections not shown are not changed by this addendum):

7.4.1.1 Renewable Energy Systems. ...

...

Exception to 7.4.1.1: Building projects that demonstrate to the AHJ that they cannot comply with Section 7.4.1.1 shall contract for renewable electricity products complying with the Green-e Renewable Energy National Standard for Renewable Electricity Canada and the United States products of not less than 1.2 MWh/ft² (12.6 MWh/m²) of gross floor area of conditioned spaces and semiheated spaces, or an amount equal to 100% of the modeled annual energy use multiplied by 20 years, whichever is less. A combination of renewable electricity products and renewable energy systems shall be permitted to demonstrate compliance. RECs shall be tracked per Section 10.9.8.

(Informative note: Building projects outside of Canada and the United States should use controlling standards for REC products, where available.)

...

7.4.2.5 Air Curtains. ~~Where air curtains are provided at building entrances or building entrance vestibules, for the distance from the air curtain discharge nozzle to the floor, the air curtain unit shall produce a minimum velocity of 6.6 ft/s (2.0 m/s) in accordance with ANSI/AMCA 220 and be installed in accordance with manufacturer's instructions. Automatic controls shall be provided that will operate the air curtain with the opening and closing of the door. Air curtains and their controls shall comply with Section 10.3.2.1.~~

...

7.4.2.9 Building Envelope Trade-Off Option. The *building envelope* trade-off option in ANSI/ASHRAE/IES Standard 90.1, Section 5.6, shall not be used for compliance with Section 7.4.2 ~~apply unless except where the procedure trade-off option~~ incorporate the modifications and additions to ANSI/ASHRAE/IES Standard 90.1 required ~~noted~~ in Section 7.4.2.

...

7.4.3.1.1 Water-Cooled Centrifugal Chiller Packages Efficiency Adjustment

- a. ~~For Water-Cooled Centrifugal Units Rated per AHRI Standard 550/590 (I-P).~~ Equipment not designed for operation at AHRI Standard 550/590 test conditions of 44.00°F leaving and 54.00°F entering chilled fluid temperatures, and with 85.00°F entering and 94.30°F leaving condenser fluid temperatures, shall have maximum full load (FL) kW/ton and part load rating requirements adjusted using the following equations:

$$FL_{adj} = FL / K_{adj}$$

$$PLV_{adj} = IPLV / K_{adj}$$

$$K_{adj} = A \times B$$

where

FL = full load kW/ton value from ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-3

FL_{adj}	=	maximum full load kW/ton rating, adjusted for nonstandard conditions
IPLV	=	IPLV value from ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-3
PLV_{adj}	=	maximum <i>NPLV</i> rating, adjusted for nonstandard conditions
A	=	$0.000000145920 \times (LIFT)^4 - 0.0000346496 \times (LIFT)^3 + 0.00314196 \times (LIFT)^2 - 0.147199 \times (LIFT) + 3.93073$
B	=	$0.0015 \times LvgEvap + 0.934$
LIFT	=	$LvgCond - LvgEvap$
LvgCond	=	full load condenser leaving fluid temperature, °F
LvgEvap	=	full load evaporator leaving temperature, °F

The FL_{adj} and PLV_{adj} values are only applicable for centrifugal chillers meeting all of the following full load design ranges:

- $36.00^\circ\text{F} \leq LvgEvap \leq 60.00^\circ\text{F}$
- $LvgCond \leq 115.00^\circ\text{F}$
- $20.00^\circ\text{F} \leq LIFT \leq 80.00^\circ\text{F}$

Centrifugal chillers designed to operate outside of these ranges are not covered by this standard.

- b. ~~For Water-Cooled Centrifugal Units Rated per AHRI Standard 551/591 (SI). Equipment not designed for operation at AHRI Standard 551/591 test conditions of 7.00°C leaving and 12.00°C entering chilled fluid temperatures, and with 30.00°C entering and 35.00°C leaving condenser fluid temperatures, shall have maximum full load (FL) COP and part load rating requirements adjusted using the following equations:~~

$$FL_{adj} = FL \times K_{adj}$$

$$PLV_{adj} = IPLV \times K_{adj}$$

$$K_{adj} = A \times B$$

where

FL	=	full load COP value from ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-3
FL_{adj}	=	minimum full load COP rating, adjusted for nonstandard conditions
IPLV	=	IPLV value from ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-3
PLV_{adj}	=	minimum <i>NPLV</i> rating, adjusted for nonstandard conditions
A	=	$0.00000153181 \times (LIFT)^4 - 0.000202076 \times (LIFT)^3 + 0.0101800 \times (LIFT)^2 - 0.264958 \times LIFT + 3.93073$
B	=	$0.0027 \times LvgEvap + 0.982$

$$\text{LIFT} = \text{LvgCond} - \text{LvgEvap}$$

LvgCond = full load condenser leaving fluid temperature, °C

LvgEvap = full load evaporator leaving temperature, °C

The FL_{adj} and PLV_{adj} values are only applicable for centrifugal chillers meeting all of the following full load design ranges:

$$-2.20^{\circ}\text{C} \leq \text{LvgEvap} \leq 15.60^{\circ}\text{C}$$

$$\text{LvgCond} \leq 46.00^{\circ}\text{C}$$

$$11.00^{\circ}\text{C} \leq \text{LIFT} \leq 44.00^{\circ}\text{C}$$

Centrifugal chillers designed to operate outside of these ranges are not covered by this standard.

...

7.4.3.10 Mechanical System Performance Path The Mechanical System Performance Path in ANSI/ASHRAE/IES Standard 90.1, Section 6.6.2, shall not be used for compliance with Section 7.4.3 except where the path incorporates the modifications and additions to ANSI/ASHRAE/IES Standard 90.1 required in Section 7.4.3.

....

11. NORMATIVE REFERENCES

ANSI/AMCA 220-05 (R2012)	Laboratory Methods of Testing Air Curtain Units for Aerodynamic	7.4.2.5
	7.4.2.5	

Appendix C

Table C1.1 Modifications and Additions to ANSI/ASHRAE/IES Standard 90.1, Appendix G, Table G3.1

...

5. Building Envelope When the total area of penetrations from mechanical equipment listed in ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-4, exceeds 24% of the opaque above-grade wall area, the mechanical equipment penetration area shall be calculated as a separate assembly with a published U-factor value for that equipment or a default U-factor of 0.5 Btu/h·ft ² ·°F (3 W/m ² ·K).	No modifications
---	------------------

...

Public Review Draft

Proposed Addendum ak to Standard 189.1-2020

Standard for the Design of High- Performance Green Buildings Except Low-Rise Residential Buildings

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Foreword

This addendum aligns with the requirements proposed for EPD disclosure in Addendum z. The requirements include a minimum number of procured products to meet GWP limits set at 125% of the industry-wide EPD average. Flexibility is allowed in selecting which products are subject to the limits.

A jurisdiction-determined percentage of the cost of procured products must have a global warming potential (GWP) less than 125% of the industry average. In addition to the jurisdiction selected percentage, a minimum of 10 building products, and all of the building products representing not less than 5% of the total cost of building materials, must meet the 125% GWP targets.

Projects can comply by providing an EPD or LCA for each subject building product that show the product's GWP is less than 125% of the industry average for cradle-to-gate production. The product and the industry-wide EPD baseline must be governed by the same Product Category Rules for the same geographic region. Product assemblies, like windows or composite flooring, can be used for compliance when component parts representing at least 80% of the assembly's GWP meet the product's GWP limit.

This addendum is to be added before the current section 9.4 Material Selection. The numbering and ordering of Section 9 was modified as an editorial change in Addendum u, which removed the prescriptive and performance paths from the section. Section 9 numbering reflecting both addendum z and this current addendum would be:

9.1 Scope

9.2 Compliance

9.3 Extracting, Harvesting, and/or Manufacturing

9.4 Environmental Product Declarations and Global Warming Potential

9.4.1 Environmental Product Declarations and Global Warming Potential Reporting

9.4.2 Product Procurement

9.5 Material Attributes

9.5.1 Reduced Impact Materials

9.5.1.1 Recycled Content and Salvaged Material Content

9.5.1.1.1 Recycled Content

9.5.1.1.2 Salvaged Material Content

9.5.1.2 Regional Materials

9.5.1.3 Biobased Products

9.5.1.3.1 Wood Building Components

9.5.1.4 Third-Party Multiattribute Certification

- 9.5.2 Life-Cycle Assessment (LCA)
 - 9.5.2.1 LCA Performance Metric
 - 9.5.2.2 Procedure
 - 9.5.2.3 Reporting
- 9.6 Construction and Demolition Waste Management
 - 9.6.1 Diversion
 - 9.6.2 Total Waste
 - 9.6.3 Construction and Demolition Waste Management Plan
- 9.7 Areas for Storage and Collection of Recyclables and Discarded Goods
 - 9.7.1 Recyclables
 - 9.7.2 Reusable Goods
 - 9.7.3 Fluorescent and High-Intensity Discharge (HID) Lamps and Ballasts
 - 9.7.4 Electronics and Batteries
- 9.8 Refrigerants
- 9.9 Mercury Content Levels of Lamps

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Addendum *ak* to 189.1-2020

Add definitions to Section 3 as follows:

Building product: Any material or product or component part of a *building product assembly* procured for permanent installation in the *building project*. Any material or product or component part of a *building product assembly* with the same specification requirements, and classified by the same product category rules, shall be defined as the same *building product*.

Building product assembly: *Building products* delivered to the project site as a completed assembly prepared for installation.

Cradle-to-gate: Inclusive of the production stage modules A1 through A3, according to ISO 21930.

Modify Table 4.2 as follows.

Table 4.2 Requirements Determined by the Jurisdiction

Section	Section Title and Description	Jurisdictional Requirement
9.4.2.a	<u>Product Procurement</u>	<u>[] 10%</u> <u>[] 15%</u>

Add new section 9.4.2.

9.4 Environmental Product Declarations and Global Warming Potential

9.4.1 Environmental Product Declarations and Global Warming Potential Reporting *[proposed addendum z]*

9.4.2 [JO] Product Procurement.

Documentation in accordance with 9.4.2.1 and 9.4.2.2 and the corresponding industry-wide Type III EPD, where available, shall be submitted for not less than 10 *building products* representing not less than 15% [JO] of the total estimated cost of *building products*. Any *building product* representing not less than 5% of the total estimated cost of *building products* shall be included in this requirement.

9.4.2.1 Building Product Documentation. A *building product's* global warming potential (GWP) or in the case of a *building product assembly's* GWP, component parts comprising not less than 80% of the assembly's

total cost or weight, shall be documented with one of the following:

- a) **Product-specific Declaration.** A product-specific, Type III EPD shall be manufacturer-specific. Type III EPDs shall comply with the goal and scope for not less than *cradle-to-gate* requirements in accordance with ISO 14025 and ISO 21930.
- b) **Product Life Cycle Report.** A publicly available third-party report of a product's life cycle assessment (LCA), in accordance with ISO 14040 and ISO 14044. The report shall verify compliance with the goal and scope for not less than the *cradle-to-gate* requirements.

9.4.2.2 Compliance. Submitted documentation shall document a *cradle-to-gate* GWP of less than 125% of the industry average *cradle-to-gate* GWP for the *building product* in accordance with Section 9.4.2.2.1 or for *building product assemblies* in accordance with 9.4.2.2.2.

All product-specific and industry-wide EPDs for a *building product* shall be based on the same regionally applicable Product Category Rule for the *building product*.

9.4.2.2.1 Determination of Industry Average. The industry-wide average GWP for the *building product* shall be based on one of the following:

- a) a currently valid publicly available Type III industry-wide EPD (IW-EPD) or LCA developed for the geographic region in which the building project is constructed,
- b) where no Type III IW-EPD or LCA is available for a building product representing not less than 5% of the total cost of *building products* permanently installed in the project, the average of not less than 5 publicly available, product-specific Type III EPDs using the same Product Category Rule for the same geographic region for the *building product* is allowed to be used as the industry average.

9.4.2.2.2 Building Product Assemblies. *Building product assemblies* shall document compliance with this section based on either:

- a) the *building product assembly's* publicly available Type III IW-EPD or LCA developed for the geographic region in which the building project is constructed,
- or
- b) the individual product component parts' publicly available Type III EPD or LCAs comprising at least 80% of the *building product assembly's* total cost or weight.

Add references to Informative Appendix G

INFORMATIVE APPENDIX G

G.1 INFORMATIVE REFERENCES

G.2 POTENTIAL SOURCES OF NORTH AMERICAN INDUSTRY-WIDE ENVIRONMENTAL PRODUCT DECLARATIONS

American Wood Council, Canadian Wood Council

Canadian Wood Council

Athena Sustainable Materials Institute

American Institute of Steel Construction

Steel Tube Institute

Concrete Reinforcing Steel Institute

Steel Deck Institute

Steel Joist Institute

EPS Industry Alliance

Spray Polyurethane Foam Association (SPFA)

Sustainable Minds

National Glass Association

Metal Construction Association

Resilient Floor Covering Institute

National Ready Mixed Concrete Association

This ends the changes available for comment on Addendum ak. The information presented below is for informational purposes only and not open for public comment.

Note to reviewers: Section 9.4.1 is part of Addendum z and is provided below for reference.

9.4.1 Environmental Product Declarations and Global Warming Potential Reporting.

9.4.1.1 Environmental Product Declarations (EPDs). EPDs shall be submitted for products that together represent not less than 25% of the total cost of all products permanently installed in the building project such that a, b, c and d are satisfied. EPDs submitted shall:

- a) represent products that are permanently installed in the building project at the time of issuance of the certificate of occupancy,
- b) represent products from not less than 10 different manufacturers,
- c) represent not less than 20 different products, and
- d) include any product with a value that exceeds 5% of the total cost of all products permanently installed in the building project.

A value of 45% of the total construction cost shall be permitted to be used in lieu of the total cost of all products permanently installed in the building project.

9.4.1.2 EPD Requirements. EPDs used to comply with 9.4.1.1 shall be third-party verified Type III EPDs consistent with ISO 21930 or ISO 14025, with not less than a cradle-to-gate scope. Where an industrywide or product-specific Type III EPD is not available for a product, a critically reviewed third-party life cycle assessment report based on ISO Standards 14040 and 14044 or third-party verified summary thereof shall be permitted as an alternative method for demonstrating compliance.

Product compliance shall be shown by submitting either a product-specific EPD or a regional- or industry-wide EPD. Each product-specific EPD shall be counted as one product. Each regional- or industry-wide EPD shall be counted as ½ product.

Products delivered to the building project site as an assembly comprised of multiple components and ready for installation into the building project shall be considered a single product. Compliance with 9.4.1.1 shall be based on either:

- a) an EPD representing the assembly, or
- b) EPDs of individual components within the assembly.

9.4.1.3 Reporting of Global Warming Potential Contribution. For each of the products with EPDs used to comply with section 9.4.1.1, the global warming potential reported in the applicable EPD as a declared unit or functional unit shall be multiplied by the number of declared units or functional units of product used in the building project. A report listing the results on a per product basis and the total square footage of the building project shall be provided to the project owner and be made available to the authority having jurisdiction (AHJ).

Public Review Draft

Proposed Addendum am to Standard 189.1-2020

Standard for the Design of High- Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (December, 2022)
(Draft Shows Proposed Changes to Current Standard)

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

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Foreword

This addendum cleans up Section 4.1 by removing text that is not needed. In earlier versions of 189.1, Section 4.1 described the use of prescriptive and performance options for compliance that were patterned on Standard 90.1. Only Section 7 still maintains the alternatives of prescriptive and performance paths, and the use of those alternatives is fully described within Section 7.2. There is no need to repeat the material from Section 7.2 in Section 4.1. This addendum will delete that duplicative text.

[Note to Reviewers: This addendum makes proposed changes to the standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the 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 am to 189.1-2020

...

Modify Section 4.1 as follows:

4.1 General. *Building projects* shall comply with either of the following:

- a. Sections 4 through 11. ~~Within each Section 4 through 9, building projects shall comply with all mandatory provisions (x.3) and, where offered, either the~~
 1. ~~Prescriptive Option (x.4) or~~
 2. ~~Performance Option (x.5).~~
- b. ASHRAE/ASHE Standard 189.3.

Informative Note: Per its scope, Standard 189.3 is applicable only to “patient care areas and related support areas of health care facilities, including hospitals, nursing facilities, outpatient facilities and their *sites*.”

Public Review Draft

Proposed Addendum t to Standard 189.1-2020

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

Second Public Review (December 2022)
(Draft Shows Proposed Independent Substantive
Changes to Previous Public Review Draft)

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

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BSR/ASHRAE/ICC/USGBC/IES Addendum t to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* 2nd Public Review Draft, Independent Substantive Changes.

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Foreword

Indoor agriculture energy usage is projected to grow significantly nationwide in this decade, driven in large part by state legalization of medical and recreational marijuana and growing demand for locally grown produce. In 2017, a total of 20 million square feet of building space was dedicated to growing crops indoors which can have energy use intensities that rival data centers. Energy use in these facilities is dominated by lighting systems which accounts for 25 to 70% of the facilities energy use and HVAC and dehumidification systems which accounts of the bulk of the remaining energy use. This addendum addresses the energy use of these facilities in three ways.

The proposal adds additional lighting efficacy and renewable energy requirements to these facilities. Lighting in non-stacked indoor operations operate on average 4,600 hours per year or 12 hours per day. ASHRAE 90.1-2022 establishes efficacy requirements for lighting in indoor horticulture at 1.9 PPE, and 1.7 PPE for greenhouses. This proposal increases the efficacy requirement to 2.1 PPE. 92% of LED products that meet the Design Light Consortium criteria already meet an efficacy of 2.1 PPE which is a 10% savings over a 1.9PPE standard and 20% savings over a 1.7PPE standard. This proposal will also require lighting from these facilities be provided by renewable energy to account for increased carbon emissions from indoor grow and greenhouse facilities compared with growing crops outdoors. This measure will increase construction costs but reduce operating costs.

This independent substantive change (ISC) adds an exception to the renewable energy requirement for greenhouses and grow facilities dedicated to food for human consumption.

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

Addendum to *t* 189.1-2020, 2nd PPR, ISC

Revise definitions to Section 3 as follows:

greenhouse: a *space* with a skylight roof ratio of 50% or more above the growing area, used exclusively for horticultural production, cultivation or maintenance by utilizing a sunlit environment. ~~Greenhouses are those that are, and is~~ erected for a period of 180 days or more.

horticultural lighting: electric lighting used for horticultural production, cultivation or maintenance with either cord-and-plug or hard-wired connections for electric power.

indoor grow space: a *space*, other than a *greenhouse*, used exclusively for horticultural production, cultivation, or maintenance.

photosynthetic photon efficacy (PPE): photosynthetic photon flux between 400- 700nm emitted by a light source divided by its electrical input power, expressed in units of micromoles per second per watt, or micromoles per joule ($\mu\text{mol/J}$) as defined by ANSI/ASABE S640

Revise as follows:

7.3.6 Energy Systems for Horticulture.

7.3.6.1 Horticultural Lighting. *Luminaires* in *indoor grow spaces* and *greenhouses* ~~spaces~~ used for *horticultural lighting* shall have a *photosynthetic photon efficacy (PPE)* of ~~at least~~ not less than 2.1 $\mu\text{mol/J}$.

7.3.6.2 Additional Renewable Energy. Additional renewable energy for *horticultural lighting* shall be provided and sized to provide the amount of adjusted renewable energy calculated in accordance with Section 7.4.1.2 and qualified in accordance with Section 7.4.1.3. The adjusted renewable energy shall be equal to or greater than the installed *horticultural lighting* wattage multiplied by 4,600 full load hours per year for *indoor grow spaces* and the installed *horticultural lighting* wattage multiplied by 2,100 full load hours per year for *greenhouses*.

Exception to 7.3.6.2: *Greenhouses* and *indoor grow spaces* dedicated to food for human consumption.

Revise Normative Reference as follows:

American Society of Agricultural and Biological Engineers (ASABE) 2950 Niles Road St. Joseph, MI 49085 USA 1-269-429-0300; www.asabe.org
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ANSI/ASABE S640-2017	Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms)	3
United States Department of Energy (USDOE) Energy Information Administration Washington, DC 20585, United States 1-202-586-500; www.eia.doe.gov/emeu/ebecs/content.html and http://tonto.eia.doe.gov/state		
40 CFR, Part 430	Energy Conservation Program for Consumer Products	7.3.6



**American Water Works
Association**

Dedicated to the World's Most Important Resource™

ANSI/AWWA C300a-XX

Addendum to

ANSI/AWWA C300-22

Standard

for

Reinforced Concrete Pressure Pipe, Steel-Cylinder Type

Revise Sec. 4.4.1.1 as follows:

4.4.1.1 Type. Cement used in concrete and mortar shall conform to ASTM C150 Type I or Type II, or ASTM C595 Type IL. Sampling and testing shall conform to the individual ASTM specifications designated therein. Unless otherwise specified by the purchaser, raw or calcined natural pozzolan or fly ash, or slag cement may be used as a cement replacement. If pozzolanic materials are used, not less than 10 percent and not more than 20 percent of the portland cement by weight may be replaced by pozzolanic materials. The pozzolanic materials shall conform to ASTM C618, except that loss on ignition shall not exceed 4 percent. If slag cement is used, not more than 20 percent of the portland cement by weight may be replaced by slag cement. The slag cement shall conform to the requirements of Grade 100 or 120 of ASTM C989/C989M.



**American Water Works
Association**

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ANSI/AWWA C302a-XX

Addendum to

ANSI/AWWA C302-22

Standard

for

Reinforced Concrete Pressure Pipe, Noncylinder Type

Revise Sec. 4.4.1.1 as follows:

4.4.1.1 Type. Cement used in concrete and mortar shall conform to ASTM C150 Type I or Type II, or ASTM C595 Type IL. Sampling and testing shall conform to the designated individual ASTM specifications. Unless otherwise specified, raw or calcined natural pozzolan or fly ash or slag cement may be used as a cement replacement for the concrete. If pozzolanic materials are used, not less than 10 percent and not more than 20 percent of the portland cement, by weight, may be replaced by pozzolanic material. The pozzolanic material shall conform to ASTM C618, except that loss on ignition shall not exceed 4 percent. If slag cement is used, not more than 20 percent of the portland cement by weight may be replaced by slag cement. The slag cement shall conform to the requirements of Grade 100 or 120 of ASTM C989/C989M.

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NSF/ANSI Standard for Food Equipment –

Dispensing Freezers

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1.2 Scope

This Standard contains requirements for the following equipment: dispensing freezers that process and freeze previously pasteurized product (e.g., soft ice cream, ice milk, yogurt, malts, custards) and dispense it directly into the consumer's container; dispensing freezers that dispense premanufactured frozen product (e.g., ice cream) directly into the consumer's container; and batch dispensing freezers.

This standard also contains requirements for dispensing freezers that are designed for customer self-service upon insertion of a token or card that is issued by the food establishment.

The materials, design, and construction requirements of this Standard may also apply to items that are manufactured as a component of a dispensing freezer.

Dispensing freezer components and materials covered under other NSF or NSF/ANSI Standards or Criteria shall also comply with the requirements therein. This Standard is not intended to restrict new unit design, provided that such design meets the minimum specifications described herein.

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7.0 Product Literature

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7.5 Dispensing Freezers, Token or Card Operated

Dispensing freezers that are designed for customer self-service upon insertion of a token or card that is issued by the food establishment shall have a permanent marking that states:

"This equipment is intended for use in a food establishment".

***Rationale:** the new language adds a provision that allows dispensing freezers equipped with a token or card reader to be evaluated and certified to NSF/ANSI 6 instead of NSF/ANSI 25. Moreover, design and construction and performance requirements in NSF/ANSI 6 that are not included in NSF/ANSI 25 are critical to the protection of public health.*

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NSF/ANSI Standard For Wastewater Technology –

8 Performance testing and evaluation

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8.5.2.1.3 pH

The average pH of all individual effluent samples shall be between 6.0 and 9.0. The average pH is the sum of individual antilog (base-10) of the negative of the pH measurements taken during a given period, divided by the total number of measurements taken during the same period, transformed to a log (base-10) value. This will return a negative value. Change the sign from negative to positive to get the average pH.

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Tracking #40i55r1 et al

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Revisions to: NSF/ANSI 40 (40i55r1); NSF/ANSI 41 (41i14r1); NSF/ANSI 46 (46i45r1); NSF/ANSI 245 (245i34r1); NSF/ANSI 350 (350i76r1)

Revision to NSF/ANSI 40-2022

Revision 1, Issue 55 (December 2022)

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NSF/ANSI Standard
For Wastewater Technology –

Residential Wastewater Treatment Systems

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5 Design and construction

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5.10 Dataplate and service label

5.10.1 Systems shall have two permanent and legible dataplates. One dataplate shall be affixed to the front of the electrical control box. The second dataplate shall be placed on the tank, aeration equipment assembly, or riser at a location accessed during maintenance cycles and inspections. The dataplates shall include:

- manufacturer's name and address;
- model number;
- ~~— serial number (required on one dataplate only);~~
- identification or tracking number options including, but not limited to:
 - batch number; or
 - lot number; or
 - date code; or
 - serial number; and
- rated daily hydraulic capacity of the system; and
- the system classification as determined with the performance testing and evaluation requirements described herein.

5.10.2 A clearly visible label or plate that provides instructions for obtaining service shall be permanently located near the failure signal.

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Tracking #40i55r1 et al

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Revisions to: NSF/ANSI 40 (40i55r1); NSF/ANSI 41 (41i14r1); NSF/ANSI 46 (46i45r1); NSF/ANSI 245 (245i34r1); NSF/ANSI 350 (350i76r1)

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Non-liquid Saturated Treatment Systems

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5 Design and construction

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5.10 Data plate and service label

5.10.1 A permanent and legible data plate shall be placed on all systems at a location accessed during maintenance cycles and inspections. A second data plate shall be affixed to the front of the electrical control box, if applicable. The data plates shall include:

- manufacturer's name, address, and telephone number;
- model number;
- ~~serial number (required on one dataplate only);~~
- identification or tracking number options including, but not limited to:
 - batch number; or
 - lot number; or
 - date code; or
 - serial number; and
- rated capacity of the system;
- the system classification(s) as determined with the performance testing and evaluation requirements described herein; and
- a statement that refers to the product literature for all maintenance and service requirements.

An additional data plate, or label, or sticker shall be prominently displayed for the user of the system. It shall include:

- a detailed description of the type, volume, and frequency that bulking agents and other additives are to be added to the system;
- a detailed description of the types of food (in terms of vegetable matter, oil and grease, and meat/animal material) the system is capable of handling (provided the system is designed to handle food wastes); and
- a brief description of common items that should and should not be added to the system.

Tracking #40i55r1 et al

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Revisions to: NSF/ANSI 40 (40i55r1); NSF/ANSI 41 (41i14r1); NSF/ANSI 46 (46i45r1); NSF/ANSI 245 (245i34r1); NSF/ANSI 350 (350i76r1)

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5.10.2 A clearly visible label or plate that provides instructions for obtaining service shall be permanently located near the failure signal, if applicable (see 5.8.1). The label or plate shall contain at a minimum the manufacturer's name, address, and telephone number.

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Evaluation of Components and Devices Used in Wastewater Treatment Systems

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5 Design and construction

Components and devices shall be fabricated to perform their intended functions when installed and operated according to the manufacturer's instructions. They shall not be adversely affected by the use environment.

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5.4 Data plate

A permanent data plate shall be provided. The plate shall be inscribed and installed so as to be easily seen and understood, and shall be securely attached at a location normally visible following recommended installation. It shall include the following:

- name and address (city and state) of manufacturer;
- model and serial number designation;
- identification or tracking number options including, but not limited to:
 - batch number; or
 - lot number; or
 - date code; or
 - serial number; and
- design capacity or rated daily capacity if applicable; and
- particle size rating, as applicable.

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Residential Wastewater Treatment Systems – Nitrogen Reduction

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Tracking #40i55r1 et al

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5 Design and construction

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5.10 Data plate and service label

5.10.1 Systems shall have two permanent and legible data plates. One data plate shall be affixed to the front of the electrical control box. The second data plate shall be placed on the tank, aeration equipment assembly, or riser at a location accessed during maintenance cycles and inspections. The data plates shall include:

- manufacturer's name and address;
- model number; designation;
- serial number (required on one data plate only);
- identification or tracking number options (required on one data plate only) including, but not limited to:
 - batch number; or
 - lot number; or
 - date code; or
 - serial number; and
- rated daily hydraulic capacity of the system; and
- the system classification as determined with the performance testing and evaluation requirements described herein.

5.10.2 A clearly visible label or plate that provides instructions for obtaining service shall be permanently located near the failure signal.

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Onsite Residential and Commercial Water Reuse Treatment Systems

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5 Design and construction

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5.10 Dataplate and service label

5.10.1 Wastewater treatment systems

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Revisions to: NSF/ANSI 40 (40i55r1); NSF/ANSI 41 (41i14r1); NSF/ANSI 46 (46i45r1); NSF/ANSI 245 (245i34r1); NSF/ANSI 350 (350i76r1)

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The system shall have a permanent and legible data plate. The data plate shall include:

- manufacturer's name and address;
- model number;
- ~~serial number;~~
- identification or tracking number options including, but not limited to:
 - batch number; or
 - lot number; or
 - date code; or
 - serial number; and
- rated daily hydraulic capacity of the system; and
- the system classification of single-family residential (R), or multi-family or commercial (C), as determined by the performance testing and evaluation requirements described herein.

5.10.2 Greywater treatment systems

The system shall have a permanent and legible dataplate. The dataplate shall include:

- manufacturer's name and address;
- model number;
- ~~serial number;~~
- identification or tracking number options including, but not limited to:
 - batch number; or
 - lot number; or
 - date code; or
 - serial number; and
- rated daily hydraulic capacity of the system;
- restrictions on the source of greywater treated by the system, being either laundry or bathing water or both, as determined by the performance testing and evaluation requirements described herein; and
- the system classification of single-family residential (R), or multi-family or commercial (C), as determined by the performance testing and evaluation requirements described herein.

5.10.3 A clearly visible label or plate that provides instructions for obtaining service shall be permanently located near the failure signal.

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Revision to NSF/ANSI 44-2021
Issue 52 Revision 2 (November 2022)

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NSF/ANSI Standard for Drinking Water Treatment Units –

Residential Cation Exchange Water Softeners

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2 Normative references

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40 CFR Part 141, *National Primary Drinking Water Regulations*, ~~July 1, 2002~~³

40 CFR Part 143, *Other Safe Drinking Water Act Regulations*, Subpart A, *National Secondary Drinking Water Regulations*, ~~July 1, 2002~~³

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EPA 600/4-79-020, *Methods for the Chemical Analysis of Water and Wastes*, March 1983¹⁰

EPA 600/4-82-0574-84-053, *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, May 2002 ~~June 1984~~¹⁰

EPA 600/4-88-039, *Methods for the Determination of Organic Compounds in Drinking Water*, December 1988¹⁰

EPA 600/4-90-020, *Methods for the Determination of Organic Compounds in Drinking Water, Supplement 1*, July 1990¹⁰

EPA 600/R-94-111, *Methods for the Determination of Metals in Environmental Samples, Supplement 1*, May 1994¹⁰

*NIST Standard Reference Database 1A (NIST/EPA/NIH Mass Spectral Library with Search Program), NIST20/NIST v20*¹¹

NSF/ANSI 53, *Drinking Water Treatment Units – Health Effects*

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¹¹National Institute of Standards and Technology. 100 Bureau Drive, Gaithersburg, MD 20899. <www.nist.gov>

Rationale: *Removes publication dates from CFR documents for consistency with other DWTU standards, corrects document number and publication year of an EPA document, and adds a normative reference for a NIST library.*

4.3 Gas chromatography / mass spectroscopy (GC/MS) analysis

4.3.1 General requirements for GC/MS analysis

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4.3.1.1 Target compounds shall be validated in accordance with the requirements of the referenced method. US EPA Methods 524.2 and 625⁴ have specific validation requirements including precision and accuracy requirements as well as demonstration of sensitivity (method detection limit study or MDL).

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For US EPA Method 625,⁴ the minimum instrument operation requirements for GC/MS analysis shall be in accordance with those protocols as defined by the method with the following modifications:

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NOTE — At the laboratory's discretion, a calibration may be performed specifically for the compound in question, with the reporting of its data from this second calibration. It should be understood, that if the laboratory utilizes this approach (calibrating for the specific analyte) all method requirements as specified by US EPA Method 625 shall ~~shall~~ should be achieved.

Rationale: Notes cannot contain normative language, so changes “shall” to “should”.

4.3.1.2 TICs are identified by comparison of the spectrum of the unknown to the mass-spectral reference library utilizing “probability-based matching” (as available from instrument manufacturers) as well as interpretation by the analyst. The laboratory shall report the TIC with the best match factor (the match factor shall not be reported) except in the following circumstances:

- due to the complex nature of GC/MS interpretation and identification, when reviewing the list of possible matches for any particular TIC peak, the laboratory has the authority to assign the identification to a compound “hit” with a lower numeric match factor from the library search algorithm;
- the laboratory may determine that none of the returned compounds by the automated search algorithm is a good match for the unknown peak. In this case the compound is reported as an “unknown”;
- the laboratory may utilize manual spectral interpretation to identify the peak in question;
- all TICs detected at a concentration greater than or equal to 3.0 ppb shall be reported.

The library used during the analysis shall be National Institute of Standards and Technology (NIST) ~~v20 (NIST20)–2007~~ or most current version. Additional spectral libraries may be used to assist in the identification of unknown compounds. For TICs, the concentration is estimated by comparison of its total ion area response to the total ion area response of the nearest internal standard. For TICs, a response factor of “1” (one) shall be utilized for the purposes of calculating the TICs estimated concentration.

Rationale: Updates the NIST spectral library version and corrects “spectra” or “spectral”.

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Table 4.3
Extraction testing parameters (volatiles)

Analyte	CAS Number	Maximum reporting limit (RL) (mg/L)	US EPA Method(s)
• • •			
xylenes (total) o-xylene ² or 1,2-xylene, m-xylene, p-xylene	95-47-6 106-42-3 108-38-3	0.1	524.2, 524.3
• • •			

Rationale: Removes footnote citation added in error.

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Revision to NSF/ANSI 44-2021
Issue 52 Revision 2 (November 2022)

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5.1.3.2 Hydrostatic pressure test – Complete systems and components

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Table 5.1
Structural integrity performance testing

Systems and components	Hydrostatic pressure test ¹	Cyclic pressure test ¹
complete systems with pressure vessels having a diameter < 203 mm (8 in)	3 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure
complete systems with pressure vessels having a diameter ≥ 203 mm (8 in)	2.4 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure
complete disposable systems with pressure vessels having a diameter < 203 mm (8 in)	3 × maximum working pressure or 2,070 kPa (300 psig)	10,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure, whichever is greater
complete disposable systems with pressure vessels having a diameter ≥ 203 mm (8 in)	2.4 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure, whichever is greater
disposable pressure vessels and components	3 × maximum working pressure or 2,070 kPa (300 psig)	10,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure, whichever is greater
metallic pressure vessels having a diameter < 203 mm (8 in) ²	3 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure
metallic pressure vessels having a diameter ≥ 203 mm (8 in) ²	2.4 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure
nonmetallic pressure vessels having a diameter < 203 mm (8 in)	3 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure
nonmetallic pressure vessels having a diameter ≥ 203 mm (8 in)	2.4 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure
valves and controls ³	3 × maximum working pressure or 2,070 kPa (300 psig)	100,000 cycles at 0 to 1,040 kPa (0 to 150 psig) or maximum working pressure

¹ When a choice is given in the Table, testing shall be done at the greater pressure.

² Metallic pressure vessels require measurement of permanent circumference and head deflection. The pressure vessel circumference shall not exhibit a permanent increase of more than 0.2% when measured at the midsection and at 30-cm (12-in) intervals. The top and bottom head deflection of the pressure vessel shall not exhibit a permanent deflection exceeding 0.5% of the vessel diameter.

³ Subject to line pressure and tested as separate components.

Rationale: Adds missing “or” to the “Hydrostatic pressure test” column in rows 2 and 4.

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8.1 Installation, operation, and maintenance instructions

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— for DIR water softeners whose manufacturers choose to include statements of salt efficiency performance and water consumption during regeneration:

- the rated salt efficiency, reported as determined in accordance with Section 7.1.1; and
- the water consumption, reported as determined in accordance with Section 7.1.1.

NOTE — For DIR water softeners, inclusion of salt efficiency performance and water consumption during regeneration are optional. However, if this information is provided, the two items above ~~shall~~ **should** be reported.

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— a diagram showing proper air gap installation to the waste connection;

NOTE — Waste connections or drain outlets ~~shall~~ **should** be designed and constructed to provide for connection to the sanitary waste system through an air gap of two pipe diameters or 25 mm (1 in), whichever is larger.

Rationale: Notes cannot contain normative language, so changes “shall” to “should”.

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Issue 46 Revision 1 (December 2022)

[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 **gray 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 Drinking Water Treatment Units –

Drinking Water Distillation Systems

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2 Normative references

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40 CFR Part 143, ~~US EPA National Secondary Drinking Water Regulations~~ **Other Safe Drinking Water Act Regulations, Subpart A, National Secondary Drinking Water Regulations**³

~~56 CFR Part 357, US EPA National Secondary Drinking Water Regulations~~³

APHA/AWWA/WEF, *Standard Methods for the Examination of Water and Wastewater*, (hereinafter referred to as *Standard Methods*)⁴

EPA 600/4-79-020, *Methods for the Chemical Analysis of Water and Wastes*, March 1983⁵

~~EPA-600/4-82-057~~ ~~EPA-600/4-84-053~~, *Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, May 2002 ~~June 1984~~⁵

EPA 600/4-88/039, *Methods for the Determination of Organic Compounds in Drinking Water*, December 1988⁵

EPA 600/4-90/020, *Methods for the Determination of Organic Compounds in Drinking Water – Supplement 1*, July 1990⁵

EPA 600/4-91/010, *Methods for the Determination of Metals in Environmental Samples*, June 1991⁵

NIST Standard Reference Database 1A (NIST/EPA/NIH Mass Spectral Library with Search Program), NIST20/NIST v20)⁶

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Rationale: Updates the title of the Secondary Drinking Water Regulations, corrects the document number and publication year of an EPA document, and adds a normative reference for the NIST mass spectral library.

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³ National Archives and Records Administration, Office of the Federal Register. 7 G Street NW, Suite A-734, Washington, DC 20401. <www.ecfr.gov>

⁴ American Public Health Association, American Water Works Association, and Water Environment Federation. <www.standardmethods.org>

⁵ US Environmental Protection Agency. 1200 Pennsylvania Avenue NW, Washington, DC 20004. <www.epa.gov>

⁶ National Institute of Standards and Technology. 100 Bureau Drive, Gaithersburg, MD 20899. <www.nist.gov>

4 Materials

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4.3.1.1 Target compounds shall be validated in accordance with the requirements of the referenced method. US EPA Methods 524.2 and 625 have specific validation requirements including precision and accuracy requirements as well as demonstration of sensitivity (method detection limit study or MDL).

For US EPA Method 625, the minimum instrument operation requirements for GC/MS analysis shall be in accordance with those protocols as defined by the method with the following modifications:

- to guard against significant drift from an initial instrument calibration to subsequent instrument batches, the average chromatographic peak area of each internal standard in the calibration curve shall be determined. The chromatographic peak area of each internal standard in the continuing calibration shall be greater than 50% and not more than 200% of that average;
- due to the number of characteristics of the analytes associated with Method 625, while performing a continuing calibration check (CCC), concentrations of 10% of the target compounds for each analysis (e.g., base/neutral, base/neutral/acid, acid) shall be allowed to fall outside of the range of 70% to 130% (outlier) of the true value. None of the concentrations shall be allowed to fall below 50% or above 200% of the true value. If a positive sample analyte result is identified for any outlier, a second CCC shall be performed. If the second CCC determines the sample analyte result to no longer be an outlier, the sample shall be reanalyzed. However, if the second CCC also determines the analyte to be an outlier, a new calibration curve shall be determined, and the sample shall be reanalyzed;

NOTE— At the laboratory's discretion, a calibration may be performed specifically for the compound in question, with the reporting of its data from this second calibration. It shall be understood, that if the laboratory utilizes this approach (calibrating for the specific analyte) all method requirements as specified by Method 625 shall be achieved.

Rationale: Removes “NOTE —” from normative language.

4.3.1.2 TICs are identified by comparison of the spectrum of the unknown to the mass-spectral reference library utilizing “probability-based matching” (as available from instrument manufacturers) as well as interpretation by the analyst. The laboratory shall report the TIC with the best match factor (the match factor shall not be reported) except in the following circumstances:

- due to the complex nature of GC/MS interpretation and identification, when reviewing the list of possible matches for any particular TIC peak, the laboratory has the authority to assign the identification to a compound “hit” with a lower numeric match factor from the library search algorithm;
- the laboratory may determine that none of the returned compounds by the automated search algorithm is a good match for the unknown peak. In this case the compound is reported as an “Unknown”;
- the laboratory may utilize manual spectral interpretation to identify the peak in question; and
- all TICs detected at a concentration greater than or equal to 3.0 ppb shall be reported.

The library used during the analysis shall be National Institute of Standards and Technology (NIST) ~~v20 (NIST20)–2007~~ or most current version. Additional spectral libraries may be used to assist in the identification of unknown compounds. For TICs, the concentration is estimated by comparison of its total ion area response to the total ion area response of the nearest internal standard. For TICs, a response factor of “1” (one) shall be utilized for the purposes of calculating the TICs estimated concentration.

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Rationale: Updates the NIST mass spectral library version and corrects “spectra” or “spectral”.

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NSF/ANSI Standard for Drinking Water Treatment Units –

Shower Filtration Systems – Aesthetic Effects

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5 Structural performance

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5.4 Structural integrity test methods

5.4.1 Apparatus

An enclosure shall be provided for each system tested to prevent injury to personnel or property damage if the system fails.

An apparatus that may be used for the cyclic and hydrostatic test is shown schematically in Figure 1. Pressure measuring instruments shall have a precision and accuracy of 2% at the point of measurement.

~~NOTE~~— The unit shall be prepared by plugging the outlet to ensure the system is watertight.

Rationale: Removes “NOTE —” from normative language.

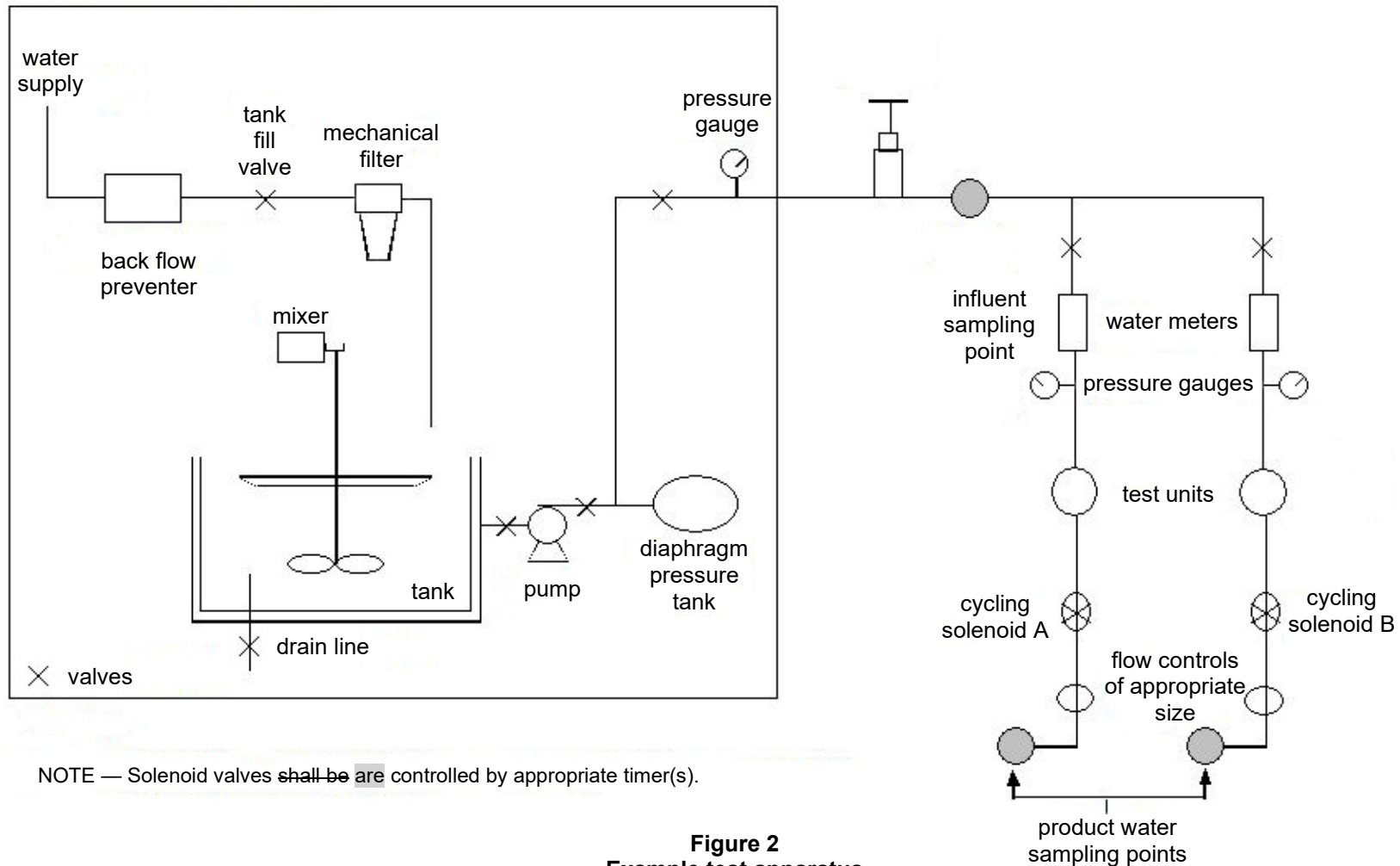
•
•

7 Elective performance claims – Test methods

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Any suitable pressure or delivery system



NOTE — Solenoid valves shall be are controlled by appropriate timer(s).

Figure 2
Example test apparatus

Rationale: This is an example of an apparatus and not normative itself so “shall be” is revised to “are.”

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8.4 Performance data sheet

8.4.1 A performance data sheet shall be available to potential buyers for each system and shall include the following information:

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— statement for claims:

“This system has been tested according to NSF/ANSI 177 for reduction of free available chlorine. The concentration of free available chlorine in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 177. This system has not been evaluated for free available chlorine reduction performance in the presence of chloramines. Free available chlorine reduction performance may be impacted by the presence of chloramines in the water supply. Please contact your local water utility to determine if chloramines are used in treating your water.”

NOTE 1— Minimum chlorine reduction per NSF/ANSI 177 shall be listed as > 50% FAC when used with an influent challenge water of 2 mg/L FAC.

~~**NOTE 2**— In addition to this statement, advertising materials may show the average percent reduction determined during verification.~~

~~**NOTE 3**— Average concentrations shall be the arithmetic mean of all reported influent challenge or product water concentrations (the detection limit value shall be used for any nondetectable concentration). The specified average percent reduction shall not be greater than the reduction calculated using the arithmetic means of the influent challenge and the product water concentrations respectively.~~

NOTE — In addition to the statement, advertising materials may show the average percent reduction determined during verification.

Rationale: Removes “**NOTE —**” from language containing normative requirements (“shall”) and moves the remaining note below them.

BSR/UL 79, Standard for Safety for Power-Operated Pumps for Petroleum Dispensing Products**1. Editorial corrections****PROPOSAL**

5.7 Where the oven aging results are not in accordance with 5.2(c), the complete assembly with the gasket installed as intended, shall be placed in an air oven for the same duration and at the same temperature used when testing the gasket material, and then shall comply with the Leakage Test, Section ~~18~~ 43, and the Hydrostatic Strength Test, Section 49, while at the test temperature.

5.8 Where the low temperature results are not in accordance with 5.2(d), the complete assembly with the gasket installed as intended, shall be placed in a cold chamber for 24 hours at the same temperature used when testing the gasket material, and then shall comply with the Leakage Test, Section ~~18~~ 43, and the Hydrostatic Strength Test, Section ~~21~~ 49, while at the test temperature.

2. Clarification of low temperature test for composite elastomeric parts**PROPOSAL**

3.1A COMPOSITE GASKET MATERIAL - A material of one of the following types:

- a) Type I - Composite cork consisting of granular cork mixed in a binder other than rubber;
- b) Type II - Plant fiber consisting of different saturated grades of paper;
- c) Type III - Plant fiber and cork particles mixed in a binder other than rubber;
- d) Type IV - Granular cork and rubber compound mixed in a rubber binder; or
- e) Type V - Fibers such as Aramide, glass, and carbon mixed in a rubber or other binder.

5.2 With reference to the requirement in 5.1, an elastomeric part used in contact with liquid or vapor shall have the following properties when tested as specified in the Standard for Gaskets and Seals, UL 157:

- a) Those properties relating to minimum tensile strength and elongation after oven aging, as specified in UL 157. The service temperature used to determine the conditioning time and temperature for oven aging is to be 140°F (60°C), unless the product is designated for use at a higher temperature, or the temperature of the component measured during the temperature test is higher;
- b) Low temperature rating of minus 20°F (minus 29°C), except for composite elastomeric parts which are subjected to 8.16; and
- c) Volume change and extraction as specified in the requirements for UL 157, for end-use applications of gasoline, gasoline/alcohol blends up to 15% Ethanol, gasoline/alcohol blends up to 15% Methanol, diesel fuel, fuel oil, and lubricating oil. Other end-use applications, when marked on the pump, shall use the fluids marked for exposure.

5.8 A composite elastomeric part or when ~~Where~~ the low temperature results are not in accordance with 5.2(d), the complete assembly with the gasket installed as intended, shall be placed in a cold chamber for 24 hours at the same temperature used when testing the gasket material, and then shall comply with the Leakage Test, Section ~~18~~ 43, and the Hydrostatic Strength Test, Section ~~21~~ 49, while at the test temperature.

BSR/UL 498D, Standard for Safety for Attachment Plugs, Cord Connectors and Receptacles with Arcuate (Locking Type) Contacts

1. This revision of ANSI/UL 498D expands requirements for Weather-Resistant Receptacles

PROPOSAL

4.2 The following publications are referenced in this Standard:

ASTM A90, Standard Test Method for Weight (Mass) of Coating on Iron or Steel Articles with Zinc or Zinc-Alloy Coatings

ASTM A653, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM G151, Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources

ASTM G153, Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

ASTM G155, Standard Practice for Operating Xenon Arc Lamp Apparatus for Exposure of Materials

Table 34.1
Summary of Tests
General Grade Attachment Plugs

39	Moisture Absorption Resistance	3	Conducted on vulcanized fibrefiber , fuseholders and insulating backplates. Use insulating material portion of device only.
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Table 34.2
Summary of Tests
Inlets (Motor Attachment Plugs)

39	Moisture Absorption Resistance	6	Conducted on vulcanized fibrefiber , fuseholders and insulating backplates. Use insulating material portion of device only.
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Table 34.3
Summary of Tests
Cord Connectors

39	Moisture Absorption Resistance	3	Conducted on vulcanized fibrefiber , fuseholders and insulating backplates. Use insulating material portion of device only.
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Table 34.4
Summary of Tests
Receptacles

39	Moisture Absorption Resistance	3	Conducted on vulcanized fibrefiber , fuseholders and insulating backplates. Use insulating material portion of device only.
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ANNEX B (NORMATIVE)

Weather-Resistant Receptacles

INTRODUCTION

B1 Scope

B1.1 The requirements of this ANNEX B cover flush-type receptacles with arcuate contacts (locking-type configurations) additionally identified as weather-resistant, intended for use in wet and damp locations in accordance with Article 406 of NFPA 70.

B1.2 A flush-type receptacle additionally identified as weather-resistant shall comply with the applicable requirements of this Standard, UL 498D, except as modified by the requirements in this Annex.

B1.3 This Annex is intended to evaluate only the flush-type receptacles with arcuate contacts covered by this Standard, UL 498D.

B1.4 This Annex does not apply to the enclosure or any component which forms the enclosure, including the outlet box or flush-device cover plate, or both.

B1.5 This Annex does not apply to other end-product equipment that incorporate a weather-resistant receptacle.

CONSTRUCTION

B2 General

B2.1 In addition to the general performance and construction requirements for receptacles, a receptacle with arcuate contacts additionally identified as weather-resistant shall also comply with requirements for corrosion resistance, cold impact, accelerated aging, and resistance to ultraviolet light and water exposure, as specified in this Annex.

B3 Insulating Materials

B3.1 An insulating material used in the construction of the face of a weather-resistant receptacle shall comply with Section B8, Ultraviolet Light and Water Exposure Test.

Exception: Insulating materials used in the construction of components other than the face of a weather-resistant receptacle, such as the body, shutters, and indicator lights, are not required to comply with this requirement. This exception does not apply to external shutters located on the outer face of the device.

B4 Corrosion Resistance

B4.1 Except as noted in B4.2, all current-carrying parts shall be copper alloy.

B4.2 All terminal parts (i.e., terminal screws, pressure plates or springs) shall be copper alloy or stainless steel having a minimum of 16 percent chromium content. An internal back wire nut may be steel protected with nickel as described in B4.4(a)(3) or B4.4(a)(4). Protection is required on all sheared or cut edges but not required for punched holes with screw threads.

B4.3 Metals used in combinations shall be galvanically compatible.

B4.4 Noncurrent-carrying metal parts, such as metal mounting yoke, and mounting screws shall be:

a) Steel protected by one of the following coatings:

1) Hot-dipped mill-galvanized sheet steel conforming with the coating Designation A60, G60 or G90 in the Weight (Mass) of Coating Requirements table in ASTM A653, with not less than 40 percent of the zinc on any side, based on the minimum single-spot test requirement in this ASTM designation. The weight of the zinc coating may be determined by any acceptable method; however, in case of question the weight of coating shall be established in accordance with ASTM A90. Sheared, cut edges, punched holes and screw threads are not required to be additionally protected;

2) A zinc coating, other than that provided on hot-dipped mill-galvanized steel, having an average thickness not less than 0.0005 inch (0.013 mm) and a minimum thickness of not less than 0.0004 inch (0.0102 mm). Sheared, cut edges punched holes, and screw threads are not required to be additionally protected;

3) A nickel coating having a thickness not less than 0.00015 inch (0.0038 mm); or

4) A tin over nickel coating having an overall thickness of not less than 0.00015 inch (0.0038 mm).

b) Stainless steel having a minimum of 16 percent chromium content;

c) Copper, bronze or brass alloys; or

d) Aluminum or aluminum alloys.

PERFORMANCE

B5 General

B5.1 A receptacle additionally identified as weather-resistant shall be subjected to Section B6, Cold Impact Test, Section B7, Accelerated Aging Test, and Section B8, Ultraviolet Light and Water Exposure Test.

B6 Cold Impact Test

B6.1 When subjected to the Cold Impact Test described in B6.2, six representative weather-resistant receptacles shall withstand the impact without breakage of the receptacle face or any other damage that could increase the risk of fire or electric shock. Upon completion of the test, each device shall:

a) Be capable of completely mating with the intended attachment plugs both grounding and non-grounding types;

b) Not crack to the extent such that a 1/32 inch (0.8 mm) diameter rod can be inserted through the crack and contact live parts; and

c) Be subjected to the Dielectric Voltage-Withstand Test described in Section 81. The devices are not required to be subjected to the humidity conditioning described in 81.2.

B6.2 Six representative weather-resistant receptacles shall be conditioned for 5 h in circulating air at a temperature of minus 20 $\pm$ 1°C (minus 4 $\pm$ 2°F). Immediately following removal from the conditioning chamber, each device shall be subjected to the Impact Test described in B6.3.

B6.3 Six receptacles are to be mounted to a cast metal (malleable iron) outlet box and a metallic flush-device cover plate is to be installed on the receptacle in the intended manner. The receptacle, faceplate, and box are to be placed on a steel plate at least 1/2-inch (12.7-mm) thick with the outlet facing upward. A 3 lb (1.36 kg) cylindrical weight, 1-1/4 inch (31.8 mm) in diameter and having a flat end without any

sharp edges, is to be dropped from a height of 11 inches (279 mm) to impact the center of each receptacle outlet. For duplex receptacles, three devices are to be tested using one outlet, and three using the other.

B7 Accelerated Aging Test

B7.1 A receptacle additionally identified as weather-resistant shall not crack or distort to the extent such that upon completion of the test each device shall:

- a) Be capable of completely mating with the intended attachment plug;
- b) Not crack to the extent such that a 1/32 inch (0.8 mm) diameter rod can be inserted through the crack and contact live parts; and
- c) Be subjected to the Dielectric Voltage-Withstand Test described in Section 81. The devices are not required to be subjected to the humidity conditioning described in 81.2.

B7.2 The device is to be placed in a full-draft air-circulating oven for 7 days at a temperature of 70°C (158°F). The device is to be allowed to rest at room temperature for at least one hour after removal from the oven.

B8 Ultraviolet Light and Water Exposure Test

B8.1 When subjected to the Ultraviolet Light and Water Exposure Test described in B8.2, the insulating material employed in the face of a weather-resistant receptacle, shall not exhibit deterioration such as cracking, crazing, or warping, after exposure.

Exception: Insulating material employed in the face of a weather-resistant receptacle that has been investigated in accordance with the requirements for the Ultraviolet Light Exposure Test in UL 746C, and so identified, is not required to comply with this requirement.

B8.2 The receptacle is to be mounted such that the receptacle face is exposed to ultraviolet light and water by using either of the following methods:

- a) Twin enclosed carbon-arc, Type D, in accordance with ASTM G151 and ASTM G153. Method 1, continuous exposure to light and intermittent exposure to water spray, with a programmed cycle of 120 min consisting of a 102 min light exposure and an 18 min exposure to water spray with light, shall be used. The apparatus shall operate with a black-panel temperature of 63 ±3°C (145 ±5°F); or
- b) Xenon-arc, Type B, in accordance with ASTM G155. Test Method A, continuous exposure to light and intermittent exposure to water spray, with a programmed cycle of 120 min consisting of a 102 min light exposure and an 18 min exposure to water spray with light, shall be used.

B8.3 The xenon-arc lamp apparatus shall employ borosilicate glass inner and outer optical filters capable of producing a spectral irradiance of 0.35 W/m²/nm at 340 nm and a black panel temperature of 63 ±3°C (145 ±5°F).

B8.4 Three representative devices in each color shall be mounted on the inside of the cylinder in the ultraviolet-light apparatus in such a way that they do not touch each other.

B8.5 For twin enclosed carbon-arc, the representative devices shall be exposed for a total of 720 h. For xenon-arc, the representative devices shall be exposed for a total of 1000 h.

B8.6 For a material that is to be evaluated in a range of colors, representative devices in the natural (when used in this color) and in the most heavily pigmented light and dark colors shall be provided to represent the color range.

MARKINGS

B9 General

B9.1 A receptacle additionally identified as weather-resistant shall be marked with the phrase "Weather-Resistant" or the abbreviation "WR" either on the device, installation instructions, packaging, or on the smallest unit container.

B9.2 If marked on the receptacle, the letters shall be a minimum of 3/16 inch (4.8 mm) in height and visible after installation.

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BSR/UL 498F, Standard for Safety for Plugs, Socket-Outlets and Couplers with Arcuate (Locking Type) Contacts

1. This revision of ANSI/UL 498F expands requirements for Weather-Resistant Receptacles

PROPOSAL

4.2 The following publications are referenced in this Standard:

ASTM A90, Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings

ASTM A653, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM G151, Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources

ASTM G153, Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

ASTM G155, Standard Practice for Operating Xenon Arc Lamp Apparatus for Exposure of Materials

Table 34.1
Summary of Tests: General Grade Attachment Plugs

39	Moisture Absorption Resistance	3	Conducted on vulcanized fibre, fuseholders and insulating backplates. Use insulating material portion of device only
----	--------------------------------	---	--

Table 34.2
Summary of Tests: Inlets (Motor Attachment Plugs)

39	Moisture Absorption Resistance	6	Conducted on vulcanized fibre, fuseholders and insulating backplates. Use insulating ma
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Table 34.3
Summary of Tests: Cord Connectors

39	Moisture Absorption Resistance	3	Conducted on vulcanized fibre, fuseholders and insulating backplates. Use insulating material portion of device only.
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Table 34.4
Summary of Tests: Receptacles

39	Moisture Absorption Resistance	3	Conducted on vulcanized fibre, fuseholders and insulating backplates. Use insulating material portion of device only.
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ANNEX B (NORMATIVE)

Weather-Resistant Receptacles

INTRODUCTION

B1 Scope

B1.1 The requirements of this ANNEX B cover flush-type receptacles with arcuate contacts (locking-type configurations) additionally identified as weather-resistant, intended for use in wet and damp locations in accordance with Article 406 of NFPA 70.

B1.2 A flush-type receptacle additionally identified as weather-resistant shall comply with the applicable requirements of this Standard, UL 498F, except as modified by the requirements in this Annex.

B1.3 This Annex is intended to evaluate only the flush-type receptacles with arcuate contacts covered by this Standard, UL 498F.

B1.4 This Annex does not apply to the enclosure or any component which forms the enclosure, including the outlet box or flush-device cover plate, or both.

B1.5 This Annex does not apply to other end-product equipment that incorporate a weather-resistant receptacle.

CONSTRUCTION

B2 General

B2.1 In addition to the general performance and construction requirements for receptacles, a receptacle with arcuate contacts additionally identified as weather-resistant shall also comply with requirements for corrosion resistance, cold impact, accelerated aging, and resistance to ultraviolet light and water exposure, as specified in this Annex.

B3 Insulating Materials

B3.1 An insulating material used in the construction of the face of a weather-resistant receptacle shall comply with Section B8, Ultraviolet Light and Water Exposure Test.

Exception: Insulating materials used in the construction of components other than the face of a weather-resistant receptacle, such as the body, shutters, and indicator lights, are not required to comply with this requirement. This exception does not apply to external shutters located on the outer face of the device.

B4 Corrosion Resistance

B4.1 Except as noted in B4.2, all current-carrying parts shall be copper alloy.

B4.2 All terminal parts (i.e., terminal screws, pressure plates or springs) shall be copper alloy or stainless steel having a minimum of 16 percent chromium content. An internal back wire nut may be steel protected with nickel as described in B4.4(a)(3) or B4.4(a)(4). Protection is required on all sheared or cut edges but not required for punched holes with screw threads.

B4.3 Metals used in combinations shall be galvanically compatible.

B4.4 Noncurrent-carrying metal parts, such as metal mounting yoke, and mounting screws shall be:

a) Steel protected by one of the following coatings:

1) Hot-dipped mill-galvanized sheet steel conforming with the coating Designation A60, G60 or G90 in the Weight (Mass) of Coating Requirements table in ASTM A653, with not less than 40 percent of the zinc on any side, based on the minimum single-spot test requirement in this ASTM designation. The weight of the zinc coating may be determined by any acceptable method; however, in case of question the weight of coating shall be established in accordance with ASTM A90. Sheared, cut edges, punched holes and screw threads are not required to be additionally protected;

2) A zinc coating, other than that provided on hot-dipped mill-galvanized steel, having an average thickness not less than 0.0005 inch (0.013 mm) and a minimum thickness of not less than 0.0004 inch (0.0102 mm). Sheared, cut edges punched holes, and screw threads are not required to be additionally protected;

3) A nickel coating having a thickness not less than 0.00015 inch (0.0038 mm); or

4) A tin over nickel coating having an overall thickness of not less than 0.00015 inch (0.0038 mm).

b) Stainless steel having a minimum of 16 percent chromium content;

c) Copper, bronze or brass alloys; or

d) Aluminum or aluminum alloys.

PERFORMANCE

B5 General

B5.1 A receptacle additionally identified as weather-resistant shall be subjected to Section B6, Cold Impact Test, Section B7, Accelerated Aging Test, and Section B8, Ultraviolet Light and Water Exposure Test.

B6 Cold Impact Test

B6.1 When subjected to the Cold Impact Test described in B6.2, six representative weather-resistant receptacles shall withstand the impact without breakage of the receptacle face or any other damage that could increase the risk of fire or electric shock. Upon completion of the test, each device shall:

a) Be capable of completely mating with the intended attachment plugs both grounding and non-grounding types;

b) Not crack to the extent such that a 1/32 inch (0.8 mm) diameter rod can be inserted through the crack and contact live parts; and

c) Be subjected to the Dielectric Voltage-Withstand Test described in Section 82. The devices are not required to be subjected to the humidity conditioning described in 82.2.

B6.2 Six representative weather-resistant receptacles shall be conditioned for 5 h in circulating air at a temperature of minus 20 $\pm$ 1°C (minus 4 $\pm$ 2°F). Immediately following removal from the conditioning chamber, each device shall be subjected to the Impact Test described in B6.3.

B6.3 Six receptacles are to be mounted to a cast metal (malleable iron) outlet box and a metallic flush-device cover plate is to be installed on the receptacle in the intended manner. The receptacle, faceplate, and box are to be placed on a steel plate at least 1/2-inch (12.7-mm) thick with the outlet facing upward. A 3 lb (1.36 kg) cylindrical weight, 1-1/4 inch (31.8 mm) in diameter and having a flat end without any

sharp edges, is to be dropped from a height of 11 inches (279 mm) to impact the center of each receptacle outlet. For duplex receptacles, three devices are to be tested using one outlet, and three using the other.

B7 Accelerated Aging Test

B7.1 A receptacle additionally identified as weather-resistant shall not crack or distort to the extent such that upon completion of the test each device shall:

- a) Be capable of completely mating with the intended attachment plug.
- b) Not crack to the extent such that a 1/32 inch (0.8 mm) diameter rod can be inserted through the crack and contact live parts; and
- c) Be subjected to the Dielectric Voltage-Withstand Test described in Section 82. The devices are not required to be subjected to the humidity conditioning described in 82.2.

B7.2 The device is to be placed in a full-draft air-circulating oven for 7 days at a temperature of 70°C (158°F). The device is to be allowed to rest at room temperature for at least one hour after removal from the oven.

B8 Ultraviolet Light and Water Exposure Test

B8.1 When subjected to the Ultraviolet Light and Water Exposure Test described in B8.2, the insulating material employed in the face of a weather-resistant receptacle, shall not exhibit deterioration such as cracking, crazing, or warping, after exposure.

Exception: Insulating material employed in the face of a weather-resistant receptacle that has been investigated in accordance with the requirements for the Ultraviolet Light Exposure Test in UL 746C, and so identified, is not required to comply with this requirement.

B8.2 The receptacle is to be mounted such that the receptacle face is exposed to ultraviolet light and water by using either of the following methods:

- a) Twin enclosed carbon-arc, Type D, in accordance with ASTM G151 and ASTM G153. Method 1, continuous exposure to light and intermittent exposure to water spray, with a programmed cycle of 120 min consisting of a 102 min light exposure and an 18 min exposure to water spray with light, shall be used. The apparatus shall operate with a black-panel temperature of 63 ±3°C (145 ±5°F); or
- b) Xenon-arc, Type B, in accordance with ASTM G155. Test Method A, continuous exposure to light and intermittent exposure to water spray, with a programmed cycle of 120 min consisting of a 102 min light exposure and an 18 min exposure to water spray with light, shall be used.

B8.3 The xenon-arc lamp apparatus shall employ borosilicate glass inner and outer optical filters capable of producing a spectral irradiance of 0.35 W/m²/nm at 340 nm and a black panel temperature of 63 ±3°C (145 ±5°F).

B8.4 Three representative devices in each color shall be mounted on the inside of the cylinder in the ultraviolet-light apparatus in such a way that they do not touch each other.

B8.5 For twin enclosed carbon-arc, the representative devices shall be exposed for a total of 720 h. For xenon-arc, the representative devices shall be exposed for a total of 1000 h.

B8.6 For a material that is to be evaluated in a range of colors, representative devices in the natural (when used in this color) and in the most heavily pigmented light and dark colors shall be provided to represent the color range.

MARKINGS

B9 General

B9.1 A receptacle additionally identified as weather-resistant shall be marked with the phrase "Weather-Resistant" or the abbreviation "WR" either on the device, installation instructions, packaging, or on the smallest unit container.

B9.2 If marked on the receptacle, the letters shall be a minimum of 3/16 inch (4.8 mm) in height and visible after installation.

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BSR/UL 60079-5, Standard for Safety for Explosive Atmospheres – Part 5: Equipment Protection by Powder Filling “q”

1. Revisions to Incorporate Amendment 1 into UL 60079-5 adoption IEC 60079-5, Ed. 4

PROPOSAL

5.1.3 Dielectric strength test of the filling material

5.1.3DV DE Modification of Clause 5.1.3 Title to replace with the following:

~~Dielectric strength~~ Insulation resistance test of the filling material

5.2.2 Dielectric strength test of the filling material

5.2.2DV DE Modification of Clause 5.2.2 Title to replace with the following:

~~Dielectric strength~~ Insulation resistance test of the filling material

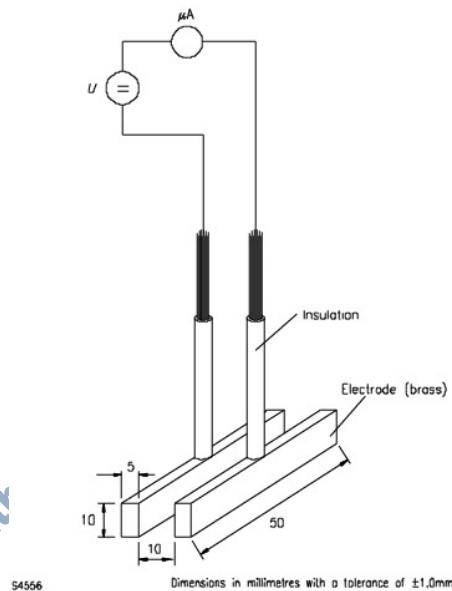


Figure 2

Test arrangement for the dielectric strength test of the filling material

Figure 2DV DE Modification of Figure 2 Title to replace with the following:

Test arrangement for the ~~dielectric strength~~ insulation resistance test of the filling material

6 Marking

6DV.1 DR Modification of Clause 6, first paragraph to replace with the following:

Electrical equipment, parts of electrical equipment, and Ex Components of powder filling “q” shall be marked “q” or “qb” in accordance with UL 60079-0 ~~IEC 60079-0~~, with the following additional marking, as appropriate:

BSR/UL 62986, Standard for Safety for Plugs, Socket-Outlets and Couplers with Arcuate Contacts

1. This revision of ANSI/UL 62986 expands requirements for Weather-Resistant Receptacles

PROPOSAL

2DV.2 D2 Addition: Add the following references:

ASTM A90, Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings

ASTM A653, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

ASTM G151, Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources

ASTM G153, Standard Practice for Operating Enclosed Carbon Arc Light Apparatus for Exposure of Nonmetallic Materials

ASTM G155, Standard Practice for Operating Xenon Arc Lamp Apparatus for Exposure of Materials

ANNEX DVB **(Normative)** **Weather-Resistant Receptacles**

INTRODUCTION

DVB1 Scope

DVB1.1 The requirements of this ANNEX DVB cover flush-type receptacles with arcuate contacts (locking-type configurations) additionally identified as weather-resistant, intended for use in wet and damp locations in accordance with Article 406 of the National Electrical Code, NFPA 70.

DVB1.2 A flush-type receptacle additionally identified as weather-resistant shall comply with the applicable requirements of this Standard, UL 62986, except as modified by the requirements in this Annex.

DVB1.3 This Annex is intended to evaluate only the flush-type receptacles with arcuate contacts covered by this Standard, UL 62986.

DVB1.4 This Annex does not apply to the enclosure or any component which forms the enclosure, including the outlet box or flush-device cover plate, or both.

DVB1.5 This Annex does not apply to other end-product equipment that incorporate a weather-resistant receptacle.

CONSTRUCTION

DVB2 General

DVB2.1 In addition to the general performance and construction requirements for receptacles, a receptacle with arcuate contacts additionally identified as weather-resistant shall also comply with requirements for corrosion resistance, cold impact, accelerated aging, and resistance to ultraviolet light and water exposure, as specified in this Annex.

DVB3 Insulating Materials

DVB3.1 An insulating material used in the construction of the face of a weather-resistant receptacle shall comply with Section DVB8, Ultraviolet Light and Water Exposure Test.

Exception: Insulating materials used in the construction of components other than the face of a weather-resistant receptacle, such as the body, shutters, and indicator lights, are not required to comply with this requirement. This exception does not apply to external shutters located on the outer face of the device.

DVB4 Corrosion Resistance

DVB4.1 Except as noted in DVB4.2, all current-carrying parts shall be copper alloy.

DVB4.2 All terminal parts (i.e., terminal screws, pressure plates or springs) shall be copper alloy or stainless steel having a minimum of 16 percent chromium content. An internal back wire nut may be steel protected with nickel as described in DVB4.4(a)(3) or DVB4.4(a)(4). Protection is required on all sheared or cut edges but not required for punched holes with screw threads.

DVB4.3 Metals used in combinations shall be galvanically compatible.

DVB4.4 Noncurrent-carrying metal parts, such as metal mounting yoke, and mounting screws shall be:

a) Steel protected by one of the following coatings:

1) Hot-dipped mill-galvanized sheet steel conforming with the coating Designation A60, G60 or G90 in the Weight (Mass) of Coating Requirements table in ASTM A653, with not less than 40 percent of the zinc on any side, based on the minimum single-spot test requirement in this ASTM designation. The weight of the zinc coating may be determined by any acceptable method; however, in case of question the weight of coating shall be established in accordance with ASTM A90. Sheared, cut edges, punched holes and screw threads are not required to be additionally protected;

2) A zinc coating, other than that provided on hot-dipped mill-galvanized steel, having an average thickness not less than 0.0005 inch (0.013 mm) and a minimum thickness of not less than 0.0004 inch (0.0102 mm). Sheared, cut edges punched holes, and screw threads are not required to be additionally protected;

3) A nickel coating having a thickness not less than 0.00015 inch (0.0038 mm); or

4) A tin over nickel coating having an overall thickness of not less than 0.00015 inch (0.0038 mm).

b) Stainless steel having a minimum of 16 percent chromium content;

c) Copper, bronze or brass alloys; or

d) Aluminum or aluminum alloys.

PERFORMANCE**DVB5 General**

DVB5.1 A receptacle additionally identified as weather-resistant shall be subjected to Section DVB6, Cold Impact Test, Section DVB7, Accelerated Aging Test, and Section DVB8, Ultraviolet Light and Water Exposure Test.

DVB6 Cold Impact Test

DVB6.1 When subjected to the Cold Impact Test described in DVB6.2, six representative weather-resistant receptacles shall withstand the impact without breakage of the receptacle face or any other damage that could increase the risk of fire or electric shock. Upon completion of the test, each device shall:

- a) Be capable of completely mating with the intended attachment plugs both grounding and non-grounding types;
- b) Not crack to the extent such that a 1/32 inch (0.8 mm) diameter rod can be inserted through the crack and contact live parts; and
- c) Be subjected to the Dielectric Voltage-Withstand Test described in Section 18.5. The devices are not required to be subjected to the humidity conditioning described in 17.3.

DVB6.2 Six representative weather-resistant receptacles shall be conditioned for 5 h in circulating air at a temperature of minus 20 $\pm$ 1°C (minus 4 $\pm$ 2°F). Immediately following removal from the conditioning chamber, each device shall be subjected to the Impact Test described in DVB6.3.

DVB6.3 Six receptacles are to be mounted to a cast metal (malleable iron) outlet box and a metallic flush-device cover plate is to be installed on the receptacle in the intended manner. The receptacle, faceplate, and box are to be placed on a steel plate at least 1/2-inch (12.7-mm) thick with the outlet facing upward. A 3 lb (1.36 kg) cylindrical weight, 1-1/4 inch (31.8 mm) in diameter and having a flat end without any sharp edges, is to be dropped from a height of 11 inches (279 mm) to impact the center of each receptacle outlet. For duplex receptacles, three devices are to be tested using one outlet, and three using the other.

DVB7 Accelerated Aging Test

DVB7.1 A receptacle additionally identified as weather-resistant shall not crack or distort to the extent such that upon completion of the test each device shall:

- a) Be capable of completely mating with the intended attachment plug.
- b) Not crack to the extent such that a 1/32 inch (0.8 mm) diameter rod can be inserted through the crack and contact live parts; and
- c) Be subjected to the Dielectric Voltage-Withstand Test described in 18.5. The devices are not required to be subjected to the humidity conditioning described in 17.3.

DVB7.2 The device is to be placed in a full-draft air-circulating oven for 7 days at a temperature of 70°C (158°F). The device is to be allowed to rest at room temperature for at least one hour after removal from the oven.

DVB8 Ultraviolet Light and Water Exposure Test

DVB8.1 When subjected to the Ultraviolet Light and Water Exposure Test described in DVB8.2, the insulating material employed in the face of a weather-resistant receptacle, shall not exhibit deterioration such as cracking, crazing, or warping, after exposure.

Exception: Insulating material employed in the face of a weather-resistant receptacle that has been investigated in accordance with the requirements for the Ultraviolet Light Exposure Test in UL 746C, and so identified, is not required to comply with this requirement.

DVB8.2 The receptacle is to be mounted such that the receptacle face is exposed to ultraviolet light and water by using either of the following methods:

a) Twin enclosed carbon-arc, Type D, in accordance with ASTM G151 and ASTM G153. Method 1, continuous exposure to light and intermittent exposure to water spray, with a programmed cycle of 120 min consisting of a 102 min light exposure and an 18 min exposure to water spray with light, shall be used. The apparatus shall operate with a black-panel temperature of $63 \pm 3^{\circ}\text{C}$ ($145 \pm 5^{\circ}\text{F}$); or

b) Xenon-arc, Type B, in accordance with ASTM G155. Test Method A, continuous exposure to light and intermittent exposure to water spray, with a programmed cycle of 120 min consisting of a 102 min light exposure and an 18 min exposure to water spray with light, shall be used.

DVB8.3 The xenon-arc lamp apparatus shall employ borosilicate glass inner and outer optical filters capable of producing a spectral irradiance of $0.35 \text{ W/m}^2/\text{nm}$ at 340 nm and a black panel temperature of $63 \pm 3^{\circ}\text{C}$ ($145 \pm 5^{\circ}\text{F}$).

DVB8.4 Three representative devices in each color shall be mounted on the inside of the cylinder in the ultraviolet-light apparatus in such a way that they do not touch each other.

DVB8.5 For twin enclosed carbon-arc, the representative devices shall be exposed for a total of 720 h. For xenon-arc, the representative devices shall be exposed for a total of 1000 h.

DVB8.6 For a material that is to be evaluated in a range of colors, representative devices in the natural (when used in this color) and in the most heavily pigmented light and dark colors shall be provided to represent the color range.

MARKINGS

DVB9 General

DVB9.1 A receptacle additionally identified as weather-resistant shall be marked with the phrase "Weather-Resistant" or the abbreviation "WR" either on the device, installation instructions, packaging, or on the smallest unit container.

DVB9.2 If marked on the receptacle, the letters shall be a minimum of 3/16 inch (4.8 mm) in height and visible after installation.

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