# CONTENTS

## American National Standards

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Initiation Notification System (PINS)</td>
<td>2</td>
</tr>
<tr>
<td>Call for Comment on Standards Proposals</td>
<td>10</td>
</tr>
<tr>
<td>Final Actions - (Approved ANS)</td>
<td>26</td>
</tr>
<tr>
<td>Call for Members (ANS Consensus Bodies)</td>
<td>32</td>
</tr>
<tr>
<td>American National Standards (ANS) Announcements</td>
<td>38</td>
</tr>
<tr>
<td>American National Standards (ANS) Process</td>
<td>39</td>
</tr>
<tr>
<td>Accreditation Announcements (Standards Developers)</td>
<td>40</td>
</tr>
<tr>
<td>ANS Under Continuous Maintenance</td>
<td>42</td>
</tr>
<tr>
<td>ANSI-Accredited Standards Developer Contacts</td>
<td>43</td>
</tr>
</tbody>
</table>

## International Standards

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO and IEC Draft Standards</td>
<td>45</td>
</tr>
<tr>
<td>ISO and IEC Newly Published Standards</td>
<td>48</td>
</tr>
<tr>
<td>Accreditation Announcements (U.S. TAGs to ISO)</td>
<td>50</td>
</tr>
<tr>
<td>International Organization for Standardization (ISO)</td>
<td>51</td>
</tr>
<tr>
<td>Call for Members (USNC)</td>
<td>54</td>
</tr>
</tbody>
</table>

## Information Concerning

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration of Organization Names in the United States</td>
<td>55</td>
</tr>
<tr>
<td>Proposed Foreign Government Regulations</td>
<td>56</td>
</tr>
</tbody>
</table>
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.

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

National Adoption
BSR/AAMI/ISO 13004-202x, Sterilization of health care products - Radiation - Substantiation of selected sterilization dose: Method VDmaxSD (identical national adoption of ISO 13004:2022)
Stakeholders: Manufacturers, testing labs, regulators, consultants.
Project Need: Nationally adopt ISO 13004:2022, which superseded ISO/TS 13004, which was previously nationally adopted.
Interest Categories: Producers, Government/Regulatory, General Interest.
Scope: This document describes a method for substantiating a selected sterilization dose of 17.5 kGy, 20 kGy, 22.5 kGy, 27.5 kGy, 30 kGy, 32.5 kGy, or 35 kGy that achieves a sterility assurance level (SAL) of 10−6 or less for radiation sterilization of health care products. This document also specifies a method of sterilization dose audit used to demonstrate the continued effectiveness of the substantiated sterilization dose.
NOTE 1: Selection and substantiation of the sterilization dose is used to meet the requirements for establishing the sterilization dose within process definition in ISO 11137-1.

AGMA (American Gear Manufacturers Association)
Amir Aboutaleb; tech@agma.org | 1001 N Fairfax Street, 5th Floor | Alexandria, VA 22314-1587 www.agma.org

Revision
BSR/AGMA 6011-KXX-202x, Specification for High Speed Helical Gear Units (revision of ANSI/AGMA 6011-J14 (R2019))
Stakeholders: Manufacturers and users of high-speed gear drives.
Project Need: Update standard to reflect current state-of-the art.
Interest Categories: Manufacturers, users, and those with general interest including academics.
Scope: This standard includes design, lubrication, bearings, testing and rating for single- and double-helical external-tooth, parallel-shaft speed reducers or increasers. Units covered include those operating with at least one stage having a pitch-line velocity equal to or greater than 35 meters per second or rotational speeds greater than 4500 rpm and other stages having pitch-line velocities equal to or greater than 8 meters per second.
AGMA (American Gear Manufacturers Association)
Amir Aboutaleb; tech@agma.org | 1001 N Fairfax Street, 5th Floor | Alexandria, VA  22314-1587   www.agma.org

Revision
Stakeholders: Manufacturers and users of flexible couplings.
Project Need: General update to meet current industry practices and combine related topics into one document.
Interest Categories: Manufacturers, users, and those with general interest including academics.
Scope: This standard describes potential coupling unbalance and identifies its sources. It also provides information and calculation methods related to mass elastic properties of flexible couplings.

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

New Standard
BSR/ASTM WK83694-202x, Guide for Laboratory Photography (new standard)
Stakeholders: Digital and Multimedia Evidence industry.
Project Need: This guide is intended to increase consistency among forensic photography providers due to the evidentiary and documentary value provided by photographs. This standard provides photography guidelines to better allow organizations to develop training programs and in-practice protocols.
Interest Categories: Producer, User, General Interest.
Scope: This standard describes specific photography and lighting techniques for documenting evidence in a laboratory or other controlled setting. Photography may be used in the laboratory to document evidence in various stages of analysis, and to show details that may not be discernible to the human eye. These photographs serve as a permanent record of the items of evidence, any developed evidence, or enhanced features (e.g., latent fingerprints, footwear impressions, tool marks, firearms, questioned documents).

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

New Standard
BSR/ASTM WK83695-202x, Guide for Post Mortem Examination Photography (new standard)
Stakeholders: Digital and Multimedia Evidence industry.
Project Need: This guide is intended to increase consistency among forensic photography providers due to the evidentiary and documentary value provided by photographs during forensic autopsies. This standard provides photography guidelines to better allow organizations to develop training programs and in-practice protocols.
Interest Categories: Producer, User, General Interest.
Scope: This standard provides procedures describing specific photography and lighting techniques for documenting post-mortem examinations. These photographs serve as a permanent record of the examination, related evidence, and findings.
**CTA (Consumer Technology Association)**
Catrina Akers; cakers@cta.tech | 1919 S. Eads Street | Arlington, VA  22202   www.cta.tech

*New Standard*
BSR/CTA 2118-202x, Pure Tone Average Testing Methodology and Reporting Metrics for Consumer Facing Hearing Solutions (new standard)
Stakeholders: Consumers, manufacturers, and retailers.
Project Need: To identify the elements of a standard testing methodology for a consumer facing hearing metric and establish a common vocabulary to describe hearing health for a consumer facing hearing solutions, including OTC hearing aids.
Interest Categories: Producer, User, General Interest.
Scope: This document will identify the elements of a standard testing methodology for a consumer facing hearing metric and establish a common vocabulary to describe hearing health for consumer facing hearing solutions, including OTC hearing aids.

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

*Revision*
BSR/EIA 364-29E-202x, Contact Retention Test Procedure for Electrical Connectors (revision and redesignation of ANSI/EIA 364-29D-2019)
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Revise and redesignate the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: This standard establishes a test method to impose axial forces on the connector contacts to determine the ability of the connector to withstand forces that tend to displace contacts from their proper location within the connector insert and resist contact pullout.

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

*Reaffirmation*
BSR/EIA 364-42C-2012 (R202x), Impact Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-42C-2012 (R2018))
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Reaffirm the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: This standard establishes a method to determine the effects of impacts on electrical connectors.
ECIA (Electronic Components Industry Association)
Laura Donohoe; ldonohoe@ecianow.org | 13873 Park Center Road, Suite 315 | Herndon, VA  20171   www.ecianow.org

Reaffirmation
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Reaffirm the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: The object of this test is to detail a standard method to determine whether the magnetic permeability of a test item is below a specified value.

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

Reaffirmation
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Reaffirm the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: This document defines methods to evaluate the coupled condition of a connector plug, with its mating receptacle. This procedure assesses the ability of a connector pair to remain fully mated after exposure to test conditions but not during exposure.

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

Reaffirmation
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Reaffirm the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: This standard establishes a method of determining the gage location and retention of electrical connectors.

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

Reaffirmation
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Reaffirm the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: This standard describes a method for measuring the effect a specimen has on the rise time of a signal passing through it.
Project Initiation Notification System (PINS)

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

**Reaffirmation**
BSR/EIA 364-103-1998 (R202x), Propagation Delay Test Procedure for Electrical Connectors, Sockets, Cable Assemblies or Interconnection Systems (reaffirmation of ANSI/EIA 364-103-1998 (R2018))
Stakeholders: Electronics, electrical and telecommunications industries.
Project Need: Reaffirm the current American National Standard.
Interest Categories: User, Producer, General Interest.
Scope: This standard describes a method for measuring the time it takes for a digital signal to propagate from one specified point to a second specified point.

**IES (Illuminating Engineering Society)**
Patricia McGillicuddy; pmcgillicuddy@ies.org | 120 Wall Street, Floor 17 | New York, NY  10005-4001   www.ies.org

**New Standard**
BSR/IES RP-47-202x, Recommended Practice: Landscape Lighting (new standard)
Stakeholders: Lighting practitioners, electrical engineers, architects, landscape architects, landscape lighting manufacturers, installers, civil engineers, arborists, homeowners, building owners, and regulatory and government code officials.
Project Need: The field of landscape lighting is a subcategory of the broader field of exterior lighting, with a central objective of maintaining an interesting and pleasing outdoor scene (refer to the images in Figure 1-1). Although the boundary of what constitutes landscape lighting has an element of subjectivity, the field typically is understood as distinct from lighting for roadways, parking lots, stadiums, correctional facilities, outdoor theatrical stages, and other areas with specialized requirements and a utilitarian focus. Within those limits, the field is as varied as the images and connotations evoked by the term “landscape.”
Scope: Landscape lighting provides aesthetic and practical solutions for lighting gardens, fields, statuary, walkways, steps, water features, signs, flagpoles, and more. Varied projects, materials, colors, and textures provide lighting designers vast opportunities to exercise their creative talents. The field also involves the challenges of working with complex and changing outdoor environments. For practitioners with suitable interests, knowledge, and skills, landscape lighting is a distinctly enjoyable and stimulating discipline.
**NEMA (ASC C18) (National Electrical Manufacturers Association)**

Khaled Masri; Khaled.Masri@nema.org | 1300 North 17th Street, Suite 900 | Arlington, VA  22209   www.nema.org

**Revision**

BSR C18.5M Part 1-202x, Portable Lithium Rechargeable Cells and Batteries - General and Specifications
(revision of ANSI C18.5M Part 1-2020)

Stakeholders: Manufacturers, users, and testing laboratories of Portable Rechargeable Cells and Batteries.

Project Need: To fill the standards gap for Lithium Ion performance.

Interest Categories: Producers, Users and Testing Labs, General Interests.

Scope: This publication applies to portable rechargeable, or secondary, lithium cells, and batteries. This document covers secondary lithium cells and batteries with a range of chemistries. Each electrochemical couple has a characteristic voltage range over which it releases its electrical capacity, a characteristic nominal voltage and a characteristic final voltage during discharge. See Table 1 for further details of the electrochemical systems included in the scope of this standard. This document defines a minimum required level of performance and a standardized methodology by which testing is performed and the results of this testing are reported to the user.

**NRMCA (National Ready Mixed Concrete Association)**

Scott Campbell; scampbell@nrmca.org | 66 Canal Center Plaza, Suite 250 | Alexandria, VA  22314   https://www.nrmca.org/

**New Standard**

BSR/NRMCA 100-202x, Prescriptive Design of Exterior Concrete Walls for One- and Two-Family Dwellings (new standard)

Stakeholders: Architects, engineers, contractors, developers of one- and two-family dwellings.

Project Need: NRMCA 100 will supersede PCA 100 which is referenced in the International Residential Code and is thus used to design and construct residential buildings in the United States and internationally. This is an essential standard for use by designers and contractors of one- and two-family dwellings.

Interest Categories: Producer, User, General.

Scope: NRMCA 100 is a new version of a no-longer-supported standard, PCA 100. This standard provides designers and contractors with prescriptive design requirements for low-rise residential construction. NRMCA 100 will be based on the existing PCA 100 standard and is being developed as the Portland Cement Association (PCA) is no longer a standards developing organization.

**TCNA (ASC A108) (Tile Council of North America)**

Katelyn Simpson; KSimpson@tileusa.com | 100 Clemson Research Blvd. | Anderson, SC  29625   www.tcnatile.com

**Revision**

BSR A108.5-202x, Installation of Ceramic Tile with Dry-Set Portland Cement Mortar, Modified Dry-Set Cement Mortar, EGP (Exterior Glue Plywood) Modified Dry-Set Cement Mortar, or Improved Modified Dry-Set Cement Mortar (revision of ANSI A108.5-2021)

Stakeholders: Ceramic tile installers, contractors, and builders (labor interest category); related material manufacturers (manufacturing interest category); distributors, retailers and consumers (user interest category); and affiliated industries (i.e., stone) and other general interest users of this standard (general interest category).

Project Need: Various stakeholders have suggested revisions be made to various sections of this standard.

Interest Categories: Labor, Manufacturer, User, and General Interest.

Scope: This standard outlines the guidelines for installation of ceramic tile with dry-set cement mortar, modified dry-set cement mortar, EGP modified dry-set cement mortar, and improved modified dry-set cement mortar.
**TCNA (ASC A108) (Tile Council of North America)**
Katelyn Simpson; KSimpson@tileusa.com | 100 Clemson Research Blvd. | Anderson, SC 29625  www.tcnatile.com

**Revision**

BSR A108.11-202X, Interior Installation of Cementitious Backer Units (revision of ANSI A108.11-2018)
Stakeholders: Ceramic tile installers, contractors, and builders (labor interest category); related material manufacturers (manufacturing interest category); distributors, retailers and consumers (user interest category); and affiliated industries (i.e., stone) and other general interest users of this standard (general interest category).
Project Need: Various stakeholders have suggested revisions be made to various sections of this standard.
Interest Categories: Labor, Manufacturer, User, and General Interest.
Scope: This standard describes the specifications for interior installation of cementitious backer units.

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

**Addenda**

Stakeholders: Designers, installers, building owners, building tenants.
Project Need: Update standard.
Interest Categories: User, Producer and General Interest.
Scope: This Addendum adds balanced single twisted-pair cabling. It also adds a requirement for two category 6A cables for WAPs (wireless access points) to a requirement to harmonize with recent standards document changes.

**Revision**

BSR/TIA 568.2-E-202X, Balanced Twisted-Pair Telecommunications Cabling and Components Standard (revision and redesignation of ANSI/TIA 568.2-D-2018)
Stakeholders: Cable and connector manufacturers, end users, system developers, installers, consultants. Field tester manufacturers and users.
Project Need: Update standard.
Interest Categories: User, Producer and General Interest.
Scope: This project will create ANSI/TIA 568.2-E, revision of ANSI/TIA 568.2-D. Known errors will be corrected, nomenclature will be updated, and any general needed updates will be made.
**TIA (Telecommunications Industry Association)**
Teesha Jenkins; standards-process@tiaonline.org | 1320 North Courthouse Road, Suite 200 | Arlington, VA 22201-2598
www.tiaonline.org

**Revision**
BSR/TIA 570-E-202x, Residential Telecommunications Infrastructure Standard (revision and redesignation of ANSI/TIA 570-D-2018)
Stakeholders: Designers; installers; building owners; building tenants.
Project Need: Update standard.
Interest Categories: User, Producer and General Interest.
Scope: This Standard applies to telecommunications premises cabling systems and the related pathways and spaces for single- and multi-dwelling residential buildings. It applies to the telecommunications cabling within or between structures and includes the cabling within a single-dwelling unit and the backbone cabling. It specifies cabling intended to support a wide range of telecommunications applications in the residential environment including voice, data, video, security, audio, and control systems. Revise this standard as part of the 5-year maintenance requirement and add relevant updates including, but not limited to, balanced single twisted-pair cabling.

**Addenda**
Stakeholders: Designers; installers; education facility owners.
Project Need: Update standard.
Interest Categories: User, Producer and General Interest.
Scope: This Addendum adds balanced single twisted-pair cabling.
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: November 27, 2022

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC  28739  | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST MAH-202x, Protocol for Conducting Measurements of Radon and Radon Decay Products in Homes (revision of ANSI/AARST MAH-2019)

This standard of practice specifies procedures and minimum requirements when measuring radon concentrations in single-family residences for determining if radon mitigation is necessary to protect current and future occupants. Proposed revisions are part of harmonization efforts with other AARST radon measurement standards.

Click here to view these changes in full
Send comments (copy psa@ansi.org) to: StandardsAssist@gmail.com

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

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

Addenda

BSR/ASHRAE Addendum a to Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022)

This proposed addendum adds burning velocity (BV) data to Table 4-1, “Refrigerant Data and Safety Classifications,” and Table 4-2, “Data and Safety Classifications for Refrigerant Blends.” Burning velocity data for previously approved refrigerants are added where available. This proposed addendum also corrects several calculation errors which were identified, particularly for RCL values driven by flammability vs. toxicity.

Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts
Comment Deadline: November 27, 2022

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

Revision
BSR/NSF 46-202x (i43r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2021)
This Standard is intended for use with components and devices not covered by other NSF wastewater standards. Components and devices covered by this Standard are intended for use with greywater or blackwater, or both. Management methods for the end-products of these components and devices are not addressed in this Standard. This Standard shall in no way restrict new system designs, provided that such designs meet the minimum specifications described herein. All devices and components meeting the scope of this Standard shall comply with all of the requirements described in Sections 1 through 8. In addition, devices and components shall comply with the applicable subsequent section(s) contained in this Standard. Where subsequent sections of the standard include requirements that overlap with those found in Sections 1 through 8, the requirements of both sections shall be met unless otherwise specified in the requirements of the subsequent section.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

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

Revision
BSR/NSF 173-202x (i102r1), Dietary Supplements (revision of ANSI/NSF 173-2021)
This standard contains requirements for dietary supplements that contain one or more of the following dietary ingredients: a vitamin; a mineral; an herb or other botanical; an amino acid; a dietary substance for use by humans to supplement the diet by increasing the total dietary intake; or a concentrate, metabolite, constituent, extract, or combinations of these ingredients.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: rbrooker@nsf.org

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

Revision
BSR/NSF 455-2-202x (i42r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)
This standard is intended to define a standardized approach for auditing to determine the level of compliance of dietary supplement products to 21 CFR Part 111, as well as incorporating additional retailer requirements.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: rbrooker@nsf.org
Comment Deadline: November 27, 2022

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

Revision
BSR/NSF 455-2-202x (i50r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455 -2-2021)
This standard is intended to define a standardized approach for auditing to determine the level of compliance of dietary supplement products to 21 CFR Part 111, as well as incorporating additional retailer requirements.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: rbrooker@nsf.org

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC  27709-3995  | Vickie.T.Hinton@ul.org, https://ulse.org/

National Adoption
BSR/UL 61010-1-202x, Standard for Safety for Electrical Equipment for Measurement, Control, and Laboratory Use; Part 1: General Requirements (national adoption of IEC 61010-1 with modifications and revision of ANSI/UL 61010-1-2018)
This proposal provides revisions to the proposal document dated August 19, 2022 per responses to comments received.
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)
9 Burlington Crescent, Ottawa, ON  K1T3L1  | celine.eid@ul.org, https://ulse.org/

Revision
This standard states basic construction, test, and marking requirements for fixture wires. Fixture wires are single conductor and are of the following types:
600-volt Types: PTF, PTF, PAF, PAFF, KF-2, KFF-2, PF, PFF, PGF, PGFF, SF-2, SFF-2, ZF, ZFF, ZHF, TF, TFF, TFN, TFFN, RFH-2, FFH-2, FFHH-2, RFHH-2, and RFHH-3;
300-volt Types: KF-1, KFF-1, SF-1, SFF-1, XF, and XFF. These types are for use as specified in Article 402 and other applicable parts of the National Electrical Code (NEC), ANSI/NFPA 70. These types are as described individually in index Table 4.1 - Table 4.9 of this standard.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Celine Eid, celine.eid@ul.org
**Revision**

BSR/UL 719-202x, Standard for Safety for Nonmetallic-Sheathed Cables (revision of ANSI/UL 719-2022)

1.1 These requirements cover nonmetallic-sheathed cables containing 2 – 4 thermoplastic-insulated circuit conductors, with a grounding conductor, in the constructions indicated in Table 1. These cables are intended for use in accordance with Article 334 and other applicable parts of the National Electrical Code, NFPA 70. Type NMC cable is for use in dry, moist, damp, and corrosive locations, and Type NM cable is for use in normally dry locations. Both types carry the suffix letter "-B" to designate the use of conductors with 90°C insulation.

1.2 A cable to which the designation "ST1" (signifying "limited smoke") is applied as a type-letter suffix complies with the test criteria for smoke release and for cable damage height stated in the Standard for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables, UL 1685.

Click here to view these changes in full

Send comments (copy psa@ansi.org) to: Celine Eid, celine.eid@ul.org

---

**Revision**


Proposed new edition is a binational standard with CAN/ULC-S541 that will incorporate requirements for Canada and the United States. The harmonized requirements include: addition of an Alternative Indoor Corrosion Test (21-Day) to be consistent with current requirements for initiating device standards; significant changes to the output pressure and sound requirements that harmonize the minimum sound level requirements at 75 dBA; clarification and revision of the abnormal and burnout tests to remove country-specific differences, hence harmonizing the test procedures. A new section is included to address the misapplication of voltage in speakers that have multi-voltage capabilities; new construction and performance requirements for battery-powered units, including primary batteries, secondary batteries used for standby power, and rechargeable lithium-ion batteries; addition of requirements for the evaluation of reduced spacings on printed-wiring boards to be consistent with requirements for initiating devices; new requirements for Wireless Systems; addition of new firmware requirements; revisions to the gasket requirements for outdoor use products; and revisions to the Ultraviolet Light and Water Exposure Test and the Accelerated Air-Oven Aging Test for outdoor products.

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: https://csds.ul.com/Home/ProposalsDefault.aspx
Comment Deadline: November 27, 2022

ULSE (UL Standards & Engagement)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995  | jennifer.fields@ul.org, https://ULSE.org/

Revision
BSR/UL 3100-202x, Standard for Safety for Automated Mobile Platforms (AMPs) (proposal dated 02-25-2022) (revision of ANSI/UL 3100-2021)
This proposal covers a revision to the Dielectric Voltage Withstand Test.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area https://csds.ul.com/Home/ProposalsDefault.aspx.

Comment Deadline: December 12, 2022

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

Reaffirmation
This document specifies minimum requirements for quality management systems (QMSs) to effectively, efficiently, and consistently process (transport, clean, decontaminate, disinfect, inspect, package, sterilize, and store) medical devices to prevent adverse patient events and non-manufacturer-related device failures.
Single copy price: Free
Obtain an electronic copy from: jallen@aami.org
Send comments (copy psa@ansi.org) to: jallen@aami.org

ANS (American Nuclear Society)
555 North Kensington Avenue, La Grange Park, IL 60526  | kmurdoch@ans.org, www.ans.org

Reaffirmation
BSR/ANS 57.3-2018 (R202x), Design Requirements for New Fuel Storage Facilities at Light Water Reactor Plants (reaffirmation of ANSI/ANS 57.3-2018)
This standard defines the required functions of wet- or dry-storage facilities for new fuel at light-water-reactor nuclear power plants. It provides minimum design requirements for safe storage of new nuclear fuel and control components at such plants. The fuel storage facilities covered by this standard are used for receiving, inspecting, and storing fuel containing new and recycled uranium and mixed oxides.
Single copy price: $25.00
Obtain an electronic copy from: orders@ans.org
Order from: orders@ans.org
Send comments (copy psa@ansi.org) to: pschroeder@ans.org
Comment Deadline: December 12, 2022

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

National Adoption
IEC 61400-5:2020 specifies requirements to ensure the engineering integrity of wind turbine blades as well as an appropriate level of operational safety throughout the design lifetime. It includes requirements for:
- aerodynamic and structural design,
- material selection, evaluation and testing,
- manufacture (including associated quality management),
- transportation, installation, operation and maintenance of the blades.
The purpose of this document is to provide a technical reference for designers, manufacturers, purchasers, operators, third-party organizations and material suppliers, as well as to define requirements for certification.
Single copy price: Free
Obtain an electronic copy from: secretary@aresca.us
Order from: ARESCA
Send comments (copy psa@ansi.org) to: secretary@aresca.us

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

National Adoption
BSR/ARESCA 61400-12-1-202x, Wind energy generation systems - Part 12-1: Power performance measurement of electricity producing wind turbines (identical national adoption of IEC 61400-12-1:2023)
IEC 61400-12-1:2022 specifies a procedure for measuring the power performance characteristics of a single wind turbine and applies to the testing of wind turbines of all types and sizes connected to the electrical power network. In addition, this document defines a procedure to be used to determine the power performance characteristics of small wind turbines (as defined in IEC 61400-2) when connected to either the electric power network or a battery bank. This document defines a measurement methodology that requires the measured power curve and derived energy production figures to be supplemented by an assessment of uncertainty sources and their combined effects. This third edition of IEC 61400-12-1 is part of a structural revision that cancels and replaces the performance standards IEC 61400-12-1:2017 and IEC 61400-12-2:2013. The structural revision contains no technical changes with respect to IEC 61400-12-1:2017 and IEC 61400-12-2:2013, but the parts that relate to wind measurements, measurement of site calibration and assessment of obstacle and terrain have been extracted into separate standards.
Single copy price: Free
Obtain an electronic copy from: secretary@aresca.us
Order from: ARESCA
Send comments (copy psa@ansi.org) to: secretary@aresca.us
Comment Deadline: December 12, 2022

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

National Adoption

BSR/ARESCA 61400-12-2-202x, Wind energy generation systems - Part 12-2: Power performance of electricity producing wind turbines based on nacelle anemometry (identical national adoption of IEC 61400-12-2:2022)

IEC 61400-12-2:2022 specifies a procedure for verifying the power performance characteristics of a single electricity-producing, horizontal axis wind turbine that is not considered to be a small wind turbine per IEC 61400-2. It is expected that this document be used when the specific operational or contractual specifications do not comply with the requirements set out in IEC 61400-12-1. The purpose of this document is to provide a uniform methodology of measurement, analysis, and reporting of power performance characteristics for individual electricity-producing wind turbines utilizing nacelle anemometry methods. This document is intended to be applied only to horizontal axis wind turbines of sufficient size that the nacelle-mounted anemometer does not significantly affect the flow through the turbine’s rotor and around the nacelle and hence does not affect the wind turbine’s performance. This second edition of IEC 61400-12-2 is part of a structural revision that cancels and replaces the performance standards IEC 61400-12-1:2017 and IEC 61400-12-2:2013. The structural revision contains no technical changes with respect to IEC 61400-12-1:2017 and IEC 61400-12-2:2013, but the parts that relate to wind measurements, measurement of site calibration, and assessment of obstacle and terrain have been extracted into separate standards.

Single copy price: Free
Obtain an electronic copy from: secretary@aresca.us
Order from: ARESCA
Send comments (copy psa@ansi.org) to: secretary@aresca.us

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

National Adoption

BSR/ARESCA 61400-12-3-202x, Wind energy generation systems - Part 12-3: Power Performance - Measurement Based Site Calibration (identical national adoption of IEC 61400-12-3:2022)

IEC 61400-12-3:2022 specifies a measurement and analysis procedure for deriving the wind speed correction due to terrain effects and applies to the performance testing of wind turbines of all types and sizes connected to the electrical power network as described in IEC 61400-12-1. The procedure applies to the performance evaluation of specific wind turbines at specific locations. The purpose of this part of IEC 61400 is to provide a uniform methodology that will ensure consistency, accuracy, and reproducibility in the measurement and analysis of a site calibration for use in the determination of the power performance of wind turbines. This document provides guidance in the measurement, analysis, and reporting of the site calibration for subsequent use in power performance testing for wind turbines.

Single copy price: Free
Obtain an electronic copy from: secretary@aresca.us
Order from: ARESCA
Send comments (copy psa@ansi.org) to: secretary@aresca.us
Comment Deadline: December 12, 2022

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

National Adoption
BSR/ARESCA 61400-12-5-202x, Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain (identical national adoption of IEC 61400-12-5:2023)
IEC 61400-12-5:2022 specifies the procedures for assessing the significance of obstacles and terrain variations on a proposed power performance measurement site and applies to the performance testing of wind turbines of all types and sizes connected to the electrical power network as described in other parts of the IEC 61400 series. The procedure applies to the performance evaluation of specific wind turbines at specific locations.
Single copy price: Free
Obtain an electronic copy from: secretary@aresca.us
Order from: ARESCA
Send comments (copy psa@ansi.org) to: secretary@aresca.us

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

National Adoption
BSR/ARESCA 61400-12-6-202x, Wind energy generation systems - Part 12-6: Measurement based nacelle transfer function of electricity producing wind turbines (identical national adoption of IEC 61400-12-6:2023)
IEC 61400-12-6:2022 specifies a procedure for measuring the nacelle transfer function of a single electricity-producing, horizontal axis wind turbine, which is not considered to be a small wind turbine in accordance with IEC 61400-2. It is expected that this document be used when a valid nacelle transfer function is needed to execute a power performance measurement according to IEC 61400-12-2. This document specifies how to characterize a wind turbine's nacelle transfer function. The nacelle transfer function is determined by collecting simultaneous measurements of nacelle-measured wind speed and free stream wind speed (as measured on a meteorological mast) for a period that is long enough to establish a statistically significant database over a range of wind speeds and under varying wind and atmospheric conditions. The procedure also provides guidance on determination of measurement uncertainty including assessment of uncertainty sources and recommendations for combining them.
Single copy price: Free
Obtain an electronic copy from: secretary@aresca.us
Order from: ARESCA
Send comments (copy psa@ansi.org) to: secretary@aresca.us
Comment Deadline: December 12, 2022

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

Reaffirmation

BSR/ASABE AD4254-13-2013 (R202x), Agricultural machinery - Safety - Part 13: Large rotary mowers (reaffirm a national adoption ANSI/ASABE AD4254-13-2013 (R2017))
This part of ISO 4254, when used together with ISO 4254-1, specifies the safety requirements and their verification for the design and construction of towed, semi-mounted, or mounted large rotary mowers with single or multiple cutting elements which have a cutting diameter of 1,000 mm or greater for any single cutting element assembly, mounted on a propelling tractor or machine, intended for agricultural mowing equipment and designed for shredding crop residue, grass, and small brush by impact. It describes methods for the elimination or reduction of hazards arising from the intended use and reasonable foreseeable misuse of these machines by one person (the operator) in the course of normal operation and service. In addition, it specifies the type of information on safe working practices to be provided by the manufacturer.
Single copy price: $51.00 [ASABE Members]; $75.00 [Non-members]
Obtain an electronic copy from: vanglder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: vangilder@asabe.org

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

Reaffirmation

BSR/ASABE S602.3-OCT2018 (R202x), General Safety Standard for Agricultural Tractors in Scraper Applications (reaffirmation of ANSI/ASABE S602.3-OCT2018)
This Standard provides safety requirements for agricultural scraper tractors as defined in ASAE S390, when used in construction environments, as defined in ISO 6165. This standard does not apply to agricultural tractors used in traditional agricultural applications, such as land leveling. Agricultural scraper tractors that meet the requirements of this standard are suitable for use in traditional agricultural tractor applications.
Single copy price: $51.00 [ASABE Members]; $75.00 [Non-members]
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: vangilder@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

Revision

BSR/ASHRAE Standard 70-202x, Method of Testing the Performance of Air Outlets and Air Inlets (revision of ANSI/ASHRAE Standard 70-2006)
This revision of ANSI/ASHRAE Standard 70-2006 defines laboratory methods of testing air outlets and air inlets used to terminate ducted and un-ducted systems for distribution and return of building air.
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: December 12, 2022

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

New Standard
BSR/EIA 364-123-202x, High Temperature Exposure With Contact Loading Test Procedure for Electrical Connectors (new standard)
This test procedure establishes a test method to determine with high temperature exposure to the connector, the contacts shall maintain their specified locations, and there shall be no electrical discontinuity while the contact is under a load.
Single copy price: $75.00
Obtain an electronic copy from: global.ihs.com
Send comments (copy psa@ansi.org) to: Ed Mikoski (emikoski@ecianow.org)

ESTA (Entertainment Services and Technology Association)
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

New Standard
BSR/ES1.5-202x, Event Safety - Medical (new standard)
BSR ES1.5 helps identify the steps necessary to create a reasonable level of protection from medical hazards that can be created by, exacerbated by, or cause effective treatment delay as a result of, the unique challenges and circumstances presented by the special event environment. Its scope includes the assessment of specific medical hazards, and also addresses the potential impact to local medical services, which may be temporarily impacted by the specific needs of the special event.
Single copy price: Free
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Order from: standards@esta.org
Send comments (copy psa@ansi.org) to: Same

New Standard
BSR/ES1.40-202x, Event Safety - Security (new standard)
This standard addresses the various guest services and crowd control aspects that are encompassed by "event security", all of which serve a common function of establishing the behavioral expectations for the event, ranging from permissible item possession, access control, and behavioral management, to crime prevention and an overall sense of safety for event attendees. This standard addresses both active and passive security considerations. It distinguishes between private security staff and law enforcement. This standard helps reduce the risk of harm to event attendees, and to their property, while helping to improve their onsite experience.
Single copy price: Free
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Order from: standards@esta.org
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: December 12, 2022

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

Revision
This Standard covers materials, chemicals, components, products, equipment and systems, related to public and residential recreational water facility operation.
Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

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

Revision
This Standard covers materials, chemicals, components, products, equipment and systems, related to public and residential recreational water facility operation.
Single copy price: Free
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

OPEI (Outdoor Power Equipment Institute)
1605 King Street, Alexandria, VA 22314 | dmustico@opei.org, www.opei.org

National Adoption
This part of OPEI/ISO 5395 specifies terminology and common test methods used for verification of safety requirements for powered rotary lawnmowers, cylinder lawnmowers, and flail lawnmowers including pedestrian-controlled (with or without sulky) and ride-on types.
Single copy price: Free
Obtain an electronic copy from: dmustico@opei.org
Order from: dmustico@opei.org
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: December 12, 2022

OPEI (Outdoor Power Equipment Institute)
1605 King Street, Alexandria, VA 22314 | dmustico@opei.org, www.opei.org

National Adoption
BSR/OPEI/ISO 5395-2:202X, Garden equipment - Safety requirements for combustion-engine-powered
tawnmowers - Part 2: Pedestrian-controlled lawnmowers (national adoption with modifications of ISO 5395
This part of OPEI/ISO 5395 specifies safety requirements and their verification for combustion-engine-powered
pedestrian-controlled rotary lawnmowers, cylinder lawnmowers, and flail lawnmowers, including pedestrian-
controlled lawnmowers with a sulky.
Single copy price: Free
Obtain an electronic copy from: dmustico@opei.org
Order from: dmustico@opei.org
Send comments (copy psa@ansi.org) to: Same

OPEI (Outdoor Power Equipment Institute)
1605 King Street, Alexandria, VA 22314 | dmustico@opei.org, www.opei.org

National Adoption
BSR/OPEI/ISO 5395-3:202X, Garden equipment - Safety requirements for powered lawnmowers - Part 3: Ride-on
lawnmowers (national adoption with modifications of ISO 5395-3:2013; ISO 5395-3:2013/Amd 1:2017; ISO
5395-3:2013/Amd 2:2017)
This part of OPEI/ISO 5395 specifies safety requirements and their verification for powered ride-on rotary
lawnmowers, cylinder lawnmowers, and flail lawnmowers.
Single copy price: Free
Obtain an electronic copy from: dmustico@opei.org
Order from: dmustico@opei.org
Send comments (copy psa@ansi.org) to: Daniel Mustico; dmustico@opei.org

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

New Standard
BSR/TIA 758-C-202x, Customer-Owned Outside Plant Telecommunications Infrastructure Standard (new
standard)
The purpose of this Standard is to enable the planning and installation of an outside plant structured cabling
system infrastructure. This Standard establishes the recommendations and requirements used in the design of
the telecommunication pathways and spaces, and the cabling installed between buildings or points in a
customer-owned campus environment. Customer-owned campus facilities are typically termed “outside
plant” (OSP). For the purpose of this Standard, they are termed, “customer-owned OSP”.
Single copy price: $174.00
Obtain an electronic copy from: standards-process@tiaonline.org
Order from: standards-process@tiaonline.org
Send comments (copy psa@ansi.org) to: Same
Comment Deadline: December 12, 2022

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

Revision
BSR/TIA 942-C-202x, Telecommunications Infrastructure Standard for Data Centers (revision and redesignation of ANSI/TIA 942-B-2017)
This Standard specifies the minimum requirements for telecommunications infrastructure of data centers and computer rooms, including edge data centers, enterprise data centers, managed services data centers, colocation data centers, and cloud data centers. The topology specified in this document is intended to be applicable to any size data center.
Single copy price: $256.00
Obtain an electronic copy from: standards-process@tiaonline.org
Order from: TIA (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
Single copy price: Free
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

ULSE (UL Standards & Engagement)
333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, https://ulse.org/

Revision
BSR/UL 414-202x, Standard for Safety for Meter Sockets (revision of ANSI/UL 414-2022)
The proposed revisions to UL 414 include: (1) Editorial correction to section headings of Supplement SA and (2) Addition of Supplement SC, Meter Socket Adapters with Branch Circuit Connections.
Single copy price: Free
Obtain an electronic copy from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx
**Comment Deadline: December 12, 2022**

**ULSE (UL Standards & Engagement)**
333 Pfingsten Road, Northbrook, IL 60062-2096 | mitchell.gold@ul.org, https://ulse.org/

**Revision**
BSR/UL 486A-486B-202x, Standard for Safety for Wire Connectors (revision of ANSI/UL 486A-486B-2021)
Ballot of the following topics: (1) Insulating covers during stress corrosion tests; (2) Addition of stranding table; (3) Revisions to clarify requirements associated with copper-clad aluminum and revise standard for clarity and usability; (4) Addition of testing requirements for the lineside of service rating; (5) Corrections and clarifications to UL 486A-486B; (6) Thermal testing with insulation colors other than black; and (7) Alternate information means.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com
Send comments (copy psa@ansi.org) to: https://csds.ul.com

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

**Reaffirmation**
BSR Z80.11-2012 (R202x), Laser Systems for Corneal Reshaping (reaffirmation of ANSI Z80.11-2012 (R2017))
This standard applies to any laser system whose primary intended use is to alter the shape of the cornea through the removal of corneal tissue, resulting in the improvement of visual performance. This standard addresses the vocabulary, performance requirements, labeling, and clinical investigations necessary for this type of device.
Single copy price: $94.00
Obtain an electronic copy from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Order from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Send comments (copy psa@ansi.org) to: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org

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

**Reaffirmation**
BSR Z80.12-2007 (R202x), Multifocal Intraocular Lenses (reaffirmation of ANSI Z80.12-2007 (R2017))
This standard applies to any ocular implant whose primary indication is the correction of aphakia and whose optic is designed to provide simultaneous distance and near vision. For the purposes of this standard, these implants are referred to as multifocal intraocular lenses (MIOLs). This standard does not consider optics designed to provide astigmatic power correction. The term “near vision”, as used in this standard, includes useful vision at the distance of claimed benefit; e.g., near and/or intermediate distances.
Single copy price: $55.00
Obtain an electronic copy from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Order from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Send comments (copy psa@ansi.org) to: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Comment Deadline: December 12, 2022

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

Reaffirmation
BSR Z80.13-2007 (R202x), Phakic Intraocular Lenses (reaffirmation of ANSI Z80.13-2007 (R2017))
This standard applies to any intraocular lens (IOL) whose primary indication is the modification of the refractive power of a phakic eye. It does not include IOLs used to correct presbyopia or astigmatism.
Single copy price: $45.00
Obtain an electronic copy from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Order from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Send comments (copy psa@ansi.org) to: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org

Comment Deadline: December 27, 2022

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY  10016-5990  | ansibox@asme.org, www.asme.org

Reaffirmation
This Code provides guidance for design, selection, and application of the data acquisition systems used in ASME Code Performance Tests. This Code provides descriptions of the various data acquisition system architectures and information on determining system uncertainties and to assist in selecting and applying these data acquisition systems.
Single copy price: $115.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Donnie Alonzo; dalonzo@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 B89.1.9-202x, Gage Blocks (revision of ANSI/ASME B89.1.9-2002 (R2012))
This Standard specifies the most important design and metrological characteristics of gage blocks with a rectangular or square cross-section and a nominal length.
Single copy price: Free
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Justin Cassamassino; cassasmassinoj@asme.org
Project Withdrawn

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

**ULSE (UL Standards & Engagement)**
333 Pfingsten Road, Northbrook, IL  60062-2096  | mitchell.gold@ul.org, https://ulse.org/

BSR/UL 96-202x, Standard for Safety for Lightning Protection Components (revision of ANSI/UL 96-2020)
Inquiries may be directed to Mitchell Gold; mitchell.gold@ul.org

**Notice of Withdrawal: ANSI at least 10 years past approval date**

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

**ASSP (ASC A10) (American Society of Safety Professionals)**
520 N. Northwest Highway, Park Ridge, IL  60068  | TFisher@ASSP.org, www.assp.org

**Revision**

A new edition of this withdrawn standard is being resubmitted for ANSI approval as a new standard under ASSP A10.32.
Direct inquiries to: Tim Fisher; TFisher@ASSP.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.

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

Revision

ABTG (Applied Building Technology Group)
6300 Enterprise Lane, Madison, WI 53719 | tkutz@qualtim.com, www.appliedbuildingtech.com

New Standard

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

Revision
ANSI/ASAE S318.19 MONYEAR, Safety for Agricultural Field Equipment (revision and redesignation of ANSI/ASAE S318.18 JUN2017) Final Action Date: 10/21/2022

ASC X9 (Accredited Standards Committee X9, Incorporated)
275 West Street, Suite 107, Annapolis, MD 21401 | admin@x9.org, www.x9.org

Reaffirmation

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

Reaffirmation
ANSI/ASME B89.1.13-2013 (R2022), Micrometers (reaffirmation of ANSI/ASME B89.1.13-2013) Final Action Date: 10/21/2022

Revision

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

New Standard
ANSI/ASTM E3235-2021, Practice for Latent Print Evidence Imaging Resolution (new standard) Final Action Date: 10/18/2022
New Standard

New Standard

Reaffirmation
ANSI/ASTM F681-1982 (R2022), Practice for Use of Branch Connections (reaffirmation of ANSI/ASTM F681-1982 (R2018)) Final Action Date: 10/18/2022

Reaffirmation

Reaffirmation

Reaffirmation
ANSI/ASTM F721-2018 (R2022), Specification for Gage Piping Assemblies (reaffirmation of ANSI/ASTM F721-2018 (R2018)) Final Action Date: 10/18/2022

Reaffirmation

Reaffirmation
ANSI/ASTM F856-1997 (R2022), Practice for Mechanical Symbols, Shipboard Heating, Ventilation, and Air Conditioning (HVAC) (reaffirmation of ANSI/ASTM F856-1997 (R2018)) Final Action Date: 10/18/2022

Reaffirmation

Reaffirmation
ANSI/ASTM F994-1986 (R2022), Specification for Design and Installation of Overboard Discharge Hull Penetration Connections (reaffirmation of ANSI/ASTM F994-1986 (R2018)) Final Action Date: 10/18/2022

Reaffirmation
ANSI/ASTM F998-2012 (R2022), Specification for Centrifugal Pump, Shipboard Use (reaffirmation of ANSI/ASTM F998-2012 (R2018)) Final Action Date: 10/18/2022

Reaffirmation
ANSI/ASTM F1006-1986 (2022), Specification for Entrainment Separators for Use in Marine Piping Applications (reaffirmation of ANSI/ASTM F1006-1986 (R2018)) Final Action Date: 10/18/2022
Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation
ANSI/ASTM F2071-2000 (2022), Specification for Switch, Position Proximity (Noncontact) or Limit (Mechanical Contact), Fiber-Optic (reaffirmation of ANSI/ASTM F2071-2000 (R2017)) Final Action Date: 10/18/2022

Revision

Revision

Revision

Revision

Revision
ANSI/ASTM F1521-2022, Test Methods for Performance of Range Tops (revision of ANSI/ASTM F1521-2012 (R2018)) Final Action Date: 10/18/2022
ASTM (ASTM International)
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | accreditation@astm.org, www.astm.org

Revision

ESTA (Entertainment Services and Technology Association)
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

Reaffirmation
ANSI E1.35-2013 (R2022), Standard for Lens Quality Measurements for Pattern Projecting Luminaires Intended for Entertainment Use (reaffirmation of ANSI E1.35-2013 (R2018)) Final Action Date: 10/20/2022

NISO (National Information Standards Organization)
3600 Clipper Mill Road, Suite 302, Baltimore, MD 21211 | nlagace@niso.org, www.niso.org

Revision

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

Revision
ANSI/NSF 14-2022 (i125r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2021) Final Action Date: 10/10/2022

Revision

Revision

Revision
ANSI/NSF 455-2-2022 (i35r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 10/12/2022

Revision
ANSI/NSF 455-2-2022 (i36r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 10/14/2022

Revision
ANSI/NSF 455-2-2022 (i37r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 10/19/2022

Revision
ANSI/NSF 455-2-2022 (i38r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 10/17/2022
**Revision**
ANSI/NSF 455-2-2022 (i40r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 10/19/2022

**SDI (ASC A250) (Steel Door Institute)**
30200 Detroit Road, Westlake, OH 44145 | leh@wherryassoc.com, www.wherryassocsteeldoor.org

**Revision**
ANSI A250.4-2022, Physical Endurance for Steel Doors, Frames and Frame Anchors (revision of ANSI A250.4-2018) Final Action Date: 10/17/2022

**ULSE (UL Standards & Engagement)**
333 Pfingsten Road, Northbrook, IL 60062-2096 | Susan.P.Malohn@ul.org, https://ulse.org/

**National Adoption**
ANSI/UL 62446-1-2022, Photovoltaic (PV) Systems - Requirements for Testing, Documentation and Maintenance - Part 1: Grid Connected Systems - Documentation, Commissioning Tests and Inspection (national adoption with modifications of IEC 62446-1) Final Action Date: 10/20/2022

**National Adoption**

**Reaffirmation**
ANSI/UL 641-2009 (R2022), Standard for Safety for Type L Low-Temperature Venting Systems (reaffirmation of ANSI/UL 641-2009 (R2018)) Final Action Date: 10/20/2022

**Reaffirmation**
ANSI/UL 2561-2009 (R2022), Standard for Safety for 1400 Degree Fahrenheit Factory-Built Chimneys (reaffirmation of ANSI/UL 2561-2009 (R2018)) Final Action Date: 10/20/2022

**Revision**

**Revision**
ANSI/UL 962-2022a, Standard for Household and Commercial Furnishings (revision of ANSI/UL 962-2022) Final Action Date: 10/21/2022

**Revision**
ANSI/UL 970-2022, Standard for Retail Fixtures and Merchandising Displays (revision of ANSI/UL 970-2020) Final Action Date: 10/21/2022

**Revision**
ANSI/UL 1769-2022, Standard for Safety for Cylinder Valves (revision of ANSI/UL 1769-2016) Final Action Date: 10/12/2022
ULSE (UL Standards & Engagement)
333 Pfingsten Road, Northbrook, IL 60062 | isabella.brodzinski@ul.org, https://ulse.org/

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


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

BSR/AAMI/ISO 13004-202x, Sterilization of health care products - Radiation - Substantiation of selected sterilization dose: Method VDmaxSD (identical national adoption of ISO 13004:2022)

AGMA (American Gear Manufacturers Association)
1001 N Fairfax Street, 5th Floor, Alexandria, VA 22314-1587 | tech@AGMA.org, www.AGMA.org

BSR/AGMA 6011-KXX-202x, Specification for High Speed Helical Gear Units (revision of ANSI/AGMA 6011-J14 (R2019))

AGMA (American Gear Manufacturers Association)
1001 N Fairfax Street, 5th Floor, Alexandria, VA 22314-1587 | tech@AGMA.org, www.AGMA.org


ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@ARESCA.US, www.ARESCA.US


ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@ARESCA.US, www.ARESCA.US

BSR/ARESCA 61400-12-1-202x, Wind energy generation systems - Part 12-1: Power performance measurement of electricity producing wind turbines (identical national adoption of IEC 61400-12-1:2023)

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@ARESCA.US, www.ARESCA.US

BSR/ARESCA 61400-12-2-202x, Wind energy generation systems - Part 12-2: Power performance of electricity producing wind turbines based on nacelle anemometry (identical national adoption of IEC 61400-12-2:2023)

ARESCA (American Renewable Energy Standards and Certification Association)
256 Farrell Farm Road, Norwich, VT 05055 | secretary@ARESCA.US, www.ARESCA.US

BSR/ARESCA 61400-12-3-202x, Wind energy generation systems - Part 12-3: Power Performance - Measurement Based Site Calibration (identical national adoption of IEC 61400-12-3:2023)
Call for Members (ANS Consensus Bodies)

**ARESCA (American Renewable Energy Standards and Certification Association)**
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us
BSR/ARESCA 61400-12-5-202x, Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain (identical national adoption of IEC 61400-12-5:2023)

**BSR/ARESCA 61400-12-5-202x, Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain (identical national adoption of IEC 61400-12-5:2023)**

**ARESCA (American Renewable Energy Standards and Certification Association)**
256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us
BSR/ARESCA 61400-12-6-202x, Wind energy generation systems - Part 12-6: Measurement based nacelle transfer function of electricity producing wind turbines (identical national adoption of IEC 61400-12-6:2023)

**ASABE (American Society of Agricultural and Biological Engineers)**
2950 Niles Road, Saint Joseph, MI 49085 | vangilder@asabe.org, https://www.asabe.org/
BSR/ASABE AD4254-13-2013 (R202x), Agricultural machinery - Safety - Part 13: Large rotary mowers (reaffirm a national adoption ANSI/ASABE AD4254-13-2013 (R2017))

**BSR/ASABE AD4254-13-2013 (R202x), Agricultural machinery - Safety - Part 13: Large rotary mowers (reaffirm a national adoption ANSI/ASABE AD4254-13-2013 (R2017))**

**ASABE (American Society of Agricultural and Biological Engineers)**
2950 Niles Road, Saint Joseph, MI 49085 | vangilder@asabe.org, https://www.asabe.org/
BSR/ASABE S602.3-OCT2018 (R202x), General Safety Standard for Agricultural Tractors in Scraper Applications (reaffirmation of ANSI/ASABE S602.3-OCT2018)

**ASABE (American Society of Agricultural and Biological Engineers)**
2950 Niles Road, Saint Joseph, MI 49085 | vangilder@asabe.org, https://www.asabe.org/
BSR/ASABE S602.3-OCT2018 (R202x), General Safety Standard for Agricultural Tractors in Scraper Applications (reaffirmation of ANSI/ASABE S602.3-OCT2018)

**ASME (American Society of Mechanical Engineers)**
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

**CTA (Consumer Technology Association)**
1919 S. Eads Street, Arlington, VA 22202 | cakers@cta.tech, www.cta.tech
BSR/CTA 2118-202x, Pure Tone Average Testing Methodology and Reporting Metrics for Consumer Facing Hearing Solutions (new standard)
CTA is seeking new members to join the consensus body. CTA and the R11 Health, Fitness & Wellness Committee are particularly interested in adding new members (called "users") who acquire health, fitness and wellness products. from those who create them, and in adding new members who neither produce nor use health, fitness or wellness products, and others (called members with a "general interest").

**ECIA (Electronic Components Industry Association)**
13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org
BSR/EIA 364-29E-202x, Contact Retention Test Procedure for Electrical Connectors (revision and redesignation of ANSI/EIA 364-29D-2019)

**ECIA (Electronic Components Industry Association)**
13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org
BSR/EIA 364-123-202x, High Temperature Exposure with Contact Loading Test Procedure for Electrical Connectors (new standard)
**ECIA (Electronic Components Industry Association)**
13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org

BSR/EIA 364-42C-2012 (R202x), Impact Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-42C-2012 (R2018))

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


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


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


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


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

BSR/EIA 364-103-1998 (R202x), Propagation Delay Test Procedure for Electrical Connectors, Sockets, Cable Assemblies or Interconnection Systems (reaffirmation of ANSI/EIA 364-103-1998 (R2018))

**ESTA (Entertainment Services and Technology Association)**
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

BSR/ES1.5-202x, Event Safety - Medical (new standard)
The Event Safety Working Group seeks new consensus body members in the following interest categories: Performing artist, Insurance company, Event worker, Event producer, Equipment provider, and Dealer/rental company.

**ESTA (Entertainment Services and Technology Association)**
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

BSR/ES1.40-202x, Event Safety - Security (new standard)
The Event Safety Working Group seeks new consensus body members in the following interest categories: Performing artist, Insurance company, Event worker, Event producer, Equipment provider, and Dealer/rental company.
Call for Members (ANS Consensus Bodies)

IES (Illuminating Engineering Society)
120 Wall Street, Floor 17, New York, NY 10005-4001 | pmcgillicuddy@ies.org, www.ies.org
BSR/IES RP-47-202x, Recommended Practice: Landscape Lighting (new standard)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 46-202x (i43r1), Evaluation of Components and Devices Used in Wastewater Treatment Systems (revision of ANSI/NSF 46-2021)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | rbrooker@nsf.org, www.nsf.org
BSR/NSF 173-202x (i102r1), Dietary Supplements (revision of ANSI/NSF 173-2021)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | rbrooker@nsf.org, www.nsf.org
BSR/NSF 455-2-202x (i42r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | rbrooker@nsf.org, www.nsf.org
BSR/NSF 455-2-202x (i50r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)

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

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

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

TIA (Telecommunications Industry Association)
1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org
BSR/TIA 568.2-E-202x, Balanced Twisted-Pair Telecommunications Cabling and Components Standard (revision and redesignation of ANSI/TIA 568.2-D-2018)

TIA (Telecommunications Industry Association)
1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org
BSR/TIA 570-E-202x, Residential Telecommunications Infrastructure Standard (revision and redesignation of ANSI/TIA 570-D-2018)

TIA (Telecommunications Industry Association)
1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org
BSR/TIA 758-C-202x, Customer-Owned Outside Plant Telecommunications Infrastructure Standard (new standard)

TIA (Telecommunications Industry Association)
1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org
BSR/TIA 942-C-202x, Telecommunications Infrastructure Standard for Data Centers (revision and redesignation of ANSI/TIA 942-B-2017)

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

ULSE - UL Standards & Engagement
ANSI/UL 962-202x approval rescinded

A July 1, 2022 Standards Action, Final Action notice mistakenly announced Approval of this UL proposal. This approval is hereby rescinded. The public review notice will be approved at a future date.

BSR/UL 962-202x, Standard for Household and Commercial Furnishings
(revision of ANSI/UL 962-2022)

1. Revisions To Correct Cross References, Address Mandatory Language, Reflect Standards Writing Conventions, Clarify Requirements, And Similar Changes In Preparation For A New Edition

Please direct inquiries to: Elizabeth Northcott; Elizabeth.Northcott@ul.org
American National Standards (ANS) Process

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

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

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

- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): www.ansi.org/standardsaction
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): www.ansi.org/asd
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: www.ansi.org/asd
- American National Standards Key Steps: www.ansi.org/anskeysteps
- American National Standards Value: www.ansi.org/ansvalue
- 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
IES - Illuminating Engineering Society
Effective October 21, 2022
The reaccreditation of IES - Illuminating Engineering Society has been approved at the direction of ANSI’s Executive Standards Council, under its recently revised operating procedures for documenting consensus on IES-sponsored American National Standards, effective October 21, 2022. For additional information, please contact: Patricia McGillicuddy, Illuminating Engineering Society (IES) | 120 Wall Street, Floor 17, New York, NY 10005-4001 | (917) 913-0027, pmcgillicuddy@ies.org

Approval of Reaccreditation – ASD
MHI - Material Handling Industry
Effective October 20, 2022
The reaccreditation of MHI - Material Handling Industry has been approved at the direction of ANSI’s Executive Standards Council, under its recently revised operating procedures for documenting consensus on MHI-sponsored American National Standards, effective October 20, 2022. For additional information, please contact: Patrick Davison, Material Handling Industry (MHI) | 8720 Red Oak Boulevard, Suite 201, Charlotte, NC 28217 | (704) 714-8755, pdavison@mhi.org

Approval of Reaccreditation – ASD
TCIA - Tree Care Industry Association, sponsor of ASC A300, Standard Practices for Shade Tree Maintenance
Effective October 21, 2022
The reaccreditation of TCIA - Tree Care Industry Association, sponsor of ASC A300, Standard Practices for Shade Tree Maintenance has been approved at the direction of ANSI’s Executive Standards Council, under its recently revised operating procedures for documenting consensus on TCIA/ASC A300-sponsored American National Standards, effective October 21, 2022. For additional information, please contact: Robert Rouse, Tree Care Industry Association | 136 Harvey Road, Suite 101, Londonderry, NH 03053 | (603) 314-5380, rrouse@tcia.org
Accreditation Announcements (Standards Developers)

Public Review of Revised ASD Operating Procedures


Comment Deadline: November 28, 2022

ASHRAE - American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., an ANSI Member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on ASHRAE-sponsored American National Standards, under which it was last reaccredited in 2020. 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: Tanisha Meyers-Lisle, American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) | 180 Technology Parkway, Peachtree Corners, GA 30092 | (678) 539-1111, TMeyers-Lisle@ashrae.org

To view/download a copy of the revisions during the public review period, click here.

Please submit any public comments on the revised procedures to ASHRAE by November 28, 2022, with a copy to the ExSC Recording Secretary in ANSI’s New York Office (jthompso@ANSI.org).

Public Review of Revised ASD Operating Procedures

ULSE - UL Standards & Engagement

Comment Deadline: November 28, 2022

ULO - UL Standards & Engagement, an ANSI Member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on ULSE-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: Patricia Sena, UL Standards & Engagement (ULO) | 12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | (919) 549-1636, patricia.a.sena@ul.org

To view/download a copy of the revisions during the public review period, click here.

Please submit any public comments on the revised procedures to ULSE by November 28, 2022, 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.

<table>
<thead>
<tr>
<th>ANSI-Accredited Standards Developers (ASD) Contacts</th>
<th>ANSI-Accredited Standards Developers Contact Information</th>
</tr>
</thead>
</table>
| **AAMI** Association for the Advancement of Medical Instrumentation | **AAMI** Association for the Advancement of Medical Instrumentation  
901 N. Glebe Road, Suite 300  
Arlington, VA 22203  
www.aami.org  
Jody Allen jallen@aami.org  
Thomas Kim tkim@aami.org |
| **AARST** American Association of Radon Scientists and Technologists | **AARST** American Association of Radon Scientists and Technologists  
527 N. Justice Street  
Hendersonville, NC 28739  
www.aarst.org  
Gary Hodgden StandardsAssist@gmail.com |
| **ABTG** Applied Building Technology Group | **ABTG** Applied Building Technology Group  
6300 Enterprise Lane  
Madison, WI 53719  
www.appliedbuildingtech.com  
Trish Kutz tkutz@qualtim.com |
| **AGMA** American Gear Manufacturers Association | **AGMA** American Gear Manufacturers Association  
1001 N Fairfax Street, 5th Floor  
Alexandria, VA 22314  
www.agma.org  
Amir Aboutaleb tech@agma.org |
| **ANS** American Nuclear Society | **ANS** American Nuclear Society  
555 North Kensington Avenue  
La Grange Park, IL 60526  
www.ans.org  
Kathryn Murdoch kmurdoch@ans.org |
| **ARESCA** American Renewable Energy Standards and Certification Association | **ARESCA** American Renewable Energy Standards and Certification Association  
256 Farrell Farm Road  
Norwich, VT 05055  
www.aresca.us  
George Kelly secretary@aresca.us |
| **ASABE** American Society of Agricultural and Biological Engineers | **ASABE** American Society of Agricultural and Biological Engineers  
2950 Niles Road  
Saint Joseph, MI 49085  
https://www.asabe.org/  
Carla VanGilder vangilder@asabe.org |
| **ASC X9** Accredited Standards Committee X9, Incorporated | **ASC X9** Accredited Standards Committee X9, Incorporated  
275 West Street, Suite 107  
Annapolis, MD 21401  
www.x9.org  
Ambria Frazier admin@x9.org |
180 Technology Parkway  
Peachtree Corners, GA 30092  
www.ashrae.org  
Carmen King cking@ashrae.org  
Ryan Shanley rshanley@ashrae.org |
| **ASME** American Society of Mechanical Engineers | **ASME** American Society of Mechanical Engineers  
Two Park Avenue, 6th Floor  
New York, NY 10016  
www.asme.org  
Maria Acevedo ansibox@asme.org |
| **ASTM** ASTM International | **ASTM** ASTM International  
100 Barr Harbor Drive  
West Conshohocken, PA 19428  
www.astm.org  
Laura Klineburger accreditation@astm.org |
| **CTA** Consumer Technology Association | **CTA** Consumer Technology Association  
1919 S. Eads Street  
Arlington, VA 22202  
www.cta.tech  
Catrina Akers cakers@cta.tech |
| **ECIA** Electronic Components Industry Association | **ECIA** Electronic Components Industry Association  
13873 Park Center Road, Suite 315  
Herndon, VA 20171  
www.ecianow.org  
Laura Donohoe Idonohoe@ecianow.org |
| **ESTA** Entertainment Services and Technology Association | **ESTA** Entertainment Services and Technology Association  
271 Cadman Plaza, P.O. Box 23200  
Brooklyn, NY 11202  
www.esta.org  
Richard Nix standards@esta.org |
| **IES** Illuminating Engineering Society | **IES** Illuminating Engineering Society  
120 Wall Street, Floor 17  
New York, NY 10005  
www.ies.org  
Patricia McGillicuddy pmcgillicuddy@ies.org |
| **NEMA (ASC CB)** National Electrical Manufacturers Association | **NEMA (ASC CB)** National Electrical Manufacturers Association  
1300 North 17th Street, Suite 900  
Arlington, VA 22209  
www.nema.org  
Khaled Masri Khaled.Masri@nema.org |
NISO
National Information Standards Organization
3600 Clipper Mill Road, Suite 302
Baltimore, MD 21211
www.niso.org
Nettie Lagace
nlagace@niso.org

NRMCA
National Ready Mixed Concrete Association
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
https://www.nrmca.org/
Scott Campbell
scampbell@nrmca.org

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105
www.nsf.org
Jason Snider
jsnider@nsf.org
Rachel Brooker
rbrooker@nsf.org

OPEI
Outdoor Power Equipment Institute
1605 King Street
Alexandria, VA 22314
www.opei.org
Daniel Mustico
dmustico@opei.org

SDI (ASC A250)
Steel Door Institute
30200 Detroit Road
Westlake, OH 44145
www.wherryassocsteeldoor.org
Linda Hamill
leh@wherryassoc.com

TCNA (ASC A108)
Tile Council of North America
100 Clemson Research Blvd.
Anderson, SC 29625
www.tcnatile.com
Katelyn Simpson
KSimpson@tileusa.com

TIA
Telecommunications Industry Association
1320 North Courthouse Road, Suite 200
Arlington, VA 22201
www.tiaonline.org
Teesha Jenkins
standards-process@tiaonline.org

ULSE
UL Standards & Engagement
12 Laboratory Drive
Research Triangle Park, NC 27709
https://ulse.org/
Jennifer Fields
jennifer.fields@ul.org
Tony Partridge
Tony.Partridge@ul.org
Vickie Hinton
Vickie.T.Hinton@ul.org

VC (ASC Z80)
The Vision Council
225 Reinekers Lane, Suite 700
Alexandria, VA 22314
www.z80asc.com
Michele Stolberg
ascz80@thevisioncouncil.org
### ISO Standards

**Aircraft and space vehicles (TC 20)**
- ISO/DIS 17666, Space systems - Risk management - 1/5/2023, $82.00
- ISO/DIS 27025, Space systems - Programme management - Quality assurance requirements - 1/6/2023, $125.00
- ISO/DIS 27026, Space systems - Programme management - Breakdown of project management structures - 1/7/2023, $58.00

**Concrete, reinforced concrete and pre-stressed concrete (TC 71)**

**Equipment for fire protection and fire fighting (TC 21)**
- ISO/DIS 7204, Specification for wetting agents for application on Class A fires - 1/8/2023, $71.00

**Gears (TC 60)**
- ISO/DIS 10300-1, Calculation of load capacity of bevel gears - Part 1: Introduction and general influence factors - 11/25/2022, $125.00
- ISO/DIS 10300-2, Calculation of load capacity of bevel gears - Part 2: Calculation of surface durability (pitting) - 11/25/2022, $107.00
- ISO/DIS 10300-3, Calculation of load capacity of bevel gears - Part 3: Calculation of tooth root strength - 11/25/2022, $112.00

### Geographic information/Geomatics (TC 211)
- ISO/DIS 19152-1, Geographic information - Land Administration Domain Model (LADM) - Part 1: Generic Conceptual Model - 1/8/2023, $102.00

### Metallic and other inorganic coatings (TC 107)
- ISO/DIS 3882, Metallic and other inorganic coatings - Review of methods of measurement of thickness - 1/8/2023, $58.00

### Plastics (TC 61)
- ISO/DIS 61, Plastics - Determination of apparent density of moulding material that cannot be poured from a specified funnel - 1/7/2023, $33.00
- ISO/DIS 5425, Specifications for use of poly(lactic acid) based filament in additive manufacturing applications - 1/8/2023, $58.00

### Terminology (principles and coordination) (TC 37)
- ISO/DIS 20539, Translation, interpreting and related technology - Vocabulary - 1/8/2023, $71.00

### IEC Standards

**65A/1065/NP, PNW TS 65A-1065 ED1:** Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 2-1: Requirements for complex semiconductors, 01/13/2023

**Audio, video and multimedia systems and equipment (TC 100)**
- 100/3839/FDIS, IEC 63245-2 ED1: Spatial wireless power transfer based on multiple magnetic resonances - Part 2: Reference model, 12/02/2022
Capacitors and resistors for electronic equipment (TC 40)
40/2985/FDIS, IEC 60384-14 ED5: Fixed capacitors for use in electronic equipment - Part 14: Sectional specification - Fixed capacitors for electromagnetic interference suppression and connection to the supply mains, 12/02/2022

Electric traction equipment (TC 9)
9/2887/FDIS, IEC 62973-3 ED1: Railway applications - Rolling stock - Batteries for auxiliary power supply systems - Part 3: Lead acid batteries, 12/02/2022

Electrical accessories (TC 23)
23B/1439/CD, IEC 60884-2-8 ED1: Plugs and socket-outlets for household and similar purposes - Particular requirements for socket-outlets for furniture, 01/13/2023
23K/78(F)/FDIS, IEC 62991 ED1: Particular requirements for source switching equipment (SSE), 11/11/2022

Electromechanical components and mechanical structures for electronic equipments (TC 48)
48B/3000(F)/FDIS, IEC 61076-2-116 ED1: Connectors for electrical and electronic equipment - Product requirements - Part 2 -116: Detail specification for circular connectors size 15 with up to 3+PE power contacts and auxiliary contacts, with bayonet-locking, 11/04/2022

Fibre optics (TC 86)
86A/2249/FDIS, IEC 60794-1-305 ED1: Optical fibre cables - Part 1-305: Generic specification - Basic optical cable test procedures - Cable element test methods - Ribbon tear (separability), Method G5, 12/02/2022
86B/4659/CDV, IEC 61300-2-38 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-38: Tests - Sealing for fibre optic sealed closures and hardened connectors using air pressure, 01/13/2023
86B/4677/CD, IEC 61754-13 ED3: Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 13: Type FC-PC connector family, 01/13/2023
86B/4678/NP, PNW 86B-4678 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector product specifications - Part 1-15: MPO singlemode connector - Two fibre rows, 16 fibres wide - Category C - Terminated on IEC 60793-2-50 category B-652 to B-657 fibres, 01/13/2023

Flat Panel Display Devices (TC 110)
110/1460/CVD, IEC 63145-10 ED1: Eyewear display - Part 10: Specifications, 01/13/2023

Fuel Cell Technologies (TC 105)
105/947(F)/FDIS, IEC 62282-4-102 ED2: Fuel cell technologies - Part 4-102: Fuel cell power systems for electrically powered industrial trucks - Performance test methods, 11/11/2022

Industrial-process measurement and control (TC 65)
65/948/CD, ISO 20140-5 ED2: Automation systems and integration - Evaluating energy efficiency and other factors of manufacturing systems that influence the environment - Part 5: Environmental performance evaluation data, 12/16/2022

Laser equipment (TC 76)
76/717(F)/FDIS, IEC 60825-12 ED3: Safety of laser products - Part 12: Safety of free space optical communication systems used for transmission of information, 11/04/2022

Magnetic components and ferrite materials (TC 51)
51/1419/CDV, IEC 63300 ED1: Test methods for electrical and magnetic properties of magnetic powder cores, 01/13/2023

Measuring equipment for electromagnetic quantities (TC 85)
85/841/DTS, IEC TS 63191 ED1: Demand side power quality management, 01/13/2023

Nuclear instrumentation (TC 45)
45B/1014/CD, IEC 62463 ED2: Radiation protection instrumentation - X-ray systems for the security screening of persons, 01/13/2023

Performance of household electrical appliances (TC 59)
59N/25/CDV, IEC 63086-1/AMD1 ED1: Amendment 1 - Household and similar electrical air cleaning appliances - Methods for measuring the performance - Part 1: General requirements, 01/13/2023

Power electronics (TC 22)
22E/242/CD, IEC 62909-1 ED2: Bi-directional grid connected power converters - Part 1: General and safety requirements, 01/13/2023
22F/699/CDV, IEC 62927/AMD1 ED1: Amendment 1 - Voltage sourced converter (VSC) valves for static synchronous compensator (STATCOM) - Electrical testing, 01/13/2023
Rotating machinery (TC 2)

Secondary cells and batteries (TC 21)
21/1159/CD, IEC 61427-2 ED2: Secondary cells and batteries for renewable energy storage - General requirements and methods of test - Part 2: On-grid applications, 12/16/2022

Semiconductor devices (TC 47)
47E/793(F)/FDIS, IEC 60747-16-8 ED1: Semiconductor devices - Part 16-8: Microwave integrated circuits - Limiters, 11/04/2022

Switchgear and controlgear (TC 17)
17C/879/CD, IEC 62271-211 ED2: High-voltage switchgear and controlgear - Part 211: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV, 01/13/2023
17C/878/DTS, IEC TS 62271-318 ED1: High-voltage switchgear and control gear Part 318: DC gas-insulated switchgear assemblies, 01/13/2023

Other
SyCSmartCities/267/CD, IEC SRD 63320-1 ED1: Systems Reference Deliverable (SRD) - Use Case Collection and Analysis - Smart urban planning for Smart Cities Part 1: high level analysis, 01/13/2023

JTC1-SC25/3121/CD, ISO/IEC 10192-4-2: Information technology - Home Electronic System (HES) interfaces - Part 4-2: Common user interface and cluster-to-cluster interface to support interworking among home cluster systems - Interfaces, services and objects, 12/16/2022

(TC 129)
129/19/CD, IEC 63439-1-1 ED1: Terminology for Electric Power Robots, 01/13/2023
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

Additive manufacturing (TC 261)
ISO/ASTM 52909:2022, Additive manufacturing of metals - Finished part properties - Orientation and location dependence of mechanical properties for metal powder bed fusion, $111.00

Internal combustion engines (TC 70)
ISO 8528-10:2022, Reciprocating internal combustion engine driven alternating current generating sets - Part 10: Measurement of airborne noise, $200.00

Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)
ISO 13704:2022, Petroleum, petrochemical and natural gas industries - Calculation of heater-tube thickness in petroleum refineries, $48.00

Metallic and other inorganic coatings (TC 107)
ISO 6769:2022, Vitreous and porcelain enamels - Determination of surface scratch hardness according to the Mohs scale, $48.00

Other
ISO 7906:2022, Leather - Tests for colour fastness - General principles of testing, $73.00

Paper, board and pulps (TC 6)
ISO 187:2022, Paper, board and pulps - Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples, $73.00

Personal safety - Protective clothing and equipment (TC 94)
ISO 16976-1:2022, Respiratory protective devices - Human factors - Part 1: Metabolic rates and respiratory flow rates, $111.00
ISO 16976-3:2022, Respiratory protective devices - Human factors - Part 3: Physiological responses and limitations of oxygen and limitations of carbon dioxide in the breathing environment, $149.00

Security (TC 292)
ISO 22361:2022, Sizing system, designations and marking for boots and shoes (TC 137)
ISO 19410-1:2022, Footwear sizing - In-shoe measurement - Part 1: Shoe length, $48.00

Steel wire ropes (TC 105)
ISO 2232:2022, Round non-alloy steel wires for general purpose wire ropes, large diameter wire ropes and mine hoisting wire ropes - Specifications, $149.00

ISO Technical Specifications

Sustainable development in communities (TC 268)
ISO/TS 37172:2022, Smart community infrastructures - Data exchange and sharing for community infrastructures based on geographic information, $111.00

ISO/IEC JTC 1 Technical Reports

ISO/IEC 24790:2017/Amd 1:2022, Information technology - Office equipment - Measurement of image quality attributes for hardcopy output - Monochrome text and graphic images - Amendment 1, $20.00

ISO/IEC 23090-16:2022, Information technology - Coded representation of immersive media - Part 16: Reference software for versatile video coding, $48.00
IEC Standards

Capacitors and resistors for electronic equipment (TC 40)

IEC 62391-1 Ed. 3.0 b:2022, Fixed electric double-layer capacitors for use in electric and electronic equipment - Part 1: Generic specification, $392.00

Electrical accessories (TC 23)

IEC 60755-1 Ed. 1.0 en:2022, General safety requirements for residual current operated protective devices - Part 1: Residual current operated protective devices for DC systems, $259.00

Electrical installations of buildings (TC 64)

IEC 60364-5-57 Ed. 1.0 b:2022, Low-voltage electrical installations - Part 5-57: Selection and erection of electrical equipment - Erection of stationary secondary batteries, $183.00
IEC 60364-8-82 Ed. 1.0 b:2022, Low-voltage electrical installations - Part 8-82: Functional aspects - Prosumer's low-voltage electrical installations, $392.00

Industrial-process measurement and control (TC 65)

IEC 62714-2 Ed. 2.0 b:2022, Engineering data exchange format for use in industrial automation systems engineering - Automation Markup Language - Part 2: Semantics libraries, $354.00

Performance of household electrical appliances (TC 59)

IEC 63237-1 Ed. 1.0 b:2022, Household and similar electrical appliances - Product information properties - Part 1: Fundamentals, $133.00

Power electronics (TC 22)

IEC 61975 Amd.2 Ed. 1.0 b:2022, Amendment 2 - High-voltage direct current (HVDC) installations - System tests, $25.00
IEC 61975 Ed. 1.2 b:2022, High-voltage direct current (HVDC) installations - System tests, $696.00

IEC Technical Reports

Lamps and related equipment (TC 34)

IEC/TR 63425 Ed. 1.0 en:2022, Connectivity for lighting systems, $183.00

Printed Electronics (TC 119)

IEC/TR 62899-550-1 Ed. 1.0 en:2022, Printed electronics - Part 550-1: Quality assessment - Framework document on durability testing - Mechanical and thermal testing, $89.00
Accreditation Announcements (U.S. TAGs to ISO)

Public Review of Application for Accreditation of a U.S. TAG to ISO

TC 340, Natural gas fuelling stations

Comment Deadline: 11/28/2022

The CSA Group has submitted an Application for Accreditation for a new proposed U.S. Technical Advisory Group (TAG) to ISO TC 340, Natural gas fuelling stations, and a request for approval as TAG Administrator. The proposed TAG intends to operate using the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures.

To obtain a copy of the TAG application or to offer comments, please contact: Brian Zupancic, CSA Group: 8501 E. Pleasant Valley Rd. Cleveland, OH 44131, P: (216) 524-4990 Ext. 88040 E: brian.zupancic@csagroup.org. Please submit any comments to CSA Group by November 28, 2022 (please copy jthompso@ansi.org)
Call for International (ISO) Secretariat

ISO/TC 92/SC 2 – Fire containment

Reply Deadline: October 28, 2022

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 92/SC 2 – Fire containment. ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 92/SC 2 to ASTM International. ASTM has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

ISO/TC 92/SC 2 operates under the following scope:

*Development of standards in the field of Fire containment within the scope of ISO/TC 92 Fire safety:*

*Standardization of the methods of assessing*
  - fire hazards and fire risk to life and to property;
  - the contribution of design, materials, building materials, products and components to fire safety

*and methods of mitigating the fire hazards and fire risks by determining the performance and behaviour of these materials, products and components, as well as of buildings and structures.*

*Excluded:*
  - materials and equipments already covered by other technical committees;
  - fields covered by other ISO and IEC committees.

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 92/SC 2. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

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

If no U.S. organization steps forward to assume the ISO/TC 92/SC 2 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity by October 28, 2022, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

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

ISO/TC 197/SC 1 – Hydrogen at Scale and Horizontal Energy Systems

ISO/TC 197 – Hydrogen technologies has created a new ISO Subcommittee on Hydrogen at Scale and Horizontal Energy Systems (ISO/TC 197/SC 1). The Secretariat has been assigned to Canada (SCC).

ISO/TC 197/SC 1 operates under the following scope:

Standardization of large scale hydrogen energy systems and applications including aspects of testing, certification, sustainability and placement, and coordination with other relevant standardization bodies and stakeholders.

The Compressed Gas Association (CGA) has indicated its intent to administer the U.S. TAG. Organizations interested in participating on the U.S. TAG should contact ANSI’s ISO Team (isot@ansi.org).

Establishment of ISO Subcommittee

ISO/TC 67/SC 10 – Enhanced oil recovery

ISO/TC 67 – Oil and gas industries including lower carbon energy has created a new ISO Subcommittee on Enhanced oil recovery (ISO/TC 67/SC 10). The Secretariat has been assigned to China (SAC).

ISO/TC 67/SC 10 operates under the following scope:

Standardization of “Enhanced Oil Recovery” as applied to onshore and offshore and other EOR technologies.

Excluded: aspects related to CO2 capture, transportation, and geological storage being covered by ISO/TC 265.

The American Petroleum Institute (API) has indicated its intent to administer the U.S. TAG. Organizations interested in participating on the U.S. TAG should contact ANSI’s ISO Team (isot@ansi.org).
ISO New Work Item Proposal

Management System for UN Sustainable Development Goals – Requirements for Any Organization

Comment Deadline: October 28, 2022

DS, the ISO member body for Denmark, has submitted to ISO a proposal for a new field of ISO technical activity on Management System for UN Sustainable Development Goals – Requirements for any organization, with the following scope statement:

This International Standard specifies requirements for a Sustainable Development Goals Management System when an organization:

a) Needs to demonstrate and enhance its work and performance towards the UN SDGs.
b) Seeks to manage its responsibilities in a systematic manner that contributes to the pillars of sustainability.

Consistent with the SDG policy of the organization, the intended outcome of an SDG management system is to:
c) Enhance the organization’s performance.
d) Fulfill compliance obligations.
e) Achieve selected SDG objectives.
f) Increase success.
g) Create trust and confidence to relevant existing and future stakeholders.

This proposal employs the process approach, PDCA and risk-based thinking.

PLEASE NOTE that Danish Standards propose to make an initial scope- and title clarification period where scope, title and other unresolved issues can be discussed before starting the drafting process.

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, October 28, 2022.
USNC Technical Advisory Group

U.S. TAG for IEC/TC 96, Transformers, Reactors, Power Supply Units, and Combinations Thereof

Please reply by December 1, 2022

UL Standards & Engagement has been appointed as the American National Standards Institute (ANSI) as the TAG (Technical Advisory Group) Secretary for TC 96, Transformers, Reactors, Power Supply Units, and Combinations Thereof.

As the ANSI U.S. TAG Secretary, UL Standards & Engagement is responsible for transmitting the official US position to proposals within activities under the responsibility of IEC/TC 96, as well as for bringing to the IEC any new work items that would support the broad efforts in the US in this area of standardization.

To ensure that all interested parties have an opportunity to contribute to the development of the US position on key issues that are considered by IEC/TC 96, UL Standards & Engagement is now soliciting US stakeholders to participate in the ANSI U.S. TAG. Participation in the ANSI U.S. TAG is open to all US national interested parties who are directly and materially affected by all of the TAG’s activity. Individuals who are interested in becoming a member of the ANSI U.S. TAG for IEC/TC 96 are invited to contact Megan Monsen, Secretary of the TAG, at 847.664.1292 or via e-mail at megan.monsen@ul.org.

TC 96 Scope

Standardization in the field of safety, EMC, EMF, energy efficiency and environmental aspects of transformers, reactors, power supply units, and combinations thereof. The standardization does not cover transformers, reactors and power supply units intended to be a part of distribution networks (covered by TC 14).

TC 96 has group safety function in accordance with IEC Guide 104 for transformers other than those intended to supply distribution networks, in particular transformers and power supply units intended to allow the application of protective measures against electric shock as defined by TC 64, with no limitation of rated output power, but in certain cases including limitation of voltage.

The general limitations for voltages are:
- rated supply voltage not exceeding 1 000 V a.c.;
- rated output voltage not exceeding 1 000 V a.c. or 1 500 V ripple free d.c.; however, internal voltages may exceed 1 000 V a.c. or 1 500 V ripple free d.c. For high-voltage applications, other than distribution networks (covered by TC 14), the rated output voltage can exceed 1 000 V a.c. or 1 500 V ripple free d.c. but the no load output voltage shall not exceed 15 000 V a.c. or 15 000 V d.c.

The general limitations for the rated output are:
- the maximum rated output depends on the type of transformer or linear power supply unit does in most cases not exceed 25 kVA for single-phase products and 40 kVA for three phase products;
- the maximum rated output does not exceed 1 kVA for both single-phase and three phase Switch Mode Power Supplies;
- the general limitations for the rated core power are 25 kVA for single-phase auto transformers and 40 kVA for three phase auto transformers;
- the general limitations for the rated power are 50 kvar for single-phase reactors and 80 kvar for three phase reactors.

For special transformers, reactors and power supply units and combinations thereof there are no limitation of rated output, rated core power and rated power.
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, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations notified by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to notify proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat issues and makes available these notifications. The purpose of the notification requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

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

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

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

Continuous maintenance efforts to improve these standards are currently ongoing.

These proposed revisions include updates to two testing provisions and guidance based on test results. The proposed revisions are applicable to the following ANSI/AARST publication:

— ANSI/AARST MAH 2019 (radon measurement in homes)

Latest published versions of those standards are available for comparison at [www.standards.aarst.org](http://www.standards.aarst.org) where all ANSI/AARST standards can be found for review at no charge and for purchase.

The current mitigation standards committee roster (consensus body) can be linked to from [www.standards.aarst.org/public-review](http://www.standards.aarst.org/public-review). The current work project includes (1) harmonization, where possible, for all portions of these documents to read the same for the same tasks; (2) update based on new experiences, and (3) renderings that are more conductive to stakeholders who are involved in compliance assessment.

---

**AARST Consortium on National Standards**

Website: [www.standards.aarst.org](http://www.standards.aarst.org)  
Email: StandardsAssist@gmail.com

527 N Justice Street, Hendersonville, NC 28739
Proposed Maintenance Updates for MAH 06/22

Protocol for Conducting Measurements of Radon and Radon Decay Products in Homes

Commentary/Rationale: The proposed revision to Section 6.1.2 was observed to achieve virtually the same goal while allowing more practical application in the field.

6.0 CONDUCTING THE TEST

6.1.2 Where closed-building conditions did not occur prior to the test
Where closed-building conditions were not maintained for twelve hours prior to deployment, as required in Section 4, the radon testing shall be conducted with one of the following options:

a) The testing is postponed until at least 12 hours of closed-building conditions have been maintained prior to initiating the test; or

b) The test period is extended to 4 days or more after closed-building conditions are initiated;

b) The test period extends not less than 72 hours after closed-building conditions are initiated;

Commentary/Rationale: The proposed revisions to Section 7.2.2 b) seek to harmonize with current content in ANSI/AARST radon measurement standards MAMF and MALB.

From MAH

7.2 When Two Test Results Disagree

7.2.2 Where test results disagree on exceeding the action level
When one test result is above the action level and the other test result is below the action level:

b) Not acceptable

If the higher test result is more than twice the lower test result,

1. For two collocated (side-by-side) tests conducted at the same time, a repeated collocated test for this location is required to obtain a valid measurement.

2. For two tests conducted in the same location but at different times, obtaining confirmation on whether mitigation is warranted requires additional testing.

Exception—Additional testing is not required when the cause for the discrepancy can be proven or when it is decided to proceed with mitigation.

Note 1—While decisions to mitigate at any time are not prohibited, comprehensive testing aids confidence that decisions are not being made based on a faulty test device or unexpected conditions.

Note 2—Tests conducted under heating season conditions are more likely to provide a clear characterization of potential radon hazards.

Note 3—Longer test durations reduce the chance that short-lived temporary conditions in weather or building operations have adversely influenced test results.

2. For two short-term detectors deployed at different times in the same location, obtaining confirmation on whether or not mitigation is warranted requires additional testing unless it is decided to proceed with mitigation.

This degree of uncertainty requires a precautionary stance to include that the higher test result shall be regarded as correct for making mitigation decisions unless further testing indicates otherwise.
Test results to be regarded as a more representative reflection of occupant exposure to radon hazards shall be those that most closely align to the predominant normal occupied building operating condition for the location tested, as defined in Table 7.2.2 b).

**Informational Table 7.2.2 b**

<table>
<thead>
<tr>
<th>Zone 8</th>
<th>Zone 7</th>
<th>Zone 6</th>
<th>Zone 5</th>
<th>Zone 4</th>
<th>Zone 3</th>
<th>Zone 2</th>
<th>Zone 1</th>
<th>Acutely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subarctic</td>
<td>Very Cold</td>
<td>Cool</td>
<td>Mixed</td>
<td>Warm</td>
<td>Hot</td>
<td>Very Hot</td>
<td>Hot</td>
<td></td>
</tr>
<tr>
<td>Fairbanks</td>
<td>Aspen</td>
<td>Portland ME</td>
<td>Buffalo NY</td>
<td>Burlington NH</td>
<td>New York, NY</td>
<td>Philadelphia</td>
<td>Richmond, VA</td>
<td>Atlanta</td>
</tr>
</tbody>
</table>

**Annual Average Building Operating Conditions**

This table provides annual average outdoor temperatures for various climate zones and the building conditions, in terms of heating and cooling system activity, that occur in response to these outdoor temperatures.

<table>
<thead>
<tr>
<th>% per year</th>
<th>Heating</th>
<th>Cooling</th>
<th>Neither</th>
<th>Freezing</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>83%</td>
<td>75%</td>
<td>66%</td>
<td>58%</td>
</tr>
</tbody>
</table>

Climate zone temperatures based 30-year averages published online (e.g., the National Centers for Environmental Information-NOAA) for a major city located within each climate zone. Zone classifications reflect ASHRAE standards 90.1 / 90.2 (The American Society of Heating, Refrigerating and Air-Conditioning Engineers) https://www.ashrae.org.
Commentary/Rationale: The proposed editorial commentary below this table results from harmonization with Section 7.2.2 b) that acknowledges climate zones where heating conditions might not be the predominant building operating condition.

8.5.9.2 Reporting Low Concentrations

**EQUIVALENT STATEMENTS FOR THESE ADVISORIES SHALL BE INCLUDED IN THE REPORT**

- Consider fixing the building if test results indicate radon concentrations greater than half the action level, (e.g., between 2 and 4 pCi/L).
- Note that tests conducted when heating systems are active both day and night are more likely to provide a clear characterization of potential radon hazards. †

---

**Advisories required regarding continued protection against long-term exposure to a radon hazard**

- Retest the building at least every 5 years or, to verify continued effectiveness of radon mitigation systems or efforts, at least every 2 years.
- Retest in conjunction with any sale of new or existing buildings.
- In addition, be certain to test again when any of the following circumstances occur:
  - a new addition is constructed or alterations for building reconfiguration or rehabilitation occur;
  - a ground contact area not previously tested is occupied, or a home is newly occupied;
  - heating or cooling systems are significantly altered, resulting in changes to air pressures or pressure relationships;
  - ventilation is significantly altered by extensive weatherization, changes to mechanical systems or comparable procedures;
  - significant openings to soil occur due to:
    - groundwater or slab surface water control systems that are altered or added (e.g., sumps, perimeter drain tile, shower/tub retrofits, etc.) or,
    - natural settlement causing major cracks to develop;
  - earthquakes, construction blasting, or formation of sink holes nearby; or
  - a mitigation system is altered, modified or repaired.

† Note—Where appropriate, recommendations can include retesting within a year during a time that more closely aligns with the predominant normal occupied building operating condition, as described in informational Table 7.2.2.b. Recommendations can further include guidance on test durations for such testing that are longer than 2–7 days.
BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 34-2022

Public Review Draft

Proposed Addendum a to Standard 34-2022, Designation and Safety Classification of Refrigerants

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

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

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

© 2022 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 180 Technology Parkway NW, Peachtree Corners, GA 30092. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

180 Technology Parkway NW, Peachtree Corners, GA 30092
BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants
First Public Review Draft

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

FOREWORD

This proposed addendum adds burning velocity (BV) data to Table 4-1, “Refrigerant Data and Safety Classifications,” and Table 4-2, “Data and Safety Classifications for Refrigerant Blends.” Burning velocity data for previously approved refrigerants are added where available.

In instances where refrigerant LFL and/or BV at the WCF does not exist, the WCFF data is reported. Refrigerants which contain HCFCs were not included for additional flammability data as those refrigerants are older and the data is not available. Additionally, refrigerant applications for R-419A and R-419B are not available to review for WCF data.

This proposed addendum also corrects several calculation errors which were identified, particularly for RCL values driven by flammability vs. toxicity.

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

Addendum a to Standard 34-2022

Modify Tables 4-1 and 4-2 as shown. Portions of Tables 4-1 and 4-2 which are not shown herein remain unchanged.

<table>
<thead>
<tr>
<th>Refrigerant Number</th>
<th>Chemical Name</th>
<th>Chemical Formula</th>
<th>LFL (g/m³)</th>
<th>BV (cm/s)</th>
<th>Highly Toxic or Toxic Under Code Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methane Series</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Difluoromethane (methylene fluoride)</td>
<td>CH₂F₂</td>
<td>306</td>
<td>6.7</td>
<td>Neither</td>
</tr>
<tr>
<td>50</td>
<td>Methane</td>
<td>CH₄</td>
<td></td>
<td>40</td>
<td>Neither</td>
</tr>
<tr>
<td>Ethane Series</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>143a</td>
<td>1,1,1-trifluoroethane</td>
<td>CH₃CF₃</td>
<td>282</td>
<td>7.1</td>
<td>Neither</td>
</tr>
<tr>
<td>152a</td>
<td>1,1-difluoroethane</td>
<td>CH₃CHF₂</td>
<td>130</td>
<td>23</td>
<td>Neither</td>
</tr>
<tr>
<td>170</td>
<td>Ethane</td>
<td>CH₃CH₃</td>
<td>38</td>
<td>47</td>
<td>Neither</td>
</tr>
<tr>
<td>Ethers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E170</td>
<td>Methoxymethane (dimethyl ether)</td>
<td>CH₃OCH₃</td>
<td>64</td>
<td>54</td>
<td>Neither</td>
</tr>
</tbody>
</table>
Table 4-1  Refrigerant Data and Safety Classifications

<table>
<thead>
<tr>
<th>Refrigerant Number</th>
<th>Chemical Name</th>
<th>Chemical Formula</th>
<th>LFL (g/m³)</th>
<th>BV (cm/s)</th>
<th>Highly Toxic or Toxic Under Code Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Propane Series</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290</td>
<td>Propane</td>
<td>CH₃CH₂CH₃</td>
<td>38</td>
<td>46</td>
<td>Neither</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miscellaneous Organic Compounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydrocarbons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>butane</td>
<td>CH₃CH₂CH₂CH₃</td>
<td>48</td>
<td>45</td>
<td>Neither</td>
</tr>
<tr>
<td>600a</td>
<td>2-methylpropane (isobutane)</td>
<td>CH(CH₃)₂CH₃</td>
<td>38</td>
<td>41</td>
<td>Neither</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inorganic Compounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>717</td>
<td>ammonia</td>
<td>NH₃</td>
<td>116</td>
<td>7.2</td>
<td>Neither</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unsaturated Organic Compounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1150</td>
<td>ethene (ethylene)</td>
<td>CH₂=CH₂</td>
<td>36</td>
<td>80</td>
<td>Neither</td>
</tr>
<tr>
<td>1234yf</td>
<td>2,3,3,3-tetrafluoro-1-propene</td>
<td>CF₃CF=CH₂</td>
<td>289</td>
<td>1.5</td>
<td>Neither</td>
</tr>
<tr>
<td>1234ze(E)</td>
<td>trans-1,3,3,3-tetrafluoro-1-propene</td>
<td>CF₃CH=CFH</td>
<td>303</td>
<td>1.2</td>
<td>Neither</td>
</tr>
</tbody>
</table>

Table 4-2  Data and Safety Classifications for Refrigerant Blends

<table>
<thead>
<tr>
<th>Refrigerant Number</th>
<th>RCL&lt;sup&gt;a&lt;/sup&gt;</th>
<th>LFL&lt;sub&gt;1&lt;/sub&gt;</th>
<th>BV&lt;sub&gt;p&lt;/sub&gt;</th>
<th>Highly Toxic or Toxic Under Code Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(ppm v/v)</td>
<td>(lb/1000 ft&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>(g/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>(lb/1000 ft&lt;sup&gt;3&lt;/sup&gt;)</td>
</tr>
<tr>
<td>Zeotropes</td>
<td>[ … ]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>444A</td>
<td>21,000</td>
<td>5.05.1</td>
<td>8081</td>
<td>82,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>444B</td>
<td>23,000</td>
<td>4.3</td>
<td>7049</td>
<td>93,000</td>
</tr>
</tbody>
</table>

<sup>a</sup> RCL: Refrigerant Composition Limit
<sup>1</sup> LFL: Lower Flammability Limit
<sup>p</sup> BV: Burst Velocity
**Table 4-2  Data and Safety Classifications for Refrigerant Blends**

<table>
<thead>
<tr>
<th>Refrigerant Number</th>
<th>RCL(^a) (ppm v/v)</th>
<th>LFL(^b) (g/m(^3))</th>
<th>BV(^p) (cm/s)</th>
<th>Highly Toxic or Toxic(^f) Under Code Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>445A</td>
<td>16,000</td>
<td>5.442</td>
<td>8742</td>
<td>63,000</td>
</tr>
<tr>
<td>446A</td>
<td>23,000</td>
<td>3.725</td>
<td>5929</td>
<td>93,000</td>
</tr>
<tr>
<td>447A</td>
<td>32,000</td>
<td>5.226</td>
<td>8342</td>
<td>128,000</td>
</tr>
<tr>
<td>447B</td>
<td>30,000</td>
<td>4.826</td>
<td>7842</td>
<td>121,000</td>
</tr>
<tr>
<td>451A</td>
<td>18,000</td>
<td>5.350</td>
<td>81</td>
<td>74,000</td>
</tr>
<tr>
<td>451B</td>
<td>18,000</td>
<td>5.0</td>
<td>81</td>
<td>74,000</td>
</tr>
<tr>
<td>452B</td>
<td>30,000</td>
<td>4.8</td>
<td>77</td>
<td>119,000</td>
</tr>
<tr>
<td>454A</td>
<td>21,000</td>
<td>4.432</td>
<td>7042</td>
<td>84,000</td>
</tr>
<tr>
<td>454B</td>
<td>29,000</td>
<td>4.631</td>
<td>7449</td>
<td>115,000</td>
</tr>
<tr>
<td>454C</td>
<td>19,000</td>
<td>4.644</td>
<td>7321</td>
<td>77,000</td>
</tr>
<tr>
<td>455A</td>
<td>30,000</td>
<td>6.840</td>
<td>10820</td>
<td>118,000</td>
</tr>
<tr>
<td>457A</td>
<td>15,000</td>
<td>3.4</td>
<td>54</td>
<td>60,000</td>
</tr>
<tr>
<td>459A</td>
<td>27,000</td>
<td>4.3</td>
<td>69</td>
<td>107,000</td>
</tr>
<tr>
<td>459B</td>
<td>25,000</td>
<td>5.8</td>
<td>92</td>
<td>99,000</td>
</tr>
</tbody>
</table>

**Informative Note:** LFL data values highlighted in gray in this table are based on conditions other than WCF @23°C (73.4°F). Refer to applicable table footnotes for details.

\(a\). Data taken from Calm\(^8,9,10\), Coombs\(^11,12\), and Wilson and Richard\(^13\) (see Section 10).

\(f\). Highly toxic, toxic, or neither, where highly toxic and toxic are as defined in the International Fire Code, Uniform Fire Code, and OSHA regulations, and neither identifies those refrigerants having less toxicity than either of those groups\(^1,2,3\).

\(j\). LFL is based on WCF @23°C (73.4°F) unless otherwise noted.

\(o\). Reserved for future assignment

\(p\). BV is based on WCF @23°C (73.4°F) unless otherwise noted.
NSF/ANSI Standard
For Wastewater Technology –

Evaluation of Components and Devices Used in Wastewater Treatment Systems

9 Grinder pumps and related components

9.4 Performance testing and evaluation

This section describes the performance testing and evaluation requirements for both grinder pumps and pump basins. The manufacturer shall decide whether the grinder pump alone or pump and basin shall be tested and evaluated.

9.4.1 Performance testing and evaluation for grinder pumps

Prior to and after completing the performance testing and evaluation described in this section, the grinder pump shall be disassembled, and the dimensions of critical cutting elements shall be measured.

Performance testing and evaluation of grinder pumps shall consist of the following five procedures:

1. The development of a baseline hydraulic performance curve (see Section 9.4.1.1).
2. A household items loading test (see Sections 9.4.1.2 through 9.4.1.4).
3. A shut off test (see Section 9.4.1.5).
4. A negative head test (see Section 9.4.1.6).
5. The development of a final hydraulic performance curve (see Section 9.4.1.7).

All of these procedures shall be conducted on a single grinder pump in the chronological order shown. All testing shall be performed using potable water. The grinder pump and pump basin shall be assembled, operated, and maintained during each test period in accordance with the manufacturer’s instructions. The pump basin shall be of sufficient diameter to ensure that all challenge materials are introduced to the grinder pump.

9.4.1.1 Development of a baseline hydraulic performance curve
A baseline hydraulic performance curve (baseline curve) shall be developed in accordance with the testing conditions specified in the current, applicable Hydraulic Institute testing standard (for example, centrifugal pumps shall be tested according to ANSI/HI 1.6; rotary pumps shall be tested according to ANSI/HI 3.6; and reciprocating pumps shall be tested according to ANSI/HI 6.6). The baseline curve shall be developed by plotting two measured parameters, capacity and total head, using a minimum of five condition points, one of which shall be the shut off.

9.4.1.2 Household item loading test

During the test period described in Sections 9.4.1.3 and 9.4.1.4, household items shall be added to the pump basin in accordance with Table 9.1. Items shall be loaded in the sequence indicated in Table 9.1. At the end of each day, any household items remaining in the pump basin shall be manually fed to the pump. Discharged solids shall be removed from the water if the water is recycled during the test. This test shall be performed after the gap between the stationary and rotating cutting elements has been measured.

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>toilet tissue, 24 perforated sheets (wetted in test water)</td>
<td>4 times per day, 5 d per week</td>
</tr>
<tr>
<td>facial tissue</td>
<td>2 per d, 5 d per week</td>
</tr>
<tr>
<td>filter-tip cigarette</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>egg</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>paper towel¹</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>condom¹</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>sanitary napkin¹ (wetted in test water)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>chlorine laundry bleach¹ (8 oz)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>cotton swab¹ (plastic stick)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>disposable diaper¹ (children’s size large)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>tampon¹ (plastic applicator added separately)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>adhesive bandage¹ (paper wrapper added separately)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>dental floss (12 in piece)</td>
<td>1 per d, 5 d per week</td>
</tr>
<tr>
<td>alkali drain cleaner (8 oz)</td>
<td>1 per week, at random</td>
</tr>
<tr>
<td>Handi-wipe® (or equivalent)</td>
<td>1 per week, at random</td>
</tr>
<tr>
<td>acidic drain cleaner (8 oz)</td>
<td>1 per week, at random</td>
</tr>
<tr>
<td>liquid animal fat (4 oz)</td>
<td>1 per week, at random</td>
</tr>
<tr>
<td>one pair of nylon panty hose (size large)</td>
<td>1 per week, at random</td>
</tr>
<tr>
<td>cloth diaper (wetted in test water)</td>
<td>1 time during test, at random</td>
</tr>
<tr>
<td>toothbrush</td>
<td>1 time during test, at random</td>
</tr>
<tr>
<td>wood pencil</td>
<td>1 time during test, at random</td>
</tr>
<tr>
<td>plastic table utensil</td>
<td>1 time during test, at random</td>
</tr>
<tr>
<td>metal bottle cap</td>
<td>1 time during test, at random</td>
</tr>
<tr>
<td>HDPE bottle cap</td>
<td>1 time during test, at random</td>
</tr>
</tbody>
</table>
9.4.1.3 Operating sequence during the household items loading test

The grinder pump shall be subjected to the following operating sequence. Capacities are based on the baseline curve developed in Section 9.4.1.1:

— two weeks of operation at the low capacity condition point (progressive cavity design) or at 20% of the maximum flow point (centrifugal design);
— two weeks of operation at the mid-capacity point;
— two weeks of operation at the maximum capacity point; and
— two hours of operation at the maximum capacity point with no challenge materials added to the system.

9.4.1.4 Hydraulic loading during the household items loading test

Hydraulic loading during the operating sequences described in Section 9.4.1.3 shall be based on the capacity of the pump basin, such that ten pumping cycles occur every hour. The pump basin floats and the recycle rate back to the pump basin shall be adjusted to maximize the number of on/off cycles, not to exceed 10 per hour. The pump shall be operated 24 h/d, 7 d/wk. The household items loading test shall be conducted 8 h/d, 5 d/wk.

1 metal, toy car (Matchbox\textsuperscript{3}, Hot Wheels\textsuperscript{3} or equivalent) 1 time during test, at random
2 8 oz drinking glass (crushed) 1 time during test, at random
3 Items added separately each day in succession.

\textsuperscript{2} The Clorox Company. 1221 Broadway, Oakland, CA 94612. <www.thecloroxcompany.com>
\textsuperscript{3} Mattel. 333 Continental Blvd., El Segundo, CA 90245. <www.mattel.com/en-us>
1 General

1.3 Formulation submission

The manufacturer shall submit, at a minimum, the following information for each product:

— complete formulation information, which includes the following:

  — the composition of the formulation (in percent or parts by weight for each ingredient in the formulation including excipients);

    NOTE — Ranges shall may be considered acceptable.

  — the reaction process, if applicable;


2 Normative references

•

21 USC. § 342, Adulterated Food

42 USC § 262, Regulation of biological products

4.3 Extended release

If the supplement is manufactured using an extended release technology not intended to follow the

---

USP criteria, then intended release characteristics must shall be disclosed on the product label.

5.3.2 Pesticides

Products claiming to contain botanical ingredients shall be tested according to Section 7.2.1 to confirm that they do not contain pesticides at levels greater than the maximum allowable level per day as listed in Annex N-2.

Dietary ingredients and finished products containing *Panax ginseng* or *Panax quinquefolius* shall additionally meet applicable national requirements for the market in which they are to be sold.

Products which are to be sold or distributed in the United States shall not contain pesticides listed in Section 7.2.2 (limit of detection is 10 parts per billion [ppb]). The limits are not based upon a safety or risk assessment of the individual pesticides; rather, limits are related to US trade and governmental preferences regarding ginseng suppliers. Product that does not meet the requirements for pesticides listed in Section 7.2.2 shall be labeled in a manner that would preclude its sale or distribution in the United States.

**NOTE** — Products which are to be sold and/or distributed in the United States shall not contain pesticides listed in Section 7.2.2 (limit of detection is 10 parts per billion [ppb]). The limits are not based upon a safety or risk assessment of the individual pesticides; rather, limits are related to US trade and governmental preferences regarding ginseng suppliers. Product that does not meet the requirements for pesticides listed in Section 7.2.2 shall be labeled in a manner that would preclude its sale and/or distribution in the United States.
4.4.30 Temperature and humidity control equipment shall be of adequate design for its intended function and is functioning properly. Plant shall be designed and constructed to include equipment that controls temperature and humidity when such equipment is necessary to ensure product quality. [21 CFR § 111.20(d1iv)]

4.5.11 All equipment including freezers, refrigerators, etc., that are used to hold components or dietary supplements shall be adequately designed and functioning properly. [21 CFR § 111.27(a5)]
Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

[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 GMP for Dietary Supplements –

Good Manufacturing Practices for Dietary Supplements

4 Audit Requirements

4.5 Operation

4.5.64 QC personnel shall authorize a treatment, in-process treatment, or reprocessing in an attempt to correct a deviation or unexpected event, or specification deficiency. [21 CFR § 111.113(b)]

Treatment or in-process adjustments of components, packaging and labeling and reprocessing of a dietary supplement in an attempt to correct a deviation or unexpected event, or specification deficiency shall be approved by the Quality Unit. [21 CFR § 111.90 (a1),(b1) & 21 CFR § 111.113(b) & 21 CFR § 111.120(d) & 21 CFR 111.130(c)]

4.5.65 Reprocessing controls shall be established that meet all requirements and have been shall be approved by the QC unit. [21 CFR 111.20(c2) & 21 CFR 111.77(b)(c) & 21 CFR 111.123(a5) & 21 CFR § 111.90(a), (b)]
BSR/UL 61010-1, Standard for Safety for Electrical Equipment for Measurement, Control, and Laboratory Use; Part 1: General Requirements

1. Revisions to the proposal document dated August 19, 2022 per responses to comments received.

PROPOSAL

1.1.5 ADV DR Addition of the following new sub-clause:

1.1.5 ADV.1 Gas, Vapor and Voltage Detectors or Sensors

Equipment intended to measure, sense or detect one or more electrical or physical quantities that identify a potential imminent hazard and used for signalling, may use this standard only when no alternative standard exists.

Note 1 – This standard is considered not to apply to gas detectors and similar equipment within the scope of ANSI/UL 2034, ANSI/UL 2075, CSA C22.2 No. 205, or ULC-S588.

Note 2 – Examples of standards providing additional safety requirements for gas or vapor detectors or sensors, which can be used in conjunction with this standard, are ANSI/UL 60079-29-1, ANSI/UL 920001, ANSI/UL 920004, CSA C22.2 No. 60079-29-1, or CSA C22.2 No. 62990-1.

Note 3 – Clause 1.2.1 specifies the use of Clause 17 to assess conformity for hazards or environments not fully covered in clauses 6 to 16, including aspects not covered by this document in Clause 1.2.2.

Note 4 – Local and national codes may have additional requirements based on the end products’ intended use.

Note 5 – This standard is considered not to apply to voltage detectors and similar equipment within the scope of ANSI/UL 1436, ANSI/UL / ULC 61243 series, or CSA C22.2 No 160.
BSR/UL 66, Standard for Safety for Fixture Wire

1. Addition of Types RFH-1, HF and HFF Throughout the Standard

PROPOSAL

1 Scope

1.1 This standard states basic construction, test, and marking requirements for fixture wires. Fixture wires are single conductor and are of the following types:

600 volt Types: PTF, PTFF, PAF, PAF, KF-2, KFF-2, PF, PFF, PGF, PGFF, SF-2, SFF-2, ZF, ZFF, KHF, TF, TFF, TFFN, RFH-1, RFH-2, FFH-2, FFHH-2, HF, HFF, RFH-2, and RFHH-3

300 volt Types: KF-1, KFF-1, SF-1, SFF-1, RFH-1, XF, and XFF

These types are for use as specified in Article 402 and other applicable parts of the National Electrical Code (NEC), ANSI / NFPA 70. These types are as described individually in index Table 4.1 – Table 4.10 of this standard.

NEW TABLE

Table 4.10
ECTFE insulated Types HF and HFF

<table>
<thead>
<tr>
<th>Type-letter designation</th>
<th>HF</th>
<th>HFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum temperature</td>
<td></td>
<td>150°C (302°F)</td>
</tr>
<tr>
<td>Maximum voltage</td>
<td></td>
<td>600</td>
</tr>
<tr>
<td>CONDUCTOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sizes</td>
<td></td>
<td>18, 16, and 14AWG</td>
</tr>
<tr>
<td>Metal</td>
<td></td>
<td>Nickel-based alloy or tin, nickel or silver coated or uncoated copper (6.1.1)</td>
</tr>
<tr>
<td>Stranding</td>
<td></td>
<td>Solid or 7-strand (6.1.1, 6.2.2, and 6.3.1)</td>
</tr>
<tr>
<td>Flexible-stranded</td>
<td></td>
<td>Flexible-stranded (6.1.1, 6.2.2, and 6.3.1)</td>
</tr>
<tr>
<td>Size verification</td>
<td></td>
<td>(6.4.1, 6.4.2, and 6.4.3)</td>
</tr>
<tr>
<td>Maximum length of lay of strands</td>
<td>48 x individual strand diameter (6.3.2)</td>
<td>(Table 6.2)</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>Continuity, joints, metal coating, and separator (6.5.1 – 7.3)</td>
</tr>
<tr>
<td>INSULATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td></td>
<td>ECTFE [Table 50.63 of UL 1581] (8.1.1 – 8.1.4, 8.2.2.1, and 8.2.2.4)</td>
</tr>
<tr>
<td>Minimum average thickness</td>
<td>18, 16, and 14 AWG: 15.0 mils or 0.38 mm</td>
<td></td>
</tr>
</tbody>
</table>
| Minimum thickness at any point | 18, 16, and 14 AWG: 13.0 mils or 0.33 mm | (Table 8.1)
<table>
<thead>
<tr>
<th>Type-letter designation</th>
<th>HF</th>
<th>HFF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Covering over the insulation</strong></td>
<td>No covering</td>
<td></td>
</tr>
<tr>
<td><strong>TESTS ON FINISHED WIRE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical properties tests of insulation</td>
<td>ECTFE [Table 50.63 of UL 1581] (8.2.2.1 and 8.2.2.4)</td>
<td></td>
</tr>
<tr>
<td>Conductor corrosion test (uncoated copper only)</td>
<td></td>
<td>(6.7.1)</td>
</tr>
<tr>
<td>Continuity test of conductor</td>
<td></td>
<td>(6.5.1, 11.1, and 11.2)</td>
</tr>
<tr>
<td>D-C resistance test of conductor</td>
<td></td>
<td>(12.1 – 12.3)</td>
</tr>
<tr>
<td>Spark test</td>
<td></td>
<td>(13.1 and 13.2)</td>
</tr>
<tr>
<td>Deformation test</td>
<td></td>
<td>Not applicable</td>
</tr>
<tr>
<td>Cold bend test</td>
<td></td>
<td>(15.1 – 15.7)</td>
</tr>
<tr>
<td>Test for insulation resistance at 60°F</td>
<td></td>
<td>(16.1 and 16.2)</td>
</tr>
<tr>
<td>Flame tests for VW-1 wire (optional)</td>
<td></td>
<td>(17.1)</td>
</tr>
<tr>
<td>Vertical flame test</td>
<td></td>
<td>(18.1)</td>
</tr>
<tr>
<td>Durability test of ink printing</td>
<td></td>
<td>(20.1)</td>
</tr>
<tr>
<td><strong>MARKINGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polarity ID</td>
<td></td>
<td>(21.1)</td>
</tr>
<tr>
<td>Legibility of printing</td>
<td></td>
<td>(22.1)</td>
</tr>
<tr>
<td>Sequence of printed markings</td>
<td>No sequence is specified (23.1)</td>
<td></td>
</tr>
<tr>
<td>Responsible organization and factory IDs</td>
<td></td>
<td>(24.1 – 24.3 and 24.5)</td>
</tr>
<tr>
<td>Temperature ID</td>
<td></td>
<td>(25.1 and 25.2)</td>
</tr>
<tr>
<td>ID of VW-1 wire</td>
<td></td>
<td>(27.1)</td>
</tr>
<tr>
<td>Tag, reel, and carton markings</td>
<td></td>
<td>(28.1)</td>
</tr>
<tr>
<td>Current designation</td>
<td>Prohibited (29.1)</td>
<td></td>
</tr>
<tr>
<td>Date of manufacture</td>
<td></td>
<td>(30.1)</td>
</tr>
</tbody>
</table>

*a Index tables are explained in 4.1.*

6.1.2 Types PTF, PAF, KF-1, KF-2, KFF-1, KFF-2, ZHF, HF, HFF, SF-1, SF-2, SFF-1, and SFF-2 wires not employing copper shall be of a nickel-base alloy complying with the American Society for Testing and Materials Standard Specification for Nickel Rod and Bar, ASTM B 160-99, and having a tensile strength of 65,000 ±15,000 lbf/in² or 448 ±103 MN/m² or 44,816 ±10,342 N/cm² or 45.7 ±10.5 kgf/mm², an elongation of at least 35 percent, and a nominal volume resistivity of 66 ohm×cmil/ft at 20°C (68°F) or 0.110 ohm×mm²/m at 20°C (68°F). Where smaller in diameter than 0.015 inch or 0.38 mm, the individual copper strands of the conductor in Type PTFF and PAFF wires and the individual strands of a copper conductor in Type KF-1, KF-2, KFF-1, KFF-2, ZHF, SF-1, and SF-2 wires shall have a nickel coating complying with the Standard Specification for Nickel-Coated Soft or Annealed Copper Wire, ASTM B 355-95, or a silver coating complying with the Standard Specification for Silver-Coated Soft or Annealed Copper Wire, ASTM B 298-99. The conductor in Type ZF, ZFF, HF, HFF, XF, XFF, PF, PFF, PGF, and PGFF wires shall be of uncoated copper; of nickel-, silver-, or tin-coated copper; or of a nickel-base alloy
– complying as stated in this paragraph and in 6.1.1. A copper conductor in Type PTF and PAF wires shall have a nickel coating complying with ASTM B 355-95.
BSR/UL 719, Standard for Safety for Nonmetallic-Sheathed Cables

1. Eliminate the edgewise crush resistance test on NM-B Cable

PROPOSAL

5.13 Crushing resistance test for flat cable

5.13.1 To crush finished flat cable containing two or three 14 or 12 AWG copper, or 12 or 10 AWG aluminum or copper-clad aluminum circuit conductors with a grounding conductor shall be when tested in accordance with 7.12 shall be:

a) An average of not less than 600 lbf or 2669 N or 272 kgf shall be needed when the crushing force is applied to the cable flatwise as indicated in 7.12.1.1 – 7.12.1.4.

b) An average of not less than 1200 lbf or 5338 N or 544 kgf shall be needed when the crushing force is applied to the cable edgewise as indicated in 7.12.2.1 – 7.12.2.5.

7.12.2 Edgewise

7.12.2.1 The cable is to be crushed edgewise between two flat, rigid, parallel, horizontal steel plates that are 2 inches or 50 mm wide. A previously untested sample of finished flat cable is to be used, with ten trials being made. For each trial, the cable — with its axis horizontal and its flat faces vertical — is to be gripped at points 3 inches or 75 mm to each side of the section of cable to be crushed and manually twisted by turning the cable 90 degrees in opposite directions. The flat faces thus remain vertical at the midpoint and the opposite flat faces are up and horizontal. For half of the trials, the samples are to be twisted in a clockwise direction and, for the other half, the samples are to be twisted in the opposite direction.

7.12.2.2 One of the steel plates is to be secured to the underside of the head of a compression machine whose head travels vertically, and the other is to be secured directly below the first on the bed of the machine. After being twisted as indicated in 7.12.2.1, the cable is to be placed on the bed plate with the length of the cable parallel to the 2 inch or 50 mm dimensions of the plate and the vertical flat faces of the cable at the center of the plate. The twist in the cable is to be maintained throughout the test either manually or by means of a jig.

7.12.2.3 The insulated conductors and the two steel plates are to be connected to low-voltage indicators (buzzers or the like) and to power supplies to provide a means for indicating a short circuit between conductors or between any conductor and the steel plates. The grounding conductor is to be out of the circuit. The cable, the apparatus, and the surrounding air are to be in thermal equilibrium with one another at a temperature of 23.0 ±2.0°C (73.4 ±3.6°F) during the test.

7.12.2.4 The head of the machine is to be started and moved toward the bed at the rate of 0.50 ±0.05 in/min or 10 ±1 mm/min. The travel is to be continued until contact is established between the insulated conductors or between one or more of the insulated conductors and one or both plates. The crushing force being exerted by the machine and the points between which the contact occurs are to be noted and recorded, and the downward direction of travel of the head is to be reversed. If the insulated conductors do not remain one above the other until a contact is established, or if the cable does not remain vertical at the center of the plates, the results of the trial are to be disregarded and a new trial is to be made at a different location.

7.12.2.5 The crushing procedure is to be repeated on nine other samples or at nine other locations at least 12 inches or 305 mm apart on the sample length of cable. The results of all ten trials are to be averaged. If the average is less than 1200 lbf or 5338 N or 544 kgf for cable with two 14, 12, or 10 AWG insulated conductors, the cable is not acceptable.
BSR/UL 1480, Standard for Safety for Speakers for Fire Alarm and Signaling Systems, Including Accessories


PROPOSAL

4.2 The following publications are referenced in this Standard:

NFPA 720, Installation of Carbon Monoxide (CO) Detection and Warning Equipment

9.6.14 An opening for a gong-shell striker or similar part shall be not larger than is required for the operation of the speaker.

9.7.1 A gasket used to seal an opening between two parts that are intended to be separated in the field for installation or maintenance shall comply with the Accelerated Air-Oven Aging Test, 37.2. The gasket shall be secured with adhesive or a mechanical means to one of the mating surfaces. The gasket and the securing means shall not be damaged when the joint is opened following the exposure in 37.2.

9.7.2 A gasket used as an environmental seal shall be of a material that is suitable for its application by complying with the Accelerated Air-Oven Aging test, 37.2, and the requirements in Gaskets, 9.7. A gasket used exclusively as an acoustical seal is not required to be subjected to the requirements in 9.7.

10.1 Ferrous metal, iron and steel parts other than bearings and similar parts where such protection is impractical, shall be protected against corrosion by enameling, galvanizing, plating, or other equivalent means. Refer to Accelerated Corrosion Tests, Section 33.

18.12 The "pink noise" supply to speakers specified in the tests of Input, Section 19, Frequency Response and Output Sound Pressure level, Section 20, Directional Characteristic, Section 21, Temperature Rise, Section 22, Endurance, Section 25, Variable Ambient Temperature, Section 26, Humidity, Section 27, Speakers with Multiple Input Voltages, 28.3, Jarring, Section 30, Accelerated Corrosion Tests, Section 33, and Water Spray, Section 34, shall be a random frequency of uniform spectral density weighted -3 dB/octave. The frequency range of the input signal shall be limited to the frequency bandwidth specified by the manufacturer or 400 - 4000 Hz, whichever is greater. The slope of the bandpass filter shall be at least 24 dB/octave. The ratio of the peak to RMS signal should be between 1.8 and 2.2 or an average crest factor of 2. The amplitude of the amplifier is to be adjusted to produce the rated RMS voltage at the speaker terminals.

Table 20.1
Tests Requiring Audibility Measurements

<table>
<thead>
<tr>
<th>Test</th>
<th>Section reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endurance</td>
<td>25</td>
</tr>
<tr>
<td>Variable ambient temperature</td>
<td>26</td>
</tr>
<tr>
<td>Humidity</td>
<td>27</td>
</tr>
<tr>
<td>Vibration</td>
<td>31</td>
</tr>
<tr>
<td>Accelerated Corrosion</td>
<td>33</td>
</tr>
<tr>
<td>Water Spray</td>
<td>34</td>
</tr>
<tr>
<td>Polarity reversal</td>
<td>35</td>
</tr>
<tr>
<td>Polymeric materials tests (temperature test)</td>
<td>37</td>
</tr>
<tr>
<td>Mechanical Strength Tests for Enclosures</td>
<td>38</td>
</tr>
<tr>
<td>Transient</td>
<td>39</td>
</tr>
<tr>
<td>Battery-Powered Units</td>
<td>42</td>
</tr>
</tbody>
</table>

33 Accelerated Corrosion Tests

37.1.1 Polymeric materials used for the sole support of current-carrying parts, or for all or part of an enclosure of a speaker, shall be subjected to the tests in Accelerated Air-Oven Aging (Temperature), 37.2 and Flame, 37.3 and 37.4. Where possible, a complete speaker shall be used.
37.2 Accelerated Air-Oven Aging Test (Temperature)

37.2.1 At least three representative samples shall be mounted on supports in an air circulating oven maintained at 90 ±2 ºC (194 ºF) for 7 d or at 70 ±2 ºC (158 ºF) for 28 d. Following the aging period, the sample shall then be removed from the oven and permitted to cool to room temperature before being examined as described in 9.6.7 for any distortion which exposes high-voltage uninsulated current carrying parts. Falling off of the sample’s cover shall be permitted only when parts operating at a potential greater than 30 Vac or 42.442.4 Vdc are not exposed, operation is not affected, and the cover can be replaced as intended. Gaskets on samples intended for outdoor use shall be visually examined for evidence of deterioration such as cracking, shrinkage, distortion, or similar deterioration to an extent that it affects the integrity of the seal. If visual evidence exists, a sample shall be subjected to the Water Spray test (Section 34) following the sound level measurements in 20.2. Where the conditioning process has damaged electronic components, it is permissible to replace them.

37.3.5 The flame of a Bunsen or Tirrill burner having a tube with a length of 100 ±10 mm (3.94 ±0.39 in)9.5 ±0.3 mm (0.374 ±0.12 in) and an inside diameter of 9.5 ±0.3 mm (0.374 ±0.12 in)100 ±10 mm (3.94 ±0.39 in) is to be adjusted to have a 19 mm (3/4 in) height of yellow flame with no blue cone. Two 30 second applications of the tip of the flame are to be made to each section of the equipment specified as indicated above, with 1 min intervals between the applications. A supply of technical-grade methane gas (minimum 98 % pure) is to be used with a regulator and meter for uniform gas flow.

37.4.4 The Bunsen or Tirrill burner with a tube length of 100 ±10 mm (3.94 ±0.39 in)9.5 ±0.3 mm (0.374 ±0.12 in), and an inside diameter of 9.5 ±0.3 mm (0.374 ±0.12 in)100 ±10 mm (3.94 ±0.39 in), is to be placed remote from the specimen, ignited, and adjusted so that when the burner flame is 127 mm (5 in), the height of the inner blue cone is 38 mm (1-1/2 in). The tube is not to be equipped with end attachments, such as stabilizers.

B3.1 The temporal 4 pattern is widely used and mandated by CSA 6.19 and NFPA 729.
BSR/UL 3100, Standard for Safety for Automated Mobile Platforms (AMPs)

1. Revision to Dielectric Voltage Withstand Test

PROPOSAL

50.2 Circuits at 60 Vdc and or 30 Vac or higher shall be subjected to a dielectric withstand voltage consisting of a potential of twice the circuit voltage.