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# Project Initiation Notification System (PINS)

ANSI Procedures require notification of ANSI by ANSI-accredited standards developers (ASD) of the initiation and scope of activities expected to result in new or revised American National Standards (ANS). Early notification of activity intended to reaffirm or withdraw an ANS and in some instances a PINS related to a national adoption is optional. The mechanism by which such notification is given is referred to as the PINS process. For additional information, see clause 2.4 of the ANSI Essential Requirements: Due Process Requirements for American National Standards.

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. 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 affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

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

Colleen Elliott; celliott@aami.org | 901 N. Glebe Road, Suite 300 | Arlington, VA 22203 [www.aami.org](http://www.aami.org)

### ***National Adoption***

BSR/AAMI 80369-2-202x, Small-bore connectors for liquids and gases in healthcare applications - Part 2:

Connectors for respiratory applications (identical national adoption of ISO 80369-2 (Ed 1))

Stakeholders: Medical device manufacturers, clinicians, regulators.

Project Need: Standardization of small-bore connectors for respiratory applications.

Interest Categories: industry, user, regulatory, general interest

Scope: This document specifies dimensions for two respiratory small-bore connectors. One (R1) is intended for use on medical devices subjected to pressures up to 15 kPa such as a breathing system, the other (R2) is intended for use on medical devices subjected to higher pressures between 15 kPa and 600 kPa such as oxygen therapy tubing. This document also specifies the performance requirements used to verify the dimensions.

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

Colleen Elliott; celliott@aami.org | 901 N. Glebe Road, Suite 300 | Arlington, VA 22203 [www.aami.org](http://www.aami.org)

### ***National Adoption***

BSR/AAMI 80369-6-202x, Small bore connectors for liquids and gases in healthcare applications - Part 6:

Connectors for neuraxial applications (national adoption with modifications of ISO 80369-6 (Ed 2))

Stakeholders: Medical device manufacturers, clinicians, regulators.

Project Need: Revision of some technical aspects of the document to improve manufacturability and to align with ISO 80369-7:2021.

Interest Categories: Industry, User, Regulatory, General Interest

Scope: ISO 80369-6 specifies requirements for small-bore connectors intended to be used for connections in neuraxial applications. Neuraxial applications involve the use of medical devices intended to administer medications to neuraxial sites, wound-infiltration anaesthesia delivery, and other regional anaesthesia procedures or to monitor or remove cerebro-spinal fluid for therapeutic or diagnostic purposes.

**ANS (American Nuclear Society)**

Kathryn Murdoch; kmurdoch@ans.org | 555 North Kensington Avenue | La Grange Park, IL 60526 www.ans.org

**Revision**

BSR/ANS 8.26-202x, Criticality Safety Engineer Training and Qualification Program (revision of ANSI/ANS 8.26-2007 (R2022))

Stakeholders: USDOE and USNRC criticality safety staff; DOE contractor and NRC licensee criticality safety staff.

Project Need: Revision needed to address comments by ANS-8 and N16 members during 2012 reaffirmation balloting.

Scope: This standard presents the fundamental elements of a training and qualification program for individuals with responsibilities for performing the various technical aspects of criticality safety engineering. The standard presents a flexible array of competencies for use by management to develop tailored training and qualification programs applicable to site-specific job functions, facilities and operations.

**ASABE (American Society of Agricultural and Biological Engineers)**

Carla VanGilder; vangilder@asabe.org | 2950 Niles Road | Saint Joseph, MI 49085 <https://www.asabe.org/>

**New Standard**

BSR/ASABE S611 MONYEAR-202x, Collecting, Processing, and Visualizing Geographic Harvest Data (new standard)

Stakeholders: Researchers collecting and displaying yield-mapping data, Companies producing yield monitors, Companies developing yield mapping and Precision Farming software, Agricultural producers desiring to have accurate and understandable maps of yield and associated data, and Extension workers and consultants

Project Need: Develop a means for determining a consistent, accurate way to measure yield for various types of crops.

Interest Categories: Academia, Research, Government, Producer, General Interest, Users

Scope: The purpose of this standard is to improve the collection, processing, and visualization of data files containing geographic harvest data such as yield, moisture-content (MC), and other spatially variable properties such as grain protein content, cotton fiber maturity, etc. with the goals of preserving information content, enabling interoperability among different software products and measurement systems, and accurately conveying this information to users.

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

Tanisha Meyers-Lisle; tmlisle@ashrae.org | 180 Technology Parkway | Peachtree Corners, GA 30092 www.ashrae.org

**Revision**

BSR/ASHRAE Standard 32.1-202X, Method of Testing for Rating Refrigerated Vending Machines for Sealed Beverages (revision of ANSI/ASHRAE Standard 32.1-2017)

Stakeholders: Manufacturers of vending machines.

Project Need: This standard will be revised to update references.

Scope: The purpose of this standard is to specify methods of testing for rating the capacity and efficiency of self-contained, mechanically refrigerated vending machines for sealed beverages.

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

Connor Barbaree; CBarbaree@ashrae.org | 180 Technology Parkway | Peachtree Corners, GA 30092 www.ashrae.org

***New Standard***

BSR/ASHRAE Standard 240P-202x, Evaluating Greenhouse Gas (GHG) and Carbon Emissions in Building Design, Construction, and Operation (new standard)

Stakeholders: Code developers, owners/operators, producers, regulatory agencies, utilities.

Project Need: In order to meet their goals and commitments, building owners, jurisdictions, and municipalities are in need of an effective way to evaluate greenhouse gas (GHG) and carbon emissions of their buildings over their lifecycle. These end-users are looking to the industry for guidance on the reduction of greenhouse gas (GHG) and carbon emissions from buildings throughout their entire lifecycle. This project would initiate a standard that establishes how to measure and verify the GHG and carbon emissions of a building or group of buildings over their entire life-cycle. Additionally, this standard project would provide the necessary consistency for both procedures and data so that they may be referenced by other standards that address new and existing building performance.

Interest Categories: Producer, User, General

Scope: This standard establishes how to measure and verify the greenhouse gas (GHG) and carbon emissions of a building or group of buildings over the entire life-cycle. This standard provides consistent procedures and data to be referenced by other standards that address new and existing building performance.

**ASIS (ASIS International)**

Aivelis Opicka; standards@asisonline.org | 1625 Prince Street | Alexandria, VA 22314-2818 www.asisonline.org

***New Standard***

BSR/ASIS CAN-202x, Cannabis Security (new standard)

Stakeholders: Any organization applying for, constructing, or licensed to operate as a cannabis entity; government agencies/organizations, professional security designers, practitioners, and consultants - operating in the cannabis industry.

Project Need: Every cannabis organization needs to protect its assets – people, property, and information. Every country and state that has legalized cannabis for medicinal or adult/recreational use has established requirements for compliance as a regulated cannabis organization. While there are some standards that address parts of a security program, there is no overarching set of minimum security requirements that holistically addresses all elements and phases of a cannabis operation to include: security, personnel management, product management, and transport.

Interest Categories: General Interest; Producers/Service Providers; and Users/Managers

Scope: This Standard provides guidance for the design, implementation, monitoring, evaluation, and maintenance of a cannabis security program. It also provides guidance and minimum-security requirements on the identification, application, and management of physical protection systems (PPS) to safeguard an organization's assets (e.g., people, property, and information) for cannabis operations, as well as the storage and transport of products and currency.

**CTA (Consumer Technology Association)**

Catrina Akers; cakers@cta.tech | 1919 S. Eads Street | Arlington, VA 22202 www.cta.tech

**Revision**

BSR/CTA 803-C-202x, Mobile Electronics Wiring Designations for Audio and Vehicle Security/Convenience (revision and redesignation of ANSI/CTA 803-B-2012 (R2017))

Stakeholders: Consumers, manufacturers, retailers.

Project Need: To include additional data fields and make any other necessary updates or corrections.

Scope: This standard defines the terms, abbreviations, and definitions used in the sales and installation of vehicle aftermarket audio and security equipment. The standard adds continuity to mobile electronics installation information, enables easier data collection, and ensures consistency of information to installers.

**CTA (Consumer Technology Association)**

Catrina Akers; cakers@cta.tech | 1919 S. Eads Street | Arlington, VA 22202 www.cta.tech

**New Standard**

BSR/CTA 2112-202x, Best Practices for Consumer Cardiovascular Technology Solutions: Screening and Diagnosis (new standard)

Stakeholders: Consumers, manufacturers, retailers.

Project Need: To identify best practices for the use of Consumer Cardiovascular Technology Solutions in the application of screening and diagnosis for cardiovascular conditions (e.g., AFib, Hypertension).

Scope: This document will identify best practices for the use of Consumer Cardiovascular Technology Solutions in the application of screening and diagnosis for cardiovascular conditions (e.g., AFib, Hypertension).

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

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

**New Standard**

BSR/ASSE 1379-202x, Proportional Flow Controller, with Protection from Cross Contamination, for use in Drinking Water Installations (new standard)

Stakeholders: Plumbing contractors, heating and cooling professionals, and plumbing engineers.

Project Need: Proportional Flow Control Devices are increasingly being used in the US and Canadian markets. These devices control the flow of potable water based on the pressure of hydronic water from a hydronic system. The device performs this hydraulically and has integral cross-contamination protection between the potable and hydronic water. It is necessary to have established performance criteria to ensure the backflow prevention function of the devices meets North American backflow requirements. This Standard will be based on the published US industry standard and the Canadian ORD ASSE LEC 2010.

Scope: Proportional Flow Control Devices are commonly found in European hydronic systems. Typically, these products are installed as a part of an integrated system to balance flow into both sides of a double-wall heat exchanger. One side increases the cold-water supply temperature to supply domestic hot water, the other side receives hydronic hot water that is cooled to supply the hydronic loop. The device controls the flow of water of both the cold water supply and the hydronic loop based on the temperature and flow requirements of the hydronic loop. This helps minimize dead legs in the hot-water distribution system to supply fittings. It is also important that these devices be adequately equipped with a means to prevent contamination of the water supply. This standard adapts translated requirements from DVGW VP 201 Testing Specification for Flow-rate control devices with double diaphragm and safety valve and ASSE 1012 for Backflow Preventers with intermediated Atmospheric Vent to provide adequate protection of the potable water system.

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

Deborah Spittle; comments@standards.incits.org | 700 K Street NW, Suite 600 | Washington, DC 20001 www.incits.org

### ***National Adoption***

INCITS/ISO/IEC 14651:2020 [202x], Information technology - International string ordering and comparison - Method for comparing character strings and description of the common template tailorable ordering (identical national adoption of ISO/IEC 14651:2020 and revision of INCITS/ISO/IEC 14651:2016 [2017])

Stakeholders: ICT industry.

Project Need: Adoption of this international standard is beneficial to the ICT industry.

Scope: Document defines the following: A reference comparison method. This method is applicable to two character strings to determine their collating order in a sorted list. The method can be applied to strings containing characters from the full repertoire of ISO/IEC 10646. This method is also applicable to subsets of that repertoire, such as those of the different ISO/IEC 8-bit standard character sets, or any other character set, standardized or not, to produce ordering results valid (after tailoring) for a given set of languages for each script. This method uses collation tables derived either from the Common Template Table defined in this document or from one of its tailorings. This method provides a reference format. The format is described using the Backus-Naur Form (BNF). This format is used to describe the Common Template Table. The format is used normatively within this document.

## **PGMA (Portable Generator Manufacturers Association)**

Joseph Harding; jharding@thomasamc.com | 1300 Sumner Avenue | Cleveland, OH 44115-2851 www.pgmaonline.com

### ***Revision***

BSR/PGMA G300-202x, Safety and Performance of Portable Generators (revision of ANSI/PGMA G300-2018)

Stakeholders: Manufacturers and users of portable generators.

Project Need: ANSI/PGMA G300-2018 includes requirements for a carbon-monoxide shutoff system whereby the portable generator will shut off its engine when carbon monoxide levels detected at the generator reach certain levels. It has been demonstrated that these requirements will eliminate nearly all fatalities associated with the misuse of a portable generator by operating it in an enclosed space. This proposed revision will focus on revising the carbon-monoxide shutoff system requirements to not only continue to eliminate nearly all fatalities, but also to reduce the risk of injury due to carbon-monoxide poisoning associated with the misuse of a portable generator by operating it in an enclosed space. It is anticipated that this proposed revision will also include other miscellaneous revisions.

Interest Categories: Producer, User and General Interest

Scope: This standard applies to 15 kW or smaller; single-phase; 300 V or lower; 60 hertz; gasoline, liquefied petroleum gas (LPG) and diesel engine driven portable generators intended for multiple use and intended to be moved, though not necessarily with wheels. Permanent stationary generators, 50-hertz generators, marine generators, trailer-mounted generators, generators in motor homes, generators intended to be pulled by vehicles, engine-driven welding power sources and portable generators with AC output circuits that are not compatible with NEMA receptacles are not covered.

# 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](mailto:psa@ansi.org)

\* Standard for consumer products

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## Comment Deadline: March 27, 2022

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [rshanley@ashrae.org](mailto:rshanley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### Addenda

BSR/ASHRAE Addendum I to BSR/ASHRAE Standard 15-202x, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019)

This proposed addendum I to ANSI/ASHRAE Standard 15-2019 modifies portions of the document to incorporate requirements for commercial refrigeration applications with the use of A2L, A2, and A3 refrigerants.

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

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

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [rshanley@ashrae.org](mailto:rshanley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### Addenda

BSR/ASHRAE Addendum m to BSR/ASHRAE Standard 15-202x, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019)

This proposed addendum to ANSI/ASHRAE Standard 15-2019 modifies allowances for the use of mechanical ventilation to expand this mitigation strategy for human comfort applications using A2L refrigerants.

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

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

## Comment Deadline: March 27, 2022

### **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 s to BSR/ASHRAE Standard 15-202x, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019)

This proposed addendum to Standard 15 2019 makes a modification to refrigerant charge quantity limits, which aligns Standard 15 with the outcome of the research project. This modification will also make the requirements in Standard 15 more consistent with the requirements of the product safety standard.

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

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

### **DirectTrust (DirectTrust.org, Inc.)**

1629 K Street NW, Suite 300, Washington, DC 20006 | standards@directtrust.org, www.DirectTrust.org

#### **New Standard**

BSR/DS 2020-03-100-202x, Event Notifications via the Direct Standard™ (new standard)

DirectTrust Standards seeks to develop an implementation guide for actors in the healthcare ecosystem who will use the Direct Standard™ for the communication of various transactions in support of Encounter and Event Notifications as established in CMS Interoperability and Patient Access rule. This project will establish content and workflow standards for Direct Secure Messaging between inpatient facilities and downstream providers, as well as subscription services that act as intermediaries in this flow. In order to ensure effective interoperability and to limit burdensome workflows, standardization of these messages is essential.

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

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

### **NSF (NSF International)**

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

#### **Revision**

BSR/NSF 40-202x (i42r2), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

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

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

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

## Comment Deadline: March 27, 2022

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [jsnider@nsf.org](mailto:jsnider@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF/CAN 50-202x (i185r1), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2020)

This Standard covers materials, chemicals, components, products, equipment and systems, related to public and residential recreational water facility operation.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [jsnider@nsf.org](mailto:jsnider@nsf.org)

### RVIA (Recreational Vehicle Industry Association)

3333 Middlebury Street, Elkhart, IN 46516 | [treamer@rvia.org](mailto:treamer@rvia.org), [www.rvia.org](http://www.rvia.org)

#### Revision

BSR/RVIA EGS-1-202x, Engine Generator Sets for Recreational Vehicle Safety Requirements (revision of ANSI/RVIA EGS-1-2018)

This standard sets forth safety requirements and standards for engine generators having a continuous rating of 20 kilowatts or less, intended for installation and operation in recreational vehicles and similar mobile applications.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [treamer@rvia.org](mailto:treamer@rvia.org)

### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | [jeffrey.prusko@ul.org](mailto:jeffrey.prusko@ul.org), <https://ul.org/>

#### Revision

BSR/UL 30-202x, Standard for Safety for Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids (revision of ANSI/UL 30-2004 (R2019))

The following is being recirculated for your review: (1) Revisions to proposed joint UL/ULC 30, Standard for Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids.

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

Send comments (copy [psa@ansi.org](mailto: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>

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [Doreen.Stocker@ul.org](mailto:Doreen.Stocker@ul.org), <https://ul.org/>

#### Revision

BSR/UL 207-202x, UL Standard for Safety for Refrigerant-Containing Components and Accessories, Nonelectrical (revision of ANSI/UL 207-2020)

(1) Proposed revision to compliance options to include Standard Specification for Seamless Copper Tubes for Linesets – ASTM B1003-16; (2) Proposed revisions to align with the removal of Table 11.1.

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

Send comments (copy [psa@ansi.org](mailto: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: March 27, 2022

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Nicolette.A.Weeks@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 213-202x, Standard for Rubber Gasketed Fittings for Fire-Protection Service (February 25, 2022)  
(revision of ANSI/UL 213-2019)

This proposal covers: (2) Construction requirement for rubber-gasketed fittings with side outlets; (3) Side outlets intended for sprinkler connections; (4) Side outlets for pipe connections; and (5) Marking requirements.

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

Send comments (copy [psa@ansi.org](mailto: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>

### UL (Underwriters Laboratories)

47173 Benicia Street, Fremont, CA 94538 | Paul.E.Lloret@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 217-202x, Standard for Safety for Smoke Alarms (revision of ANSI/UL 217-2022)

Proposed changes to clarify the sensitivity requirements of the alarm silence feature and to correct the smoke alarm reliability prediction requirements in Annex C.

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

Send comments (copy [psa@ansi.org](mailto: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>

### UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada | sabrina.khreibtov@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 514C-202X, Standard for Safety for Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers  
(revision of ANSI/UL 514C-2020)

Topic 1. Withdrawal of Proposal: Assembled boxes (box with removable walls).

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

Send comments (copy [psa@ansi.org](mailto: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: March 27, 2022

### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 1203-202x, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations (revision of ANSI/UL 1203-2021)

This proposal for UL 1203 covers:

- (1) Revisions to cross-references for marking requirements in clauses 21.17, 40.1.1, 40.1.3, 40.1.6, 40.1.12, 60.3, 60.21, and 60.22;
- (2) Revision to cross-reference in clause 56.1 of the Diaphragm Endurance Test;
- (3) Revisions to cross-references in test descriptions for clause 21.29B and clause SB1.29B;
- (4) Revisions of Rust Resistance Tests and protection against corrosion for clause 15.6 and deletion of clause 47;
- (5) Revisions to clause 42.3 exception 3;
- (6) Revisions to clarify thermal shock on glass parts in clause 25.1; and
- (7) Revisions to clauses 21.29, 21.29A, and SB1.29.

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

Send comments (copy [psa@ansi.org](mailto: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>

### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 2225-202x, Standard for Safety for Cables and Cable-Fittings for Use In Hazardous (Classified) Locations (revision of ANSI/UL 2225-2020)

This proposal provides revisions to the SOT # 3 proposal document dated October 15, 2021 per comments received.

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

Send comments (copy [psa@ansi.org](mailto: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>.

### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 60335-2-3-202x, Standard for Safety of Household and Similar Electrical Appliances - Part 2: Particular Requirements for Electric Irons (February 25, 2022) (revision of ANSI/UL 60335-2-3-2016)

This proposal covers: (1) Editorial revisions to national deviations.

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

Send comments (copy [psa@ansi.org](mailto: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: March 27, 2022

### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 60745-2-3-202x, UL Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-3: Particular Requirements for Grinders, Polishers, and Disk-Type Sanders, (revision of ANSI/UL 60745-2-3-2013 (R2018))

Revise Cl. 20.101.1DV to allow for application of 62841-2-3 testing requirements.

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

Send comments (copy [psa@ansi.org](mailto: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>

### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 60745-2-13-202x, UL Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-13: Particular Requirements for Chain Saws (revision of ANSI/UL 60745-2-13-2017)

Revision to address consistency of safety instructions for chainsaws.

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

Send comments (copy [psa@ansi.org](mailto: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: April 11, 2022

### ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Park, IL 60526 | [kmurdoch@ans.org](mailto:kmurdoch@ans.org), [www.ans.org](http://www.ans.org)

#### New Standard

BSR/ANS 30.3-202x, Advanced Light-Water Reactor Risk-Informed Performance-Based Design Criteria and Methods (new standard)

This standard establishes requirements for using risk-informed, performance-based (RIPB) methods for advanced light water reactor (LWR) designs. RIPB methods are provided to ensure nuclear safety design practices are consistently applied to all new advanced LWR reactor technologies, specifically; high-level safety criteria selection, nuclear safety functions and margin, licensing-basis-event selection and acceptance criteria, equipment classification and categorization, defense-in-depth adequacy, and evaluating conformance with regulatory positions. The application of this standard to existing reactors is beyond the scope of this standard.

Single copy price: \$25.00

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [pschroeder@ans.org](mailto:pschroeder@ans.org)

## Comment Deadline: April 11, 2022

### **ASABE (American Society of Agricultural and Biological Engineers)**

2950 Niles Road, Saint Joseph, MI 49085 | [vangilder@asabe.org](mailto:vangilder@asabe.org), <https://www.asabe.org/>

#### **Revision**

BSR/ASABE S354.8 MONYEAR-202x, Safety for Farmstead Equipment (revision and redesignation of ANSI/ASAE S354.7-SEP2018)

This standard is a guide to provide a reasonable degree of personal safety for operators and other persons during normal operation and servicing of farmstead equipment. This standard applies to farmstead equipment. This standard does not apply to agricultural field equipment nor to self-propelled mobile equipment such as motor vehicles, all-terrain vehicles, and skid-steer loaders.

Single copy price: \$51.00 (ASABE Members)/\$75.00 (non-ASABE Members)

Obtain an electronic copy from: [vangilder@asabe.org](mailto:vangilder@asabe.org)

Order from: Carla VanGilder; [vangilder@asabe.org](mailto:vangilder@asabe.org)

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

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [rshanley@ashrae.org](mailto:rshanley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE Addendum q to BSR/ASHRAE Standard 15-202x, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019)

This proposed change to ANSI/ASHRAE Standard 15-2019 modifies requirements for mechanical ventilation in machinery rooms with equipment using one or more Class 2L flammable refrigerants but not containing any Class 2 or Class 3 flammable refrigerants. The proposed revisions update the graphical method for determining required ventilation rates and add a detailed calculation method as an alternate compliance path.

Single copy price: \$35.00

Obtain an electronic copy from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

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

## Comment Deadline: April 11, 2022

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

520 N. Northwest Highway, Park Ridge, IL 60068 | [TFisher@ASSP.org](mailto:TFisher@ASSP.org), [www.assp.org](http://www.assp.org)

#### **Revision**

BSR/ASSP A10.24-202X, Roofing Safety Requirements for Low-Sloped Roofs (revision and redesignation of ANSI/ASSE A10.24-2014)

This standard establishes safe operating practices for the installation, maintenance, and removal of membrane roofing that is seamed or seamless on low-sloped roofs, which means the roof has a slope that is less than or equal to 4 in 12 (18 degrees). These types of roofs include but are not necessarily limited to: hot and cold built-up roofing, single-ply roofing, spray polyurethane foam (SPF) roofing, liquid-type roofing and modified bitumens.

Single copy price: \$110.00

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Order from: Tim Fisher; [tfisher@assp.org](mailto:tfisher@assp.org)

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### **AWWA (American Water Works Association)**

6666 W. Quincy Avenue, Denver, CO 80235 | [polson@awwa.org](mailto:polson@awwa.org), [www.awwa.org](http://www.awwa.org)

#### **Revision**

BSR/AWWA D121-202x, Bolted Aboveground Thermosetting Fiberglass-Reinforced Plastic Panel-Type Tanks for Water Storage (revision, redesignation and consolidation of ANSI/AWWA D121-2012, ANSI/AWWA D121a-2014)

This standard describes the design, fabrication, installation, inspection, and testing of bolted aboveground thermoset fiberglass-reinforced plastic (FRP) panel-type tanks for potable water.

Single copy price: Free

Obtain an electronic copy from: [ETSsupport@awwa.org](mailto:ETSsupport@awwa.org)

Order from: Vicki David; [vdavid@awwa.org](mailto:vdavid@awwa.org)

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

### **CRSI (Concrete Reinforcing Steel Institute)**

933 N Plum Grove Road, Schaumburg, IL 60173 | [atrygestad@crsi.org](mailto:atrygestad@crsi.org), [www.crsi.org](http://www.crsi.org)

#### **Revision**

BSR/CRSI CG1.1-202x, CRSI Standard for Epoxy Coating Plant: Straight Bar Lines (revision of ANSI/CRSI CG1.1-2016)

This Standard specifies procedures used to monitor production and assess quality during the application of epoxy coating to straight steel reinforcing bars. This Standard also describes minimum requirements for documentation, observation and testing as part of a quality control program.

Single copy price: Free

Obtain an electronic copy from: [atrygestad@crsi.org](mailto:atrygestad@crsi.org)

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## Comment Deadline: April 11, 2022

### CRSI (Concrete Reinforcing Steel Institute)

933 N Plum Grove Road, Schaumburg, IL 60173 | [atrygestad@crsi.org](mailto:atrygestad@crsi.org), [www.crsi.org](http://www.crsi.org)

#### Revision

BSR/CRSI CG1.2-202x, CRSI Standard for Epoxy Coating Plant: Custom Lines (revision of ANSI/CRSI CG1.2-2016)

This Standard specifies procedures used to monitor application process and ensure quality during the application of epoxy coating to steel for use in concrete using custom coating operations. This Standard also describes minimum requirements for documentation, observation and testing as part of a quality control program.

Single copy price: Free

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### EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | [jkirk@esda.org](mailto:jkirk@esda.org), [www.esda.org](http://www.esda.org)

#### New Standard

BSR/ESD SP5.3.4-202x, ESD Association Standard Practice for Electrostatic Discharge Sensitivity Testing - Charged Device Model (CDM) Testing - Component Level - Capacitively Coupled - Transmission Line Pulsing as an Alternative CDM Characterization Method (new standard)

This document establishes a procedure for testing components and microcircuits, such as integrated circuits, discrete semiconductor components, and electronic modules containing more than a single component according to its susceptibility (sensitivity) to damage or degradation by exposure to a defined contact CDM like electrostatic discharge (ESD). This contact-based test method can be performed on packaged devices as well as on bare dies and wafers.

Single copy price: \$145.00 (List)/\$115.00 (ESD Members) [Hard-Cover]; \$135.00 (List)/\$105.00 (ESD Members) [Soft-Cover]

Obtain an electronic copy from: [cearl@esda.org](mailto:cearl@esda.org)

Order from: Christina Earl; [cearl@esda.org](mailto:cearl@esda.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [cearl@esda.org](mailto:cearl@esda.org)

### NEMA (ASC C8) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Arlington, VA 22209 | [Khaled.Masri@nema.org](mailto:Khaled.Masri@nema.org), [www.nema.org](http://www.nema.org)

#### Revision

BSR NEMA WC 75-202x, Standard for Controlled Impedance in Internal Electrical Cable (revision of ANSI/NEMA WC 75-2015)

This standards publication was developed to cover specific requirements for finished cables with controlled impedance twisted pair(s). This standard uniquely enables a user to specify various numbers of pairs (1 - 61) with a required impedance requirement, and tailor the materials to meet a specific end application. The cables are intended for wiring of electrical equipment

Single copy price: \$79.00

Obtain an electronic copy from: [khaled.masri@nema.org](mailto:khaled.masri@nema.org)

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## Comment Deadline: April 11, 2022

### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **NFPA FIRE PROTECTION STANDARDS DOCUMENTATION:**

*The National Fire Protection Association announces the availability of the NFPA First Draft Reports for concurrent review and comment by NFPA and ANSI. These First Draft Reports contain the disposition of public inputs that were received for standards in the Annual 2023 Revision Cycle. The First Draft Report is located on the document's information page under the next edition tab. The document's specific URL, [www.nfpa.org/doc#next](http://www.nfpa.org/doc#next) (for example [www.nfpa.org/101next](http://www.nfpa.org/101next)), can easily access the document's information page. All Comments on standards in the Annual 2023 Revision Cycle must be submitted by **May 31, 2022**.*

*The disposition of all comments received from the review of the First Draft Report will be published in the Second Draft Report, and will also be available on the document's information page under the next edition tab. For more information on the rules and up-to-date information on deadlines for processing NFPA standards, check the NFPA website (<http://www.nfpa.org>) or contact Standards Administration at NFPA. Those who submit comments to NFPA are invited to copy ANSI's Board of Standards Review.*

#### **New Standard**

BSR/NFPA 915-202x, Standard for Remote Inspections (new standard)

This standard shall provide the minimum requirements for the procedures, methods, and documentation associated with remote inspections and tests, automated inspection and testing, and distance monitoring. NFPA 915 shall be referred to as "this standard" or "the standard."

Obtain an electronic copy from: [www.nfpa.org/915Next](http://www.nfpa.org/915Next)

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### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 3-202x, Standard for Commissioning of Fire Protection and Life Safety Systems (revision of ANSI/NFPA 3-2021)

This standard shall provide the required procedures, methods, and documentation for the commissioning of active and passive fire protection and life safety systems and their interconnections with other building systems.

Obtain an electronic copy from: [www.nfpa.org/3Next](http://www.nfpa.org/3Next)

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## Comment Deadline: April 11, 2022

### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 4-202x, Standard for Integrated Fire Protection and Life Safety System Testing (revision of ANSI/NFPA 4-2021)

The standard shall provide the minimum requirements for testing of integrated fire protection and life safety systems where such testing is required by the design documents, commissioning plan, governing laws, codes, regulations, or standards. These requirements include protocol for testing procedures, responsibilities of various parties, methods and documentation for verifying the operational readiness and sequence of integrated systems. The standard is designed to ensure that interconnected active and passive fire protection and life safety systems operate as intended. It is not the intent of this standard to require implementation of emergency response procedures, evacuation drills, or other exercises that require facility staff or fire department response. However, when integrated systems tests are being conducted, it can be an appropriate opportunity to practice emergency procedures or drills. This standard does not prohibit the owner of the property, building, or individual system or the owner's designated representative from requiring integrated system testing by design or contract documents. For some buildings, the integrated system testing requirements of NFPA 4 can be considered satisfied by performing the acceptance tests and the inspection, testing, and maintenance required by the NFPA standards for the systems in a building. For example..

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### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 17-202x, Standard for Dry Chemical Extinguishing Systems (revision of ANSI/NFPA 17-2021)

This standard includes minimum requirements for dry-chemical fire-extinguishing systems that discharge dry chemical from fixed nozzles or hand hose lines by means of expellant gas. The dry-chemical systems described in this standard are designed to discharge dry chemical from fixed nozzles and piping or from hose lines by means of an expellant gas. The intent of the standard is to present the design considerations applicable to these systems. It contains only the essential requirements and recommendations needed to make the standard workable in the hands of those skilled in this field. Because the flow of dry chemical (solid particles suspended in a gaseous medium) does not follow general hydraulic theories, most of the flow principles have been determined experimentally. The dry chemicals produced by various manufacturers usually are not identical in all characteristics, and each manufacturer designs equipment for use with a specific dry chemical. System design principles applicable to the products of one manufacturer are not applicable to the products of another manufacturer. As a result, it is not practical to include system design details as a part of this standard. It is now generally accepted that the flame-extinguishing properties of dry chemicals..

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## Comment Deadline: April 11, 2022

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### ***Revision***

BSR/NFPA 17A-202x, Standard for Wet Chemical Extinguishing Systems (revision of ANSI/NFPA 17A-2021)  
The provisions of this standard apply to the design, installation, operation, testing, and maintenance of preengineered wet-chemical fire extinguishing systems that discharge wet chemical from fixed nozzles and piping by means of expellant gas. It contains only the essential requirements and recommendations needed to make the standard workable in the hands of those skilled in this field. The wet-chemical systems described in this standard are designed to discharge wet chemical from fixed nozzles and piping by means of expellant gas. The intent of the standard is to present the design considerations applicable to these systems. The wet chemicals produced by various manufacturers usually are not identical in all characteristics, and each manufacturer designs equipment for use with a specific wet chemical. Therefore, system design principles applicable to the products of one manufacturer are not applicable to the products of another manufacturer. As a result, it is not practical to include system design details as part of this standard. However, such system design details are an integral part of the listing of the systems and are included in the manufacturers' design, installation, and maintenance manuals.

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### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### ***Revision***

BSR/NFPA 51B-202x, Standard for Fire Prevention during Welding, Cutting, and Other Hot Work (revision of ANSI/NFPA 51B-2019)

This standard shall cover provisions to prevent injury, loss of life, and loss of property from fire or explosion as a result of hot work. Cutting and welding processes using electric arcs or oxy-fuel gas flames are a necessary part of our industrial world. Too often, however, the persons who use, contract, or supervise the use of these processes do not fully appreciate that their improper use can result in loss of life and property by fire and explosion. Approximately 6 percent of fires in industrial properties and many fires in other properties have been caused by cutting and welding, primarily with portable equipment in areas not specifically designed or approved for such work. Cutting and certain arc welding operations produce literally thousands of ignition sources in the form of sparks and hot slag. Electric arcs or oxy-fuel gas flames and hot work pieces are also inherent ignition sources. The majority of fires in which cutting and welding are factors have been caused by sparks. These globules of molten metal have scattered horizontally as far as 35 ft (11 m), setting fire to all kinds of combustible materials. They have...

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### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### Revision

BSR/NFPA 54-202x, National Fuel Gas Code (revision of ANSI/NFPA 54-2021)

1.1.1.1 This code is a safety code that shall apply to the installation of fuel gas piping systems, appliances, equipment, and related accessories as shown in 1.1.1.1(A) through 1.1.1.1(D). (A) Coverage of piping systems shall extend from the point of delivery to the appliance connections. For other than undiluted liquefied petroleum gas (LP-Gas) systems, the point of delivery shall be the outlet of the service meter assembly or the outlet of the service regulator or service shutoff valve where no meter is provided. For undiluted LP-Gas systems, the point of delivery shall be considered to be the outlet of the final pressure regulator, exclusive of line gas regulators where no meter is installed. Where a meter is installed, the point of delivery shall be the outlet of the meter. A.1.1.1.1(A) The final pressure regulator in an undiluted liquefied petroleum gas (LP-Gas) system can include any one of the following: (1) The second-stage regulator or integral two-stage regulator; (2) A2-psi (14-kPa) service regulator or integral 2-psi (14-kPa) service regulator; (3) A single-stage regulator, where single-stage systems are permitted by NFPA 58, Liquefied Petroleum Gas Code. (B) The...

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### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### Revision

BSR/NFPA 59-202x, Utility LP-Gas Plant Code (revision of ANSI/NFPA 59-2021)

This code shall apply to the design, construction, location, installation, operation, and maintenance of refrigerated and nonrefrigerated utility gas plants including LP-gas containers, piping, and associated process equipment, and controls and fire protection. Coverage begins at: (1) The point of transfer when delivery is by cargo tank vehicle or railcar; (2) The liquid inlet isolation valve located downstream of hazardous liquid pipeline under the jurisdiction of 49 CFR part 195; (3) Coverage shall extend to the point where LP-Gas vapor or a mixture of LP-Gas vapor and air is introduced into the utility distribution system under the jurisdiction of 49 CFR Part 192. Installations that have an aggregate water capacity of 4000 gal (15.14 m<sup>3</sup>) or less shall conform to NFPA 58, Liquefied Petroleum Gas Code.

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## **Comment Deadline: April 11, 2022**

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### ***Revision***

BSR/NFPA 77-202x, Recommended Practice on Static Electricity (revision of ANSI/NFPA 77-2019)

This recommended practice applies to the identification, assessment, and control of static electricity for purposes of preventing fires and explosions. This recommended practice does not apply directly to shock hazards from static electricity. However, application of the principles set forth in this recommended practice can reduce such shock hazards to personnel. This recommended practice does not apply to the prevention and control of static electricity in hospital operating rooms or in areas where flammable anesthetics are administered or handled. This recommended practice does not apply to lightning. This recommended practice does not apply to stray electrical currents or to induced currents from radio frequency (RF) energy. This recommended practice does not apply to fueling of motor vehicles, marine craft, or aircraft. This recommended practice does not apply to cleanrooms. This recommended practice does not apply to control of static electricity and static electricity hazards involved with electronic components, which have their own requirements.

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### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### ***Revision***

BSR/NFPA 78-202x, Guide on Electrical Inspections (revision of ANSI/NFPA 78-2019)

This document covers minimum criteria to aid in organizing and conducting electrical inspections, which includes administration, plans review, and field inspection, for new electrical installations and modifications to existing electrical installations in conformance with AHJ requirements.

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### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### ***Revision***

BSR/NFPA 90A-202x, Standard for the Installation of Air-Conditioning and Ventilating Systems (revision of ANSI/NFPA 90A-2021)

This standard shall cover construction, installation, operation, and maintenance of systems for air conditioning and ventilating, including filters, ducts, and related equipment, to protect life and property from fire, smoke, and gases resulting from fire or from conditions having manifestations similar to fire. An air-duct system has the potential to convey smoke, hot gases, and flame from area to area and to supply air to aid combustion in the fire area. For these reasons, fire protection of an air-duct system is essential to safety, to life, and to the protection of property. However, an air-duct system's fire integrity also enables it to be used as part of a building's fire-protection system. Guidance for the design of smoke-control systems is provided in NFPA 92, Standard for Smoke Control Systems. Pertinent information on maintenance is provided in Annex B. Maintenance of fire dampers, ceiling dampers, smoke dampers, and combination fire/smoke dampers requirements can be found in NFPA 80, Standard for Fire Doors and Other Opening Protectives, and NFPA 105, Standard for Smoke Door Assemblies and Other Opening Protectives.

Obtain an electronic copy from: [www.nfpa.org/90aNext](http://www.nfpa.org/90aNext)

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### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### ***Revision***

BSR/NFPA 90B-202x, Standard for the Installation of Warm Air Heating and Air-Conditioning Systems (revision of ANSI/NFPA 90B-2021)

This standard shall cover construction, installation, operation, and maintenance of systems for warm air heating and air conditioning, including filters, ducts, and related equipment to protect life and property from fire, smoke, and gases resulting from fire. For other types of systems, see NFPA 90A. For installation of blower and exhaust systems, see NFPA 91. For removal of smoke and grease-laden vapors from commercial cooking equipment, see NFPA 96.

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### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 96-202x, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations (revision of ANSI/NFPA 96-2021)

This standard shall provide the minimum fire safety requirements (preventative and operative) related to the design, installation, operation, inspection, and maintenance of all public and private cooking operations. These requirements include, but are not limited to, all manner of cooking equipment, exhaust hoods, grease-removal devices, exhaust ductwork, exhaust fans, dampers, fire-extinguishing equipment, and all other auxiliary or ancillary components or systems that are involved in the capture, containment, and control of grease-laden cooking effluent. This standard shall apply to residential cooking equipment used for commercial cooking operations. This standard shall not apply to cooking equipment located in a single dwelling unit. This standard shall not apply to facilities where all of the following are met: (1) Only residential equipment is being used; (2) Fire extinguishers are located in all kitchen areas in accordance with NFPA 10, Standard for Portable Fire Extinguishers; (3) The facility is not an assembly occupancy; and (4) The authority having jurisdiction has approved the installation. This judgment should take into account the type of cooking being performed, the items being cooked, and the frequency of cooking operations. Examples of operations that might not require...

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### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 220-202x, Standard on Types of Building Construction (revision of ANSI/NFPA 220-2021)

This standard defines types of building construction based on the combustibility and the fire resistance rating of a building's structural elements. Fire walls, nonbearing exterior walls, nonbearing interior partitions, fire barrier walls, shaft enclosures, and openings in walls, partitions, floors, and roofs are not related to the types of building construction and are regulated by other standards and codes, where appropriate. It is necessary for the user to consider the influence of location, occupancy, exterior exposure, possibility of mechanical and physical damage to fire-resistant material, and other features that could impose additional requirements for safeguarding life and property, as commonly covered in building codes. For information on the construction of fire walls and fire barrier walls, see NFPA 221, Standard for High-Challenge Fire Walls, Fire Walls, and Fire Barrier Walls. For the installation of opening protection, see NFPA 80, Standard for Fire Doors and Other Opening Protectives and NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems.

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### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 221-202x, Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls (revision of ANSI/NFPA 221-2021)

This standard specifies requirements for the design and construction of high challenge fire walls, fire walls, and fire barrier walls including protection of openings and penetrations.

Obtain an electronic copy from: [www.nfpa.org/221Next](http://www.nfpa.org/221Next)

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

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 496-202x, Standard for Purged and Pressurized Enclosures for Electrical Equipment (revision of ANSI/NFPA 496-2021)

This standard applies to purging and pressurizing for the following: (1) Electrical equipment located in areas classified as hazardous by Article 500 or Article 505 of NFPA 70; (2) Electrical equipment containing sources of flammable vapors or gases and located in either classified or unclassified areas; (3) Control rooms or buildings located in areas classified as hazardous by Article 500 or Article 505 of NFPA 70; and (4) Analyzer rooms containing sources of flammable vapors or gases and located in areas classified as hazardous by Article 500 or Article 505 of NFPA 70. This standard does not apply to electrical equipment located in: (1) Areas classified as Class I, Zone 0; (2) Areas classified as Class III; and (3) Areas where flammable liquids may be splashed or spilled on the electrical equipment. Electrical equipment should be located in an area having as low a degree of hazard classification as is practical. Where there is probability of flammable liquid exposure, additional means should be taken to avoid ingress.

Obtain an electronic copy from: [www.nfpa.org/496Next](http://www.nfpa.org/496Next)

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

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 497-202x, Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas (revision of ANSI/NFPA 497-2021)

This recommended practice applies to those locations where flammable gases or vapors, flammable liquids, or combustible liquids are processed or handled; and where their release into the atmosphere could result in their ignition by electrical systems or equipment. This recommended practice provides information on specific flammable gases and vapors, flammable liquids, and combustible liquids whose relevant combustion properties have been sufficiently identified to allow their classification into the groups established by NFPA 70 (NEC), for proper selection of electrical equipment in hazardous (classified) locations. The tables of selected combustible materials contained in this document are not intended to be all-inclusive.

Obtain an electronic copy from: [www.nfpa.org/497Next](http://www.nfpa.org/497Next)

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

## Comment Deadline: April 11, 2022

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 499-202x, Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas (revision of ANSI/NFPA 499-2021)  
This recommended practice provides information on the classification of combustible dusts and of hazardous (classified) locations for electrical installations in chemical process areas and other areas where combustible dusts are produced or handled. This recommended practice addresses the application of the electrical equipment in a combustible dust atmosphere. It does not address the fugitive dusts in the facility and those potential hazards. While this document acknowledges that the dust accumulation on structural beams or within the facility is a hazard, this recommended practice addresses only dust accumulation on electrical equipment. This recommended practice provides information on combustible dusts as it relates to the proper selection of electrical equipment in hazardous (classified) locations in accordance with NFPA 70. The tables of selected combustible dusts contained in this document are not intended to be all-inclusive.

Obtain an electronic copy from: [www.nfpa.org/499Next](http://www.nfpa.org/499Next)

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

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 703-202x, Standard for Fire-Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials (revision of ANSI/NFPA 703-2021)

This standard provides criteria for defining and identifying fire retardant-treated wood and fire retardant-coated building materials. Fire-resistance ratings measured on an hourly basis are not covered in this standard. To establish such ratings, tests should be made in accordance with NFPA 251.

Obtain an electronic copy from: [www.nfpa.org/703Next](http://www.nfpa.org/703Next)

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

### **NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 1078-202x, Standard for Electrical Inspector Professional Qualifications (revision of ANSI/NFPA 1078-2019)

This standard identifies the minimum job performance requirements (JPRs) for electrical inspectors.

Obtain an electronic copy from: [www.nfpa.org/1078Next](http://www.nfpa.org/1078Next)

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

## Comment Deadline: April 11, 2022

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [arose@nsf.org](mailto:arose@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF 49-202x (i167r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2020)

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets (BSCs) that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor/blower performance.

Single copy price: Free

Obtain an electronic copy from: [https://standards.nsf.org/apps/group\\_public/download.php/62393/49i167r1%20-%20Resistance%20to%20Distortion%20-%20JC%20Memo%20and%20Ballot.pdf](https://standards.nsf.org/apps/group_public/download.php/62393/49i167r1%20-%20Resistance%20to%20Distortion%20-%20JC%20Memo%20and%20Ballot.pdf)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [arose@nsf.org](mailto:arose@nsf.org)

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [jsnider@nsf.org](mailto:jsnider@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF/CAN 50-202x (i171r3), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2020)

This Standard covers materials, chemicals, components, products, equipment, and systems related to public and residential recreational water facility operation.

Single copy price: Free

Obtain an electronic copy from: [https://standards.nsf.org/apps/group\\_public/download.php/62330/50i171r3%20-%20ultrafine%20filtration%20-%20JC%20memo%20%26%20Ballot.pdf](https://standards.nsf.org/apps/group_public/download.php/62330/50i171r3%20-%20ultrafine%20filtration%20-%20JC%20memo%20%26%20Ballot.pdf)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [jsnider@nsf.org](mailto:jsnider@nsf.org)

### SCTE (Society of Cable Telecommunications Engineers)

140 Philips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### Reaffirmation

BSR/SCTE 82-2012 (R202x), Test Method for Low-Frequency and Spurious Disturbances (reaffirmation of ANSI/SCTE 82-2012)

To define and measure low frequency and spurious disturbances caused by switched mode power supplies or other active devices in broadband Cable Telecommunications equipment.

Single copy price: \$50.00

Obtain an electronic copy from: [admin@standards.scte.org](mailto:admin@standards.scte.org)

Order from: Global Engineering Documents, (800) 854-7179, [www.global.ihs.com](http://www.global.ihs.com)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [admin@standards.scte.org](mailto:admin@standards.scte.org)

## Comment Deadline: April 11, 2022

### **SCTE (Society of Cable Telecommunications Engineers)**

140 Phillips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### **Revision**

BSR/SCTE 15-202x, Specification for Trunk, Feeder and Distribution Coaxial Cable (revision of ANSI/SCTE 15-2019)

This specification applies to material, electrical, and mechanical properties of 75-ohm coaxial cables as defined in this standard. Seventy-five-ohm coaxial cables are used to distribute radio frequency (RF), digital signals, and power, as applicable.

Single copy price: \$50.00

Obtain an electronic copy from: [admin@standards.scte.org](mailto:admin@standards.scte.org)

Order from: Global Engineering Documents, (800) 854-7179, [www.global.ihs.com](http://www.global.ihs.com)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [admin@standards.scte.org](mailto:admin@standards.scte.org)

### **SCTE (Society of Cable Telecommunications Engineers)**

140 Phillips Rd, Exton, PA 19341 | [kcooney@scte.org](mailto:kcooney@scte.org), [www.scte.org](http://www.scte.org)

#### **Revision**

BSR/SCTE 145-202x, Test Method for Second Harmonic Distortion of Passives Using a Single Carrier (revision of ANSI/SCTE 145-2015)

The purpose of this document is to establish the standard methodology to measure second harmonic distortion in a Cable Telecommunication System passive at high-signal-level conditions (50 – 60 dBmV). Due to the difficulty in acquiring multi-carrier signal generators with both 55 dBmV output and intermod beats at – 120 dBc, the test procedure will use a single-carrier source test method.

Single copy price: \$50.00

Obtain an electronic copy from: [admin@standards.scte.org](mailto:admin@standards.scte.org)

Order from: Global Engineering Documents, (800) 854-7179, [www.global.ihs.com](http://www.global.ihs.com)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [admin@standards.scte.org](mailto:admin@standards.scte.org)

### **UL (Underwriters Laboratories)**

333 Pflugsten Road, Northbrook, IL 60062-2096 | [jeffrey.prusko@ul.org](mailto:jeffrey.prusko@ul.org), <https://ul.org/>

#### **Revision**

BSR/UL 2586-202x, Standard for Safety for Hose Nozzle Valves for Flammable and Combustible Liquids (revision of ANSI/UL 2586-2021)

The following changes in requirements are being proposed: (1) Revision to the Deformation Test with respect to anchoring; (2) Revision to the External Leakage Test to clarify that if a vent tube is provided, it shall be sealed; (3) Revision to the Hose Nozzle Valve Guard Strength Test with respect to hose length size; and (4) Revision to the Sensitivity Test with respect to hose length and clarification for “no pressure- no flow” nozzles.

Single copy price: Free

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

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

Send comments (copy [psa@ansi.org](mailto: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: April 11, 2022

### UL (Underwriters Laboratories)

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

#### **Revision**

BSR/UL 2586A-202x, Standard for Safety for Hose Nozzle Valves for Gasoline and Gasoline/Ethanol Blends with Nominal Ethanol Concentrations up to 85 Percent (E0 - E85) (revision of ANSI/UL 2586A-2019)

The following changes in requirements are being proposed: (1) Revision to the Deformation Test with respect to anchoring; (2) Revision to the Long-Term Exposure Test to add E40, clarify requirements, and harmonize with UL 2586B; (3) Revision to External Leakage Test with respect to vent tube being sealed; (4) Revision to the Guard Strength Test with respect to hose length size; (5) Revision to the Sensitivity Test with respect to hose length and clarification for “no pressure-no flow” nozzles; and (6) Revision to the Blending Cycling Test to clarify requirements.

Single copy price: Free

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### UL (Underwriters Laboratories)

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

#### **Revision**

BSR/UL 2586B-202x, Standard for Safety for Hose Nozzle Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations up to 20 Percent (B20), Kerosene, and Fuel Oil (revision of ANSI/UL 2586B-2020)

The following changes in requirements are being proposed: (1) Revision to the Deformation Test with respect to anchoring; (2) Revision to the Long-Term Exposure Test to add E40, and clarify requirements; (3) Revision to the External Leakage Test with respect to vent tube being sealed; (4) Revision to the Hose Nozzle Valve Guard Strength Test with respect to hose length size; (5) Revision to the Sensitivity Test with respect to hose length and clarification for “no pressure-no flow” nozzles; and (6) Revision to the Blending Cycling Test to clarify requirements.

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Send comments (copy [psa@ansi.org](mailto: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: April 26, 2022

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Withdrawal***

INCITS/ISO/IEC 9070:1991 [S2014], Information technology - SGML support facilities - Registration procedures for public text owner identifiers (withdrawal of INCITS/ISO/IEC 9070:1991 [S2014])  
Applies to the assignment of unique owner prefixes to owners of public text conforming to ISO 8879. It describes the procedures whereby such assignments are made, and the method of constructing registered owner names from them. Procedures for self-assignment of owner prefixes by standards bodies and other organizations are also specified.

Single copy price: \$60.00

Obtain an electronic copy from: <http://webstore.ansi.org>

Order from: <http://webstore.ansi.org>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Withdrawal***

INCITS/ISO/IEC 10180:1995 [S2014], Information Technology - Processing Languages - Standard Page Description Language (SPDL) (withdrawal of INCITS/ISO/IEC 10180:1995 [S2014])  
Defines a language for the specification of electronic documents, comprised of black and white, gray scale, or full-color text, images, and geometric graphics, in a form suitable for presentation (printing or displaying on other suitable media). Intended to be extensible in order to accommodate future developments in imaging technology. Intended to be used in a variety of configurations meeting a variety of connectivity needs. It is specifically compatible with use over OSI networks. In addition to specifying how document images are represented, it specifies how Document Production Instructions affect document presentation.

Single copy price: \$133.00

Obtain an electronic copy from: <http://webstore.ansi.org>

Order from: <http://webstore.ansi.org>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

## Comment Deadline: April 26, 2022

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Withdrawal***

INCITS/ISO/IEC 13240:2001 [R2019], Information technology - Document description and processing languages - Interchange Standard for Multimedia Interactive Documents (ISMID) (withdrawal of INCITS/ISO/IEC 13240:2001 [R2019])

Facilitates the interchange of Multimedia Interactive Documents (MIDs) among heterogeneous interactive document development and delivery systems by providing the architecture from which common interchange languages can be created.

Single copy price: \$105.00

Obtain an electronic copy from: <http://webstore.ansi.org>

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Withdrawal***

INCITS/ISO/IEC 10180:1995/COR 1:2001 [S2020], Information Technology - Processing Languages - Standard Page Description Language (SPDL) - Technical Corrigendum 1 (withdrawal of INCITS/ISO/IEC 10180:1995/COR 1:2001 [S2020])

Technical Corrigendum 1 to ISO/IEC 10180:1995.

Single copy price: Free

Obtain an electronic copy from: <http://webstore.ansi.org>

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Withdrawal***

INCITS/ISO/IEC 13240:2001/COR 1:2003 [R2019], Information technology - Document description and processing languages - Interchange Standard for Multimedia Interactive Documents (ISMID) - Technical Corrigendum 1 (withdrawal of INCITS/ISO/IEC 13240:2001/COR1:2003 [R2019])

Technical Corrigendum 1 to ISO/IEC 13240:2001.

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Order from: <http://webstore.ansi.org>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

## Comment Deadline: April 26, 2022

### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 864-202X, Standard for Safety for Control Units and Accessories for Fire Alarm Systems (revision of ANSI/UL 864-2020)

Proposed fifth edition of the Binational Standard for Control Units and Accessories for Fire Alarm Systems, CAN/ULC-S527 and the proposed eleventh edition of the Binational Standard for Control Units and Accessories for Fire Alarm Systems, ANSI/UL 864.

Single copy price: Free

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

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Send comments (copy [psa@ansi.org](mailto: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>

### UL (Underwriters Laboratories)

333 Pflingsten Road, Northbrook, IL 60062 | [megan.monsen@ul.org](mailto:megan.monsen@ul.org), <https://ul.org/>

#### Revision

BSR/UL 3100-202x, Standard for Safety for Automated Mobile Platforms (AMPs) (revision of ANSI/UL 3100-2021)

This proposal for UL 3100 covers a revision to Dielectric Voltage Withstand Test.

Single copy price: Free

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

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

## Withdrawal of an ANS by ANSI-Accredited Standards Developer

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

### NEMA (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 1752, Arlington, VA 22209 | [brian.marchionini@nema.org](mailto:brian.marchionini@nema.org), [www.nema.org](http://www.nema.org)

ANSI/NEMA SB 40-2014, Communications Systems for Life Safety in Schools

Questions may be directed to: Brian Marchionini; [brian.marchionini@nema.org](mailto:brian.marchionini@nema.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.

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

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

### *Addenda*

ANSI/AAMI HA60601-1-11-2015/A1-2021, Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance - Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare - Amendment 1 (addenda to ANSI/AAMI HA60601-1-11-2015) Final Action Date: 2/18/2022

## **APA (APA - The Engineered Wood Association)**

7011 South 19th Street, Tacoma, WA 98466 | borjen.yeh@apawood.org, www.apawood.org

### *Revision*

ANSI A190.1-2022, Product Standard for Structural Glued Laminated Timber (revision of ANSI A190.1-2017) Final Action Date: 2/17/2022

## **ASME (American Society of Mechanical Engineers)**

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

### *Revision*

ANSI/ASME ASME B36.10-2022, Welded and Seamless Wrought Steel Pipe (revision of ANSI/ASME B36.10M-2018) Final Action Date: 2/18/2022

### *Revision*

ANSI/ASME B30.2-2022, Overhead and Gantry Cranes (Top Running Bridge, Top Running Hoist) (revision of ANSI/ASME B30.2-2016) Final Action Date: 2/18/2022

### *Revision*

ANSI/ASME PTC 1-2022, Performance Test Codes - General Instructions (revision of ANSI/ASME PTC 1-2015) Final Action Date: 2/18/2022

## **ASTM (ASTM International)**

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

### *National Adoption*

ANSI/ASTM/ISO 55000-2016, Asset management - Overview, Principles and Terminology (identical national adoption of ASTM/ISO 55000 and revision of ANSI/ASTM/ISO 55000-2016) Final Action Date: 2/15/2022

### *National Adoption*

ANSI/ASTM/ISO 55001-2016, Asset management - Management systems - Requirements (identical national adoption of ISO 55001 and revision of ANSI/ASTM/ISO 55001-2016) Final Action Date: 2/15/2022

### *National Adoption*

ANSI/ASTM/ISO 55002-2016, Asset management - Management systems - Guidelines for the application of ISO 55001 (identical national adoption of ISO 55002 and revision of ANSI/ASTM/ISO 55002-2016) Final Action Date: 2/15/2022

**AWS (American Welding Society)**

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

*Revision*

ANSI/AWS B2.1-1-234-2020-AMD1, Standard Welding Procedure Specification (SWPS) for 75% Argon Plus 25% Carbon Dioxide Shielded Flux Cored Arc Welding of Carbon Steel (M-1/P-1, Group 1 or 2), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, E7XT-X, in the As-Welded or PWHT Condition, Primarily Pipe Applications (revision and redesignation of ANSI/AWS B2.1-1-234:2020) Final Action Date: 2/17/2022

*Revision*

ANSI/AWS B2.1-1-235-2020-AMD1, Standard Welding Procedure Specification (SWPS) for 98% Argon Plus 2% Oxygen Shielded Gas Metal Arc Welding (Spray Transfer Mode) of Carbon Steel (M-1/P-1, Group 1 or 2), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, ER70S-3, in the As-Welded or PWHT Condition, Primarily Pipe Applications (revision and redesignation of ANSI/AWS B2.1-1-235-2019) Final Action Date: 2/17/2022

**CTA (Consumer Technology Association)**

1919 S. Eads Street, Arlington, VA 22202 | cakkers@cta.tech, www.cta.tech

*\* New Standard*

ANSI/CTA 2105-2022, Reporting/Validation Framework for Cardiovascular Technology Solutions (new standard) Final Action Date: 2/18/2022

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

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

*New Standard*

INCITS 503-2022, Information technology - SCSI Stream Commands - 5 (SSC-5) (new standard) Final Action Date: 2/15/2022

**UL (Underwriters Laboratories)**

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

*Reaffirmation*

ANSI/UL 62841-2-14-2016 (R2022), UL Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Part 2-14: Particular Requirements for Hand-Held Planers (reaffirmation of ANSI/UL 62841-2-14-2016) Final Action Date: 2/17/2022

*Revision*

ANSI/UL 790-2022, Standard for Standard Test Methods for Fire Tests of Roof Coverings (October 1, 2021) (revision of ANSI/UL 790-2018) Final Action Date: 2/18/2022

*Revision*

ANSI/UL 962-2022, Standard for Safety for Household and Commercial Furnishings (revision of ANSI/UL 962-2020) Final Action Date: 2/15/2022

*Revision*

ANSI/UL 1069-2022, Standard for Safety for Hospital Signaling and Nurse Call Equipment (revision of ANSI/UL 1069-2020) Final Action Date: 2/17/2022

# Call for Members (ANS Consensus Bodies)

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

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## ANSI Accredited Standards Developer

### CSA - CSA America Standards Inc.

CSA Group, an ANSI-accredited SDO, is seeking additional experts to serve on the bi-national Fuel Cell Technical Committee. The Fuel Cell Technical Committee develops and maintains minimum safety standards and essential requirements for the design construction and maintenance of:

- a) stationary, portable, and micro fuel cells;
- b) hydrogen generation technologies using all fuels (e.g., electrolysis, coal, natural gas);
- c) related components and equipment for stationary, portable and micro fuel cells; and
- d) related components and equipment installed for hydrogen generation technologies using all fuels.

We are seeking interested stakeholders who will actively participate and contribute to the development and maintenance of these important standards through CSA's accredited Standards Development Process(es).

The Technical Committee is seeking members in the following categories:

**User interest** — those who predominantly represent consumer interests or end users of the subject product (s), material(s), or service(s), and who are not involved in any way in production or distribution of the subject product(s), material(s), or service(s).

**Regulatory authority** — those who are predominantly involved in regulating the use of the subject product (s), material(s), or service(s).

What is expected?

- Strong interest and knowledge of the subject matter
- Active participation and willingness to work on a Technical Committee electronically and in-person
- Ability to represent a stakeholder category outlined above
- Ability to work in a multi-stakeholder environment, following the principles of consensus

If you are interested in participating as a new member of the CSA Fuel Cell Technical Committee, please submit a brief bio along with a statement outlining your interest and ability to contribute to the work to Mark Duda at [mark.duda@csagroup.org](mailto:mark.duda@csagroup.org). If you know of a colleague who may be interested in this project, feel free to distribute this document.

# Call for Members (ANS Consensus Bodies)

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## ANSI Accredited Standards Developer

### SCTE (Society of Cable Telecommunications Engineers)

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

SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities. Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at [www.scte.org](http://www.scte.org) or by e-mail from [standards@scte.org](mailto:standards@scte.org).

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](http://www.scte.org) or by e-mail from [standards@scte.org](mailto:standards@scte.org).

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

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | [celliott@aami.org](mailto:celliott@aami.org), [www.aami.org](http://www.aami.org)

BSR/AAMI 80369-2-202x, Small-bore connectors for liquids and gases in healthcare applications - Part 2: Connectors for respiratory applications (identical national adoption of ISO 80369-2 (Ed 1))

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

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | [celliott@aami.org](mailto:celliott@aami.org), [www.aami.org](http://www.aami.org)

BSR/AAMI 80369-6-202x, Small bore connectors for liquids and gases in healthcare applications - Part 6: Connectors for neuraxial applications (national adoption with modifications of ISO 80369-6 (Ed 2))

Solicit new consensus body members in the user, regulatory and general interest categories. Text to be sent to PSA.

### ASABE (American Society of Agricultural and Biological Engineers)

2950 Niles Road, Saint Joseph, MI 49085 | [vangilder@asabe.org](mailto:vangilder@asabe.org), <https://www.asabe.org/>

BSR/ASABE S354.8 MONYEAR-202x, Safety for Farmstead Equipment (revision and redesignation of ANSI/ASAE S354.7-SEP2018)

### ASABE (American Society of Agricultural and Biological Engineers)

2950 Niles Road, Saint Joseph, MI 49085 | [vangilder@asabe.org](mailto:vangilder@asabe.org), <https://www.asabe.org/>

BSR/ASABE S611 MONYEAR-202x, Collecting, Processing, and Visualizing Geographic Harvest Data (new standard)

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

520 N. Northwest Highway, Park Ridge, IL 60068 | [TFisher@ASSP.org](mailto:TFisher@ASSP.org), [www.assp.org](http://www.assp.org)

BSR/ASSP A10.24-202X, Roofing Safety Requirements for Low-Sloped Roofs (revision and redesignation of ANSI/ASSE A10.24-2014)

# Call for Members (ANS Consensus Bodies)

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

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## **EOS/ESD (ESD Association, Inc.)**

218 W. Court Street, Rome, NY 13440 | [jkirk@esda.org](mailto:jkirk@esda.org), [www.esda.org](http://www.esda.org)

BSR/ESD SP5.3.4-202x, ESD Association Standard Practice for Electrostatic Discharge Sensitivity Testing - Charged Device Model (CDM) Testing - Component Level - Capacitively Coupled - Transmission Line Pulsing as an Alternative CDM Characterization Method (new standard)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 14651:2020 [202x], Information technology - International string ordering and comparison - Method for comparing character strings and description of the common template tailorable ordering (identical national adoption of ISO/IEC 14651:2020 and revision of INCITS/ISO/IEC 14651:2016 [2017])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9070:1991 [S2014], Information technology - SGML support facilities - Registration procedures for public text owner identifiers (withdrawal of INCITS/ISO/IEC 9070:1991 [S2014])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 10180:1995 [S2014], Information Technology - Processing Languages - Standard Page Description Language (SPDL) (withdrawal of INCITS/ISO/IEC 10180:1995 [S2014])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 13240:2001 [R2019], Information technology - Document description and processing languages - Interchange Standard for Multimedia Interactive Documents (ISMID) (withdrawal of INCITS/ISO/IEC 13240:2001 [R2019])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 10180:1995/COR 1:2001 [S2020], Information Technology - Processing Languages - Standard Page Description Language (SPDL) - Technical Corrigendum 1 (withdrawal of INCITS/ISO/IEC 10180:1995/COR 1:2001 [S2020])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 13240:2001/COR 1:2003 [R2019], Information technology - Document description and processing languages - Interchange Standard for Multimedia Interactive Documents (ISMID) - Technical Corrigendum 1 (withdrawal of INCITS/ISO/IEC 13240:2001/COR1:2003 [R2019])

# Call for Members (ANS Consensus Bodies)

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

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## **NEMA (ASC C8) (National Electrical Manufacturers Association)**

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

BSR NEMA WC 75-202x, Standard for Controlled Impedance in Internal Electrical Cable (revision of ANSI/NEMA WC 75-2015)

## **NSF (NSF International)**

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

BSR/NSF 40-202x (i42r2), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

## **NSF (NSF International)**

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

BSR/NSF 49-202x (i167r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2020)

## **NSF (NSF International)**

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

BSR/NSF/CAN 50-202x (i171r3), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2020)

## **NSF (NSF International)**

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

BSR/NSF/CAN 50-202x (i185r1), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2020)

## **PGMA (Portable Generator Manufacturers Association)**

1300 Sumner Avenue, Cleveland, OH 44115-2851 | jharding@thomasamc.com, www.pgmaonline.com

BSR/PGMA G300-202x, Safety and Performance of Portable Generators (revision of ANSI/PGMA G300-2018)

# American National Standards (ANS) Announcements

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## Corrections

### UL - Underwriters Laboratories

#### **BSR/UL 1322-2017 (R202x) public review delayed**

The following Call for Comment notice that appeared in the February 18, 2022 Standards Action has been delayed: BSR/UL 1322-2017 (R202x), Standard for Fabricated Scaffold Planks and Stages (reaffirmation of ANSI/UL 1322-2017). Please direct inquiries to: Annabelle Hollen; (Annabelle.Hollen@ul.org)

## Corrections

### UL - Underwriters Laboratories

#### **BSR/UL 1812-202x designation should have been BSR/UL 499-202x**

The 2/18/2022, Call for Comment notice mistakenly referenced incorrect designation. The designation was listed as BSR/UL 1812-202x but should have been listed as follows:

BSR/UL 499-202x, Standard for Safety for Electric Heating Appliances  
(revision of ANSI/UL 499-2021)

Please direct inquiries to: Kelly Smoke; kelly.smoke@ul.org

## Accreditation Announcements (Standards Developers)

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### Approval of Reaccreditation – ASD

#### ASABE - American Society of Agricultural and Biological Engineers

Effective February 22, 2022

The reaccreditation of **ASABE - American Society of Agricultural and Biological Engineers** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ASABE-sponsored American National Standards, effective **February 22, 2022**. For additional information, please contact: Scott Cedarquist, American Society of Agricultural and Biological Engineers (ASABE) | 2950 Niles Road, Saint Joseph, MI 49085-9659 | (269) 429-0300, cedarq@asabe.org

### Approval of Reaccreditation – ASD

#### ASIS - ASIS International

Effective February 22, 2022

ANSI's Executive Standards Council has approved the reaccreditation of **ASIS International** under its recently revised operating procedures for documenting consensus on ASIS-sponsored American National Standards, effective **February 22, 2022**. For additional information, please contact: Aivelis Opicka, ASIS International (ASIS) | 1625 Prince Street, Alexandria, VA 22314-2818 | (703) 518-1439, standards@asisonline.org

### Public Review of Revised ASD Operating Procedures

#### IEEE - Institute of Electrical and Electronics Engineers

Comment Deadline: March 27, 2022

The **IEEE - Institute of Electrical and Electronics Engineers**, an ANSI Member and Accredited Standards Developer, has submitted revisions to its currently accredited IEEE-SA Standards Board Operations Manual and IEEE-SA Standards Board Bylaws for documenting consensus on IEEE-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: David Ringle, Institute of Electrical and Electronics Engineers (IEEE) | 445 Hoes Lane, Piscataway, NJ 08854-4141 | (732) 562-3806, d.ringle@ieee.org

[You may view/download a copy of the revisions during the public review period at this URL.](#)

Please submit any public comments on the revised procedures to IEEE by **March 28, 2022**, with a copy to the ExSC Recording Secretary in ANSI's New York Office (jthompo@ANSI.org).

# Meeting Notices (Standards Developers)

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## ANSI Accredited Standards Developer

### A3 - Association for Advancing Automation

#### Meeting Times March & April 2022

**ANSI-Accredited Standards Committee: R15.06, Industrial Robot Safety**

Meeting Format & Location: Hybrid; In-person in Memphis, TN; Remote via GoToMeeting

Meeting Sponsor/Host: FedEx; The University of Memphis

Purpose: SAC Comment resolution for TR 906; Prepare for update of R15.06 (U.S. national adoption of ISO 10218-1,2, which is being updated)

Day/Date/Time: Monday, March 7, 2022; 8:30 AM – 4:45 PM (Central Time) / 6:30 AM – 2:45 PM (PT)

**ANSI-Accredited Standards Committee: R15.08, Industrial Mobile Robot Safety**

Meeting (1) Meeting Format & Location: Hybrid; In-person in Memphis, TN; Remote via GoToMeeting

Meeting Sponsor/Host: FedEx; The University of Memphis

Purpose: R15.08 Committee Internal Comment resolution for R15.08 Part 2

Day/Date/Time: Wednesday, March 9, 2022 9:30 AM (Central Time) – Thursday, March 10, 2022, 4:45 PM (CT)

Meeting (2) Meeting Format & Location: Remote via GoToMeeting

Meeting Sponsor/Host: A3, the Association for Advancing Automation

Purpose: Complete Committee Internal Comment resolution for R15.08 Part 2, if not completed at in-person (hybrid) meeting March 9 & 10, 2022; arrive at consensus that the R15.08 Part 2 is ready for balloting to the R15 SAC

Day/Date/Time: The meeting will be held in several sessions as follows:

Virtual Session #1: Tuesday, March 15, 2022; 10:00 AM – 12:00 noon (Eastern Time) / 7:00 AM – 9:00 AM (PT)

Virtual Session #2: Thursday, March 17, 2022; 10:00 AM – 12:00 noon (ET) / 7:00 AM – 9:00 AM (PT)

Virtual Session #3: Tuesday, March 22, 2022; 10:00 AM – 12:00 noon (ET) / 7:00 AM – 9:00 AM (PT)

Virtual Session #4: Thursday, March 24, 2022; 10:00 AM – 12:00 noon (ET) / 7:00 AM – 9:00 AM (PT)

Virtual Session #5: Tuesday, April 5, 2022; 10:00 AM – 12:00 noon (ET) / 7:00 AM – 9:00 AM (PT)

Virtual Session #6: Thursday, April 7, 2022; 10:00 AM – 12:00 noon (ET) / 7:00 AM – 9:00 AM (PT)

Note: Some or all of these meeting sessions could be cancelled if not needed.

**ANSI-Accredited Standards Committee: R15 Standards Approval Committee (SAC) (consensus body)**

Meeting Format & Location: Hybrid; In-person in Memphis, TN; Remote via GoToMeeting

Meeting Sponsor/Host: FedEx; The University of Memphis

Purpose: Discuss Administrative Procedures for R15 committees; discuss current or upcoming documents for ballot

Day/Date/Time: Friday, March 11, 2022; 8:30 AM – 11:30 AM (CT)

For More Information: Contact Carole Franklin, cfranklin@automate.org.

## Meeting Notices (Standards Developers)

### ANSI Accredited Standards Developer

#### ASA - Acoustical Society of America

Meeting Times: May 23-27, 2022

**Acoustical Society of America (ASA Standards)** will be holding meetings in conjunction with the ASA 182nd Meeting **May 23-27, 2022**

May 23, 2022 ASC S2 Mechanical Vibration and Shock (5:00pm-6:15pm MST) Denver, CO

May 23, 2022 ASACOS Steering Meeting (7:00pm-9:30pm MST) Denver, CO

May 24, 2022 ASACOS Meeting (7:30am-9:00am MST) Denver, CO

May 24, 2022 Standards Plenary Meeting (9:15am-10:45am MST) Denver, CO

May 24, 2022 ASC S1, Acoustics Meeting (11:00am-12:15pm MST) Denver, CO

May 24, 2022 ASC S3, Bioacoustics (2:00pm-3:15pm MST) Denver, CO

May 24, 2022 ASC S3/SC1, Animal Bioacoustics (3:30pm-4:45pm MST) Denver, CO

May 24, 2022 ASC S12, Noise (5:00pm-6:15pm MST) Denver, CO

Meetings will take place at Sheraton Denver Downtown Hotel Denver, Colorado

For more information, please visit our website at <https://asastandards.org/> or email us at [standards@acousticalsociety.org](mailto:standards@acousticalsociety.org).

## American National Standards (ANS) Process

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Please visit ANSI's website ([www.ansi.org](http://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](http://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](http://www.ansi.org))

- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): [www.ansi.org/essentialrequirements](http://www.ansi.org/essentialrequirements)
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): [www.ansi.org/standardsaction](http://www.ansi.org/standardsaction)
- Accreditation information – for potential developers of American National Standards (ANS): [www.ansi.org/sdoaccreditation](http://www.ansi.org/sdoaccreditation)
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): [www.ansi.org/asd](http://www.ansi.org/asd)
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: [www.ansi.org/asd](http://www.ansi.org/asd)
- American National Standards Key Steps: [www.ansi.org/anskeysteps](http://www.ansi.org/anskeysteps)
- American National Standards Value: [www.ansi.org/ansvalue](http://www.ansi.org/ansvalue)
- ANS Web Forms for ANSI-Accredited Standards Developers - PINS, BSR8|108, BSR11, Technical Report: <https://www.ansi.org/portal/psawebforms/>
- Information about standards Incorporated by Reference (IBR): <https://ibr.ansi.org/>
- ANSI - Education and Training: [www.standardslearn.org](http://www.standardslearn.org)

## American National Standards Under Continuous Maintenance

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

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements.

The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option.

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- 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)
  - 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)
  - UL (Underwriters Laboratories)

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](http://www.ansi.org/asd), select “American National Standards Maintained Under Continuous Maintenance.” Questions? [psa@ansi.org](mailto: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](mailto:psa@ansi.org).

### AAMI

Association for the Advancement of  
Medical Instrumentation  
901 N. Glebe Road, Suite 300  
Arlington, VA 22203  
[www.aami.org](http://www.aami.org)  
Colleen Elliott  
[celliot@aami.org](mailto:celliot@aami.org)  
Hae Choe  
[standards@aami.org](mailto:standards@aami.org)

### ANS

American Nuclear Society  
555 North Kensington Avenue  
La Grange Park, IL 60526  
[www.ans.org](http://www.ans.org)  
Kathryn Murdoch  
[kmurdoch@ans.org](mailto:kmurdoch@ans.org)

### APA

APA - The Engineered Wood Association  
7011 South 19th Street  
Tacoma, WA 98466  
[www.apawood.org](http://www.apawood.org)  
Borjen Yeh  
[borjen.yeh@apawood.org](mailto:borjen.yeh@apawood.org)

### ASABE

American Society of Agricultural and  
Biological Engineers  
2950 Niles Road  
Saint Joseph, MI 49085  
<https://www.asabe.org/>  
Carla VanGilder  
[vangilder@asabe.org](mailto:vangilder@asabe.org)

### ASHRAE

American Society of Heating, Refrigerating  
and Air-Conditioning Engineers, Inc.  
180 Technology Parkway  
Peachtree Corners, GA 30092  
[www.ashrae.org](http://www.ashrae.org)  
Connor Barbaree  
[CBarbaree@ashrae.org](mailto:CBarbaree@ashrae.org)  
Ryan Shanley  
[rshanley@ashrae.org](mailto:rshanley@ashrae.org)

Tanisha Meyers-Lisle  
[tmlisle@ashrae.org](mailto:tmlisle@ashrae.org)

### ASIS

ASIS International  
1625 Prince Street  
Alexandria, VA 22314  
[www.asisonline.org](http://www.asisonline.org)  
Aivelis Opicka  
[standards@asisonline.org](mailto:standards@asisonline.org)

### ASME

American Society of Mechanical Engineers  
Two Park Avenue, M/S 6-2B  
New York, NY 10016  
[www.asme.org](http://www.asme.org)  
Terrell Henry  
[ansibox@asme.org](mailto:ansibox@asme.org)

### ASSP (Safety)

American Society of Safety Professionals  
520 N. Northwest Highway  
Park Ridge, IL 60068  
[www.assp.org](http://www.assp.org)  
Tim Fisher  
[TFisher@ASSP.org](mailto:TFisher@ASSP.org)

### ASTM

ASTM International  
100 Barr Harbor Drive  
West Conshohocken, PA 19428  
[www.astm.org](http://www.astm.org)  
Corice Leonard  
[accreditation@astm.org](mailto:accreditation@astm.org)

### AWS

American Welding Society  
8669 NW 36th Street, Suite 130  
Miami, FL 33166  
[www.aws.org](http://www.aws.org)  
Jennifer Rosario  
[jrosario@aws.org](mailto:jrosario@aws.org)

### AWWA

American Water Works Association  
6666 W. Quincy Avenue  
Denver, CO 80235  
[www.awwa.org](http://www.awwa.org)

Paul Olson  
[polson@awwa.org](mailto:polson@awwa.org)

### CRSI

Concrete Reinforcing Steel Institute  
933 N Plum Grove Road  
Schaumburg, IL 60173  
[www.crsi.org](http://www.crsi.org)  
Amy Trygestad  
[atrygestad@crsi.org](mailto:atrygestad@crsi.org)

### CTA

Consumer Technology Association  
1919 S. Eads Street  
Arlington, VA 22202  
[www.cta.tech](http://www.cta.tech)  
Catrina Akers  
[cakers@cta.tech](mailto:cakers@cta.tech)

### DirectTrust

DirectTrust.org, Inc.  
1629 K Street NW, Suite 300  
Washington, DC 20006  
[www.DirectTrust.org](http://www.DirectTrust.org)  
Stacy Clements  
[standards@directtrust.org](mailto:standards@directtrust.org)

### EOS/ESD

ESD Association, Inc.  
218 W. Court Street  
Rome, NY 13440  
[www.esda.org](http://www.esda.org)  
Jennifer Kirk  
[jkirk@esda.org](mailto:jkirk@esda.org)

### IAPMO (ASSE Chapter)

ASSE International Chapter of IAPMO  
18927 Hickory Creek Drive, Suite 220  
Mokena, IL 60448  
[www.asse-plumbing.org](http://www.asse-plumbing.org)  
Terry Burger  
[terry.burger@asse-plumbing.org](mailto:terry.burger@asse-plumbing.org);  
[standards@iapmostandards.org](mailto:standards@iapmostandards.org)

## ANSI-Accredited Standards Developers Contact Information

**ITI (INCITS)**

InterNational Committee for Information  
Technology Standards  
700 K Street NW, Suite 600  
Washington, DC 20001  
www.incits.org  
Barbara Bennett  
comments@standards.incits.org  
Deborah Spittle  
comments@standards.incits.org  
Lynn Barra  
comments@standards.incits.org

**NEMA (ASC C8)**

National Electrical Manufacturers  
Association  
1300 North 17th Street, Suite 900  
Arlington, VA 22209  
www.nema.org  
Khaled Masri  
Khaled.Masri@nema.org

**NFPA**

National Fire Protection Association  
One Batterymarch Park  
Quincy, MA 02269  
www.nfpa.org  
Patrick Foley  
PFoley@nfpa.org

**NSF**

NSF International  
789 N. Dixboro Road  
Ann Arbor, MI 48105  
www.nsf.org  
Allan Rose  
arose@nsf.org  
Jason Snider  
jsnider@nsf.org

**PGMA**

Portable Generator Manufacturers  
Association  
1300 Sumner Avenue  
Cleveland, OH 44115  
www.pgmaonline.com  
Joseph Harding  
jharding@thomasamc.com

**RVIA**

Recreational Vehicle Industry Association  
3333 Middlebury Street  
Elkhart, IN 46516  
www.rvia.org

Tyler Reamer  
treamer@rvia.org

**SCTE**

Society of Cable Telecommunications  
Engineers  
140 Philips Rd  
Exton, PA 19341  
www.scte.org  
Kim Cooney  
kcooney@scte.org

**UL**

Underwriters Laboratories  
12 Laboratory Drive  
Research Triangle Park, NC 27709  
https://ul.org/  
Doreen Stocker  
Doreen.Stocker@ul.org  
Griff Edwards  
griff.edwards@ul.org  
Nicolette Weeks  
Nicolette.A.Weeks@ul.org  
Vickie Hinton  
Vickie.T.Hinton@ul.org  
Wathma Jayathilake  
Wathma.Jayathilake@ul.org

**UL**

Underwriters Laboratories  
171 Nepean Street, Suite 400  
Ottawa, ON K2P 0  
https://ul.org/  
Sabrina Khrebtov  
sabrina.khrebtov@ul.org

**UL**

Underwriters Laboratories  
333 Pfingsten Road  
Northbrook, IL 60062  
https://ul.org/  
Elizabeth Northcott  
Elizabeth.Northcott@ul.org  
Jeff Prusko  
jeffrey.prusko@ul.org  
Megan Monsen  
megan.monsen@ul.org

**UL**

Underwriters Laboratories  
47173 Benicia Street  
Fremont, CA 94538  
https://ul.org/

Paul Lloret  
Paul.E.Lloret@ul.org

# ISO & IEC Draft International Standards



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

## COMMENTS

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

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

## ORDERING INSTRUCTIONS

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

## ISO Standards

### Acoustics (TC 43)

ISO/DIS 532-3, Acoustics - Methods for calculating loudness - Part 3: Moore-Glasberg-Schlittenlacher method - 12/19/2021, \$93.00

### Agricultural food products (TC 34)

ISO/FDIS 23418, Microbiology of the food chain - Whole genome sequencing for typing and genomic characterization of foodborne bacteria - General requirements and guidance - 7/20/2020, \$112.00

ISO/DIS 24363, Determination of fatty acid methyl esters (cis and trans) and squalene in olive oil and other vegetable oils by gas chromatography - 5/9/2022, \$82.00

### Applications of statistical methods (TC 69)

ISO/DIS 5725-1, Accuracy (trueness and precision) of measurement methods and results - Part 1: General principles and definitions - 5/8/2022, \$77.00

### Bamboo and rattan (TC 296)

ISO/DIS 5946, Bamboo-based activated carbon - General specifications - 5/8/2022, \$58.00

### Banking and related financial services (TC 68)

ISO/DIS 5158, Mobile financial services - Customer identification guidelines - 12/23/2021, \$82.00

### Dentistry (TC 106)

ISO/DIS 3990, Dentistry - Evaluation of antibacterial activity of dental restorative materials, luting cements, fissure sealants and orthodontic bonding or luting materials - 5/8/2022, \$77.00

ISO/FDIS 22683, Dentistry - Rotational adaptability test between implant body and implant abutment in dental implant systems - 5/1/2021, \$40.00

### Fine ceramics (TC 206)

ISO/DIS 24687, Fine ceramics (advanced ceramics, advanced technical ceramics) - Measurement of Seebeck coefficient and electrical conductivity of bulk-type thermoelectric materials at room and high temperatures - 5/8/2022, \$71.00

### Fluid power systems (TC 131)

ISO/DIS 21287, Pneumatic fluid power - Cylinders - Compact cylinders, 1000 kPa (10 bar) series, bores from 20 mm to 100 mm - 12/19/2021, \$46.00

ISO/FDIS 15086-3, Hydraulic fluid power - Determination of the fluid-borne noise characteristics of components and systems - Part 3: Measurement of hydraulic impedance - 10/8/2020, \$88.00

### Furniture (TC 136)

ISO/DIS 19682, Furniture - Tables - Test methods for the determination of stability, strength and durability - 5/7/2022, \$119.00

### Geographic information/Geomatics (TC 211)

ISO/DIS 19157-1, Geographic information - Data quality - Part 1: General requirements - 12/17/2021, \$165.00

### Industrial trucks (TC 110)

ISO/DIS 22915-10, Industrial trucks - Verification of stability - Part 10: Additional stability test for trucks operating in the special condition of stacking with load laterally displaced by powered devices - 5/8/2022, \$40.00

ISO/DIS 22915-20, Industrial trucks - Verification of stability - Part 20: Additional stability test for trucks operating in the special condition of offset load, offset by utilization - 5/8/2022, \$40.00

**Information and documentation (TC 46)**

ISO/DIS 16245, Information and documentation - Boxes, file covers and other enclosures, made from cellulosic materials, for storage of paper and parchment documents - 5/8/2022, \$53.00

**Mechanical contraceptives (TC 157)**

ISO/DIS 7439, Copper-bearing contraceptive intrauterine devices - Requirements and tests - 5/8/2022, \$67.00

**Metallic and other inorganic coatings (TC 107)**

ISO/DIS 4289, Recommendation and specification of HVOF cermet coatings for metallurgical roll components - 12/19/2021, \$53.00

ISO/DIS 7582, Metallic coatings for electromagnetic interference shielding - Designation and characterization method - 12/19/2021, \$77.00

**Mining (TC 82)**

ISO/DIS 24419-1, Mine closure and reclamation - Managing mining legacies - Part 1: Requirements and recommendations - 5/9/2022, \$82.00

**Nuclear energy (TC 85)**

ISO/FDIS 23018, Group-averaged neutron and gamma-ray cross sections for radiation protection and shielding calculations for nuclear reactors - 4/18/2021, \$53.00

**Optics and optical instruments (TC 172)**

ISO/DIS 17411, Optics and photonics - Optical materials and components - Test method for homogeneity of optical glasses by laser interferometry - 12/19/2021, \$88.00

**Other**

ISO/DIS 2418, Leather - Chemical, physical, mechanical and fastness tests - Position and preparation of specimens for testing - 12/24/2021, \$53.00

**Paints and varnishes (TC 35)**

ISO/DIS 2811-1, Paints and varnishes - Determination of density - Part 1: Pycnometer method - 5/9/2022, \$53.00

ISO/DIS 8130-16, Coating powders - Part 16: Determination of density by liquid displacement in a measuring cylinder - 5/9/2022, \$33.00

**Personal safety - Protective clothing and equipment (TC 94)**

ISO/DIS 16976-5, Respiratory protective devices - Human factors - Part 5: Thermal effects - 5/5/2022, \$67.00

ISO/DIS 16976-7, Respiratory protective devices - Human factors - Part 7: Hearing and speech - 5/5/2022, \$67.00

**Plain bearings (TC 123)**

ISO/FDIS 4821, Plain bearings - Dynamic adhesion test method for DLC coated parts under lubricated condition - 3/12/2021, \$62.00

**Plastics (TC 61)**

ISO 22841:2021/DAMd 1, - Amendment 1: Composites and reinforcements fibres - Carbon fibre reinforced plastics(CFRPs) and metal assemblies - Determination of the tensile lap-shear strength - Amendment 1: Precision data - 5/9/2022, \$33.00

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

ISO/FDIS 13479, Polyolefin pipes for the conveyance of fluids - Determination of resistance to crack propagation - Test method for slow crack growth on notched pipes - 6/15/2020, \$77.00

**Pulleys and belts (including veebelts) (TC 41)**

ISO/FDIS 7622-2, Steel cord conveyor belts - Longitudinal traction test - Part 2: Measurement of tensile strength - , \$40.00

**Railway applications (TC 269)**

ISO/DIS 22163, Railway applications - Railway quality management system - ISO 9001:2015 and specific requirements for application in the railway sector - 12/17/2021, \$146.00

**Road vehicles (TC 22)**

ISO/FDIS 5685, Road vehicles - Testing the abrasion resistance of automotive glazing with the windscreen wiper test - 1/24/2021, \$93.00

**Rubber and rubber products (TC 45)**

ISO/DIS 188, Rubber, vulcanized or thermoplastic - Accelerated ageing and heat resistance tests - 12/17/2021, \$82.00

ISO/DIS 5774, Plastics hoses - Textile-reinforced types for compressed-air applications - Specification - 12/18/2021, \$62.00

ISO/DIS 6804, Rubber and plastics inlet hoses and hose assemblies for washing-machines and dishwashers - Specification - 12/18/2021, \$62.00

ISO/FDIS 3302-2, Rubber - Tolerances for products - Part 2: Geometrical tolerances -, \$53.00

ISO/DIS 6502-3, Rubber - Measurement of vulcanization characteristics using curemeters - Part 3: Rotorless curemeter - 12/17/2021, \$77.00

ISO/DIS 8066-4, Rubber and plastics hoses and hose assemblies for automotive air conditioning - Specification - Part 4: Low vibration transmission type for Refrigerant 1234yf - 12/18/2021, \$98.00

**Safety of toys (TC 181)**

ISO 8124-3:2020/DAMd 1, - Amendment 1: Safety of toys - Part 3: Migration of certain elements - Amendment 1: Title missing - 5/9/2022, \$40.00

ISO/DIS 8124-2, Safety of toys - Part 2: Flammability - 5/9/2022, \$98.00

**Security (TC 292)**

ISO/DIS 22387, Security and resilience - Authenticity, integrity and trust for products and documents - Validation procedures for the application of artefact metrics - 12/24/2021, \$93.00

**Small craft (TC 188)**

ISO/FDIS 13590, Small craft - Personal watercraft - Construction and system installation requirements - 5/30/2020, \$98.00

**Soil quality (TC 190)**

ISO/DIS 22171, Soil quality - Determination of potential cation exchange capacity (CEC) and exchangeable cations buffered at pH 7, using a molar ammonium acetate solution - 12/19/2021, \$46.00

**Solar energy (TC 180)**

ISO/DIS 9847, Solar energy - Calibration of pyranometers by comparison to a reference pyranometer - 12/23/2021, \$102.00

**Sports and recreational equipment (TC 83)**

ISO/DIS 20957-2, Stationary training equipment - Part 2: Strength training equipment, additional specific safety requirements and test methods - 5/7/2022, \$77.00

ISO/DIS 20957-7, Stationary training equipment - Part 7: Rowing equipment, additional specific safety requirements and test methods - 5/7/2022, \$58.00

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

ISO/DIS 639-4, Code for the representation of individual languages and language groups - Part 4: General principles, rules and guidelines - 5/5/2022, \$107.00

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

ISO/DIS 16399, Meters for irrigation water - 5/6/2022, \$125.00

ISO/DIS 21622-3, Irrigation techniques - Remote monitoring and control for irrigation - Part 3: Interoperability - 5/9/2022, \$269.00

**Transfusion, infusion and injection equipment for medical use (TC 76)**

ISO/DIS 8536-2, Infusion equipment for medical use - Part 2: Closures for infusion bottles - 12/23/2021, \$58.00

**Transport information and control systems (TC 204)**

ISO/DIS 21177, Intelligent transport systems - ITS station security services for secure session establishment and authentication between trusted devices - 5/5/2022, \$155.00

ISO/DIS 14823-1, Intelligent transport systems - Graphic data dictionary - Part 1: Specification - 12/17/2021, \$146.00

ISO/DIS 23374-1, Intelligent transport systems - Automated valet parking systems (AVPS) - Part 1: System framework, requirements for automated driving, and communication interface - 12/24/2021, \$175.00

ISO/FDIS 23795-1, Intelligent transport systems - Extracting trip data via nomadic device for estimating CO2 emissions - Part 1: Fuel consumption determination for fleet management - 1/9/2021, \$98.00

**Tyres, rims and valves (TC 31)**

ISO/DIS 4250-1, Earth-mover tyres and rims - Part 1: Tyre designation and dimensions - 5/8/2022, \$88.00

ISO/DIS 4250-2, Earth-mover tyres and rims - Part 2: Loads and inflation pressures - 5/8/2022, \$93.00

**Water quality (TC 147)**

ISO/DIS 13167, Water quality - Plutonium, americium, curium and neptunium - Test method using alpha spectrometry - 12/18/2021, \$93.00

**Welding and allied processes (TC 44)**

ISO/FDIS 18278-1, Resistance welding - Weldability - Part 1: General requirements for the evaluation of weldability for resistance spot, seam and projection welding of metallic materials - 3/4/2021, \$67.00

**ISO/IEC JTC 1, Information Technology**

ISO/IEC 18013-2:2020/DAMd 1, - Amendment 1: Personal identification - ISO-compliant driving licence - Part 2: Machine-readable technologies - Amendment 1: DG11 length for compact encoding - 5/12/2022, \$53.00

ISO/IEC 18013-3:2017/DAMd 2, - Amendment 2: Information technology - Personal identification - ISO-compliant driving licence - Part 3: Access control, authentication and integrity validation - Amendment 2: Certificate hash for compact encoding - 5/12/2022, \$46.00

ISO/IEC DIS 9660, Information processing - Volume and file structure of CD-ROM for information interchange - 5/5/2022, \$125.00

ISO/IEC/IEEE FDIS 32675, Information technology - DevOps - Building reliable and secure systems including application build, package and deployment -, \$155.00

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

94/657/CD, IEC 61810-7-15 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-15: Robustness of Terminals, 04/15/2022

94/656/CD, IEC 61810-7-17 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-17: Shock, Acceleration and Vibration, 04/15/2022

94/655/CD, IEC 61810-7-39 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-39: Insertion and withdrawal force (mating relay and socket), 04/15/2022

94/658/CD, IEC 61810-7-7 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-7: Functional Tests, 04/15/2022

**Audio, video and multimedia systems and equipment (TC 100)**

100/3716(F)/CDV, IEC 62680-1-2 ED6: Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification, 04/22/2022

100/3715(F)/CDV, IEC 62680-1-3 ED5: Universal serial bus interfaces for data and power - Part 1-3: Common components - USB Type-C? Cable and Connector Specification, 04/22/2022

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

46A/1557/NP, PNW 46A-1557 ED1: Sectional specification for semi-rigid cables with silicon dioxide dielectric, 05/13/2022

**Electric traction equipment (TC 9)**

9/2810/NP, PNW 9-2810 ED1: Railway applications - Cybersecurity, 05/13/2022

**Electrical accessories (TC 23)**

23B/1375/CD, IEC 61995-1 ED2: Devices for the connection of luminaires for household and similar purposes - Part 1: General requirements, 05/13/2022

23B/1376/CD, IEC 61995-2 ED2: Devices for the connection of luminaires for household and similar purposes - Part 2: Standard sheets for DCL, 05/13/2022

**Fibre optics (TC 86)**

86A/2166(F)/CDV, IEC 60793-1-1 ED5: Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance, 04/15/2022

86A/2189/FDIS, IEC 60794-3-40 ED2: Optical fibre cables - Part 3-40: Outdoor cables - Family specification for cables for storm and sanitary sewers, 04/01/2022

86B/4561(F)/CDV, IEC 61754-37 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 37: Type MDC connector family, 04/15/2022

**Industrial-process measurement and control (TC 65)**

65E/871(F)/FDIS, IEC 62714-2 ED2: Engineering data exchange format for use in industrial automation systems engineering - Automation Markup Language - Part 2: Role class libraries, 03/11/2022

**Lamps and related equipment (TC 34)**

34A/2272/FDIS, IEC 60810/AMD2 ED5: Amendment 2 - Lamps, light sources and LED packages for road vehicles - Performance requirements, 04/01/2022

**Magnetic alloys and steels (TC 68)**

68/705/CD, IEC 60404-8-3 ED4: Magnetic materials - Part 8-3: Specifications for individual materials - Cold-rolled electrical non-alloyed and alloyed steel sheet and strip delivered in the semi-processed state, 05/13/2022

**Measuring equipment for electromagnetic quantities (TC 85)**

85/821(F)/FDIS, IEC 60477-1 ED1: Laboratory resistors - Part 1: Laboratory DC resistors, 03/04/2022

85/822(F)/FDIS, IEC 60477-2 ED2: Laboratory resistors - Part 2: Laboratory AC resistors, 03/04/2022

85/823/CD, IEC TR 62586-3 ED1: POWER QUALITY MEASUREMENT IN POWER SUPPLY SYSTEMS Part 3: Maintenance tests, calibration, 05/13/2022

**Safety of Electronic Equipment within the Field of Audio/Video, Information Technology and Communication Technology (TC 108)**

108/767(F)/CDV, IEC 62368-1 ED4: Audio/video, information and communication technology equipment - Part 1: Safety requirements, 05/06/2022

**Safety of household and similar electrical appliances (TC 61)**

61/6509/CD, IEC 60335-2-120 ED1: Household and similar electrical appliances - Safety - Part 2-120: Particular requirements for the safety of appliances for the generation of directly inhalable aerosols, 04/15/2022

61/6508/NP, PNW 61-6508 ED1: Household and similar electrical appliances - Safety - Part 2-XXX: Particular requirements for robots, 04/15/2022

**Semiconductor devices (TC 47)**

47E/783/FDIS, IEC 60747-5-4 ED2: Semiconductor devices - Part 5-4: Optoelectronic devices - Semiconductor lasers, 04/01/2022

47/2752(F)/FDIS, IEC 60749-10 ED2: Semiconductor devices - Mechanical and climatic test methods - Part 10: Mechanical shock - device and subassembly, 03/25/2022

47/2755/FDIS, IEC 63275-1 ED1: Semiconductor devices - Reliability test method for silicon carbide discrete metal-oxide semiconductor field effect transistors - Part 1: Test method for bias temperature instability, 04/01/2022

47/2756/FDIS, IEC 63275-2 ED1: Semiconductor devices - Reliability test method for silicon carbide discrete metal-oxide semiconductor field effect transistors - Part 2: Test method for bipolar degradation due to body diode operation, 04/01/2022

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

96/535/FDIS, IEC 61558-2-15 ED3: Safety of transformers, reactors, power supply units and combinations thereof - Part 2-15: Particular requirements and tests for isolating transformers for medical IT systems for the supply of medical locations, 04/01/2022

**Solar photovoltaic energy systems (TC 82)**

82/2017/CD, IEC TS 62915 ED2: Photovoltaic (PV) modules - Type approval, design and safety qualification - Retesting, 04/15/2022

**Surface mounting technology (TC 91)**

91/1778/CD, IEC TR 60068-3-82 ED1: Environmental Testing - Part 3  
-82: Supporting documentation and guidance - Confirmation of  
the performance of whisker test method, 05/13/2022

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

121A/477/CD, IEC TR 63434 ED1: Low voltage switchgear and  
controlgear - Partial discharge voltages and PD-level in low  
voltage switchgear and controlgear, 05/13/2022

**SYCSM**

SyCSM/62/NP, PNW TS SYCSM-62 ED1: Systems Reference  
Deliverable (SRD) - Navigation Tools for Smart Manufacturing,  
05/13/2022

**Wearable electronic devices and technologies (TC 124)**

124/175/FDIS, IEC 63203-201-1 ED1: Wearable electronic devices  
and technologies - Part 201-1: Electronic textile - Measurement  
methods for basic properties of conductive yarns, 04/01/2022

124/176/FDIS, IEC 63203-201-2 ED1: Wearable electronic devices  
and technologies - Part 201-2: Electronic textile - Measurement  
methods for basic properties of conductive fabrics and insulation  
materials, 04/01/2022



# 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](http://www.ansi.org). All paper copies are available from Standards resellers (<http://webstore.ansi.org/faq.aspx#resellers>).

## ISO Standards

### Control and safety devices for non industrial gas-fired appliances and systems (TC 161)

[ISO 23553-1:2022](#), Safety and control devices for oil burners and oil-burning appliances - Particular requirements - Part 1: Automatic and semi-automatic valves, \$200.00

### Equipment for fire protection and fire fighting (TC 21)

[ISO 14520-17:2022](#), Gaseous fire-extinguishing systems - Physical properties and system design - Part 17: Halocarbon Blend 55, \$73.00

### Essential oils (TC 54)

[ISO 3518:2022](#), Essential oil of sandalwood (*Santalum album* L.), \$73.00

[ISO 22769:2022](#), Essential oil of Australian sandalwood [*Santalum spicatum* (R.Br.) A.DC.], \$73.00

### Foundry machinery (TC 306)

[ISO 23472-5:2022](#), Foundry machinery - Vocabulary - Part 5: Cupola furnaces and pouring devices and ladles, \$48.00

### Healthcare organization management (TC 304)

[ISO 5258:2022](#), Healthcare organization management - Pandemic response (respiratory) - Drive-through screening station, \$111.00

### Human resource management (TC 260)

[ISO 23326:2022](#), Human resource management - Employee engagement - Guidelines, \$73.00

### Machine tools (TC 39)

[ISO 230-4:2022](#), Test code for machine tools - Part 4: Circular tests for numerically controlled machine tools, \$149.00

### Optics and optical instruments (TC 172)

[ISO 21395-2:2022](#), Optics and photonics - Test method for refractive index of optical glasses - Part 2: V-block refractometer method, \$149.00

### Photography (TC 42)

[ISO 18909:2022](#), Photography - Processed photographic colour films and paper prints - Methods for measuring image stability, \$200.00

### Plastics (TC 61)

[ISO 3915:2022](#), Plastics - Measurement of resistivity of conductive plastics, \$48.00

### Railway applications (TC 269)

[ISO 12856-1:2022](#), Railway applications - Polymeric composite sleepers, bearers and transoms - Part 1: Material characteristics, \$73.00

[ISO 12856-3:2022](#), Railway applications - Polymeric composite sleepers, bearers and transoms - Part 3: General requirements, \$200.00

[ISO 22074-8:2022](#), Railway infrastructure - Rail fastening systems - Part 8: Test method for vertical stiffness, \$73.00

### Risk management (TC 262)

[ISO 31073:2022](#), Risk management - Vocabulary, \$48.00

### Road vehicles (TC 22)

[ISO 26021-1:2022](#), Road vehicles - End-of-life activation of in-vehicle pyrotechnic devices - Part 1: Application and communication interface, \$250.00

### Robots and robotic devices (TC 299)

[ISO 11593:2022](#), Robots for industrial environments - Automatic end effector exchange systems - Vocabulary, \$48.00

### Ships and marine technology (TC 8)

[ISO 1704:2022](#), Ships and marine technology - Stud-link anchor chains, \$175.00

[ISO 22555:2022](#), Ships and marine technology - Propeller pitch indicators, \$48.00

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

[ISO 11806-1:2022](#), Agricultural and forestry machinery - Safety requirements and testing for portable, hand-held, powered brush-cutters and grass-trimmers - Part 1: Machines fitted with an integral combustion engine, \$175.00

**Traditional Chinese medicine (TC 249)**

[ISO 18665:2022](#), Traditional Chinese medicine - Herbal decoction apparatus, \$73.00

[ISO 23956:2022](#), Traditional Chinese medicine - Determination of benzopyrene in processed natural products, \$73.00

**Waste collection and transportation management (TC 297)**

[ISO 24162:2022](#), Test method for energy consumption of refuse collection vehicles, \$73.00

**ISO Technical Reports****Road vehicles (TC 22)**

[ISO/TR 3152:2022](#), Road vehicles - Comparison between ISO 26262-12 and other parts of the ISO 26262 series to support motorcycle adaptation, \$149.00

**ISO Technical Specifications****Transport information and control systems (TC 204)**

[ISO/TS 19468:2022](#), Intelligent transport systems - Data interfaces between centres for transport information and control systems - Platform-independent model specifications for data exchange protocols for transport information and control systems, \$250.00

**ISO/IEC JTC 1, Information Technology**

[ISO/IEC 23751:2022](#), Information technology - Cloud computing and distributed platforms - Data sharing agreement (DSA) framework, \$149.00

[ISO/IEC 23009-8:2022](#), Information technology - Dynamic adaptive streaming over HTTP (DASH) - Part 8: Session-based DASH operations, \$149.00

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

[IEC 61169-1-6 Ed. 1.0 b:2022](#), Radio-frequency connectors - Part 1-6: Electrical test methods - RF power, \$89.00

[IEC 61169-21 Ed. 1.0 b:2022](#), Radio-frequency connectors - Part 21: Sectional specification for RF connectors with inner diameter of outer conductor 9,5 mm (0,374 in) with screw coupling - Characteristic impedance 50 ohms (Type SC), \$221.00

[IEC 61169-67 Ed. 1.0 b:2022](#), Radio frequency connectors - Part 67: Sectional specification for series TRL threaded triaxial connectors, \$133.00

[IEC 61169-68 Ed. 1.0 b:2022](#), Radio-frequency connectors - Part 68: Sectional specification for series TRK bayonet coupling triaxial connectors, \$221.00

**Electromagnetic compatibility (TC 77)**

[IEC 61000-4-20 Ed. 3.0 b:2022](#), Electromagnetic compatibility (EMC) - Part 4-20: Testing and measurement techniques - Emission and immunity testing in transverse electromagnetic (TEM) waveguides, \$417.00

**Fibre optics (TC 86)**

[IEC 60794-3 Ed. 5.0 b:2022](#), Optical fibre cables - Part 3: Outdoor cables - Sectional specification, \$89.00

[IEC 61300-2-46 Ed. 2.0 en Cor.1:2022](#), Corrigendum 1 - Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-46: Tests - Damp heat, cyclic, \$0.00

[S+ IEC 60794-3 Ed. 5.0 en:2022 \(Redline version\)](#), Optical fibre cables - Part 3: Outdoor cables - Sectional specification, \$115.00

**Power system control and associated communications (TC 57)**

[IEC 61970-CGMES Ed. 1.0 b:2022](#), Energy management system application program interface (EMS-API) - Common Grid Model Exchange Specification (CGMES), \$2710.00

[IEC 61970-301 Amd.1 Ed. 7.0 b:2022](#), Amendment 1 - Energy management system application program interface (EMS-API) - Part 301: Common information model (CIM) base, \$25.00

[IEC 61970-301 Ed. 7.1 b:2022](#), Energy management system application program interface (EMS-API) - Part 301: Common information model (CIM) base, \$633.00

**Semiconductor devices (TC 47)**

[IEC 62228-7 Ed. 1.0 b:2022](#), Integrated circuits - EMC evaluation of transceivers - Part 7: CXPI transceivers, \$354.00

**Solar photovoltaic energy systems (TC 82)**

[IEC 62788-7-3 Ed. 1.0 b:2022](#), Measurement procedures for materials used in photovoltaic modules - Part 7-3: Accelerated stress tests - Methods of abrasion of PV module external surfaces, \$183.00

## **IEC Technical Reports**

### **Capacitors and resistors for electronic equipment (TC 40)**

[IEC/TR 63362-1 Ed. 1.0 en:2022](#), Application of fixed capacitors in electronic equipment - Part 1: Aluminium electrolytic capacitors, \$221.00

## **IEC Technical Specifications**

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

[IEC/TS 62876-3-1 Ed. 1.0 en:2022](#), Nanomanufacturing - Reliability assessment - Part 3-1: Graphene-based material - Stability: Temperature and humidity test, \$133.00

# International Organization for Standardization (ISO)

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## ISO Proposal for a New Field of ISO Technical Activity

### National Gas Fuelling Stations

**Comment Deadline: February 25, 2022**

AFNOR, the ISO member body for France, has submitted to ISO a proposal for a new field of ISO technical activity on Natural Gas Fuelling Stations, with the following scope statement:

*Standardization in the field of design, construction and operation of stations for fuelling compressed natural gas (CNG) and liquefied natural gas (LNG) to vehicles. It includes equipment, safety devices and maintenance.*

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team ([isot@ansi.org](mailto:isot@ansi.org)), with a submission of comments to Steve Cornish ([scornish@ansi.org](mailto:scornish@ansi.org)) by close of business on **Friday, February 25, 2022**.

# Registration of Organization Names in the United States

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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

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## 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](mailto:usatbtep@nist.gov) or [notifyus@nist.gov](mailto:notifyus@nist.gov).



**BSR/ASHRAE Addendum I  
to ANSI/ASHRAE Standard 15-2019**

**Second Public Review Draft**

**Proposed Addendum I to  
Standard 15-2019, Safety Standard  
for Refrigeration Systems**

**Second Public Review (February 2022)  
(Draft shows Proposed Independent Substantive  
Changes to Previous Public Review Draft)**

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

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BSR/ASHRAE Addendum 1 to ANSI/ASHRAE Standard 15-2019, *Safety Standard for Refrigeration Systems*  
Second Public Review Draft (Independent Substantiative Changes)

**(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 1 to ANSI/ASHRAE Standard 15-2019 modifies portions of the document to incorporate requirements for commercial refrigeration applications with the use of A2L, A2, and A3 refrigerants. The text developed is in response to CMP 0004-001 based on information and requirements in conjunction with proposed product safety standard UL/CSA 60335-2-89, as well as research performed in collaboration of AHRI, ASHRAE, the U.S. Department of Energy, California Energy Commission.*

*Many of the proposed requirements use of flammable refrigerants for commercial refrigeration applications, found mostly in new Section 7.7, are very similar to the existing requirements for A2L refrigerants for human comfort applications, found mostly in Section 7.6. Note the A2L requirements for human comfort were published in addendum d to Standard 15-2016. Notably, several of the Section 7.7 requirements refer back to Section 7.6.*

**Note:** The draft of addendum 1 that was issued for the First Publication Public Review is replaced in its entirety by this Second Independent Substantive Change Public Review Draft. Substantive changes to the First Publication Public Review draft and related changes to Standard 15-2019 are indicated by **blue-colored text** with **double-underlining** (for additions) and **red-colored text** with **strikethrough** (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard shown in **blue** or **red** text 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 1 to Standard 15-2019

***Modify Section 7 as follows. The remainder of Section 7 remains unchanged.***

## 7. RESTRICTIONS ON REFRIGERANT USE

[ ... ]

**7.7 Group A2L Refrigerants for Refrigeration Systems Other than Human Comfort.** *High-probability systems using Group A2L refrigerants for other than human comfort applications shall comply with Sections 7.7.1 through ~~7.7.5~~7.6.*

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

[ ... ]

2. Refrigeration systems shall contain a **releasable refrigerant charge** no more than  $9.2 \times LFL$  (lb), where  $LFL$  is in pounds per 1000 ft<sup>3</sup> ( $260 \times LFL$  [kg], where  $LFL$  is in kg/m<sup>3</sup>) of Group A2L refrigerant per independent circuit.

[ ... ]

**7.7.3 Listing and Installation Requirements.** *Refrigeration systems shall be listed to UL 60335-2-89<sup>18</sup> /CSA C22.2 No. 60335-2-89<sup>19</sup> and shall be installed in accordance with listing, the ~~manufacturer's instructions and any markings on the equipment restricting the installation.~~*

[ ... ]

**7.7.3.4** *When a refrigerant detector required by Section 7.7.3.3 senses a rise in refrigerant concentration above the value specified in Section ~~7.6.5(b)~~7.7-6(b), the actions of Section 7.6.2.4 shall be taken.*

[ ... ]

**7.7.5 Compressors and Pressure Vessels Located Indoors.** *For refrigeration compressors and pressure vessels*

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Second Public Review Draft (Independent Substantiative Changes)

located in an indoor space that is accessible only during service and maintenance, it shall be permissible to exceed maximum refrigerant charge calculated in ~~use larger refrigerant amounts than those given in in~~ accordance with Section 7.2, provided a mechanical ventilation system is used to prevent exceeding the RCL and all of the following provisions are met:

[ ... ]

~~**7.7.6 Refrigerant Detectors and Mitigation Activation.** Refrigerant detectors required by Section 7.7.3 shall meet the requirements of Section 7.6.5.~~



**BSR/ASHRAE Addendum m  
to ANSI/ASHRAE Standard 15-2019**

**Second Public Review Draft**

**Proposed Addendum m to  
Standard 15-2019, Safety Standard  
for Refrigeration Systems**

**Second Public Review (February 2022)  
(Draft shows Proposed Independent Substantive  
Changes to Previous Public Review Draft)**

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Second Public Review Draft (Independent Substantive Change)

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## FOREWORD

*This proposed addendum to ANSI/ASHRAE Standard 15-2019 modifies allowances for the use of mechanical ventilation to expand this mitigation strategy for human comfort applications using A2L refrigerants. Presently, Section 7.6.4 restricts the use of mechanical ventilation solely to systems that have compressors and pressure vessels located indoors. This allowance, and requirements if the allowance is used, in ANSI/ASHRAE Standard 15-2019 matches the allowance/requirements in the current third edition of UL 60335-2-40/CSA C22.2 No. 60335-2-40 product safety standard (Refer to Annex GG.4). Notably, this same domestic product safety standard allows the use of mechanical ventilation in other human comfort applications – those with compressors and pressure vessels located outdoors (Refer to Annex GG.8). Further, the international version of the product safety standard (IEC 60335-2-40, 6<sup>th</sup> edition) has the same requirements/allowances as the North American version.*

*This proposed addendum rectifies the difference by largely harmonizing ANSI/ASHRAE Standard 15 with the allowance for broader application of ventilation, and requirements if the allowance is used, in UL 60335-2-40/CSA C22.2 No. 60335-2-40, 3<sup>rd</sup> edition. This proposal would allow for mechanical ventilation in ANSI/ASHRAE Standard 15 when meeting stringent requirements for either continuous operation or operation initiated by a refrigerant detector, using an approach similar to the product safety standard. This proposed approach begins with a “simplified table method” for determining required ventilation rates, but also has a detailed calculation method.*

*The first publication public review draft received twenty comments. This independent substantive change second public review draft implements most of the submitted comments.*

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**Note:** This public review draft of addendum *m* makes proposed independent substantive changes to the previous public review draft. These substantive changes to the previous public review draft and related changes to Standard 15-2019 are indicated by **blue-colored text** with **double-underlining** (for additions) and **red-colored text** with **strikethrough** (for deletions), except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard shown in **blue** or **red** text 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.

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### Addendum m to Standard 15-2019

**Modify Section 7 as follows. The remainder of Section 7 remains unchanged.**

## 7. RESTRICTIONS ON REFRIGERANT USE

[ ... ]

**Note to Reviewers:** Addendum *g* to Standard 15-2019 also proposes changes to Section 7.3, “Volume Calculations.” To avoid potential conflicts, all changes to Section 7.3 have been removed from draft Addendum *m*. Red font with both underline and strikethrough is text added by the 1<sup>st</sup> PPR draft (underline), but removed by the 2<sup>nd</sup> PPR-ISC draft (strikethrough). All existing text in Section 7.3 of Standard 15-2019 is unchanged (blank font without strikethrough).

### 7.3 Volume Calculations....

#### 7.3.1 Nonconnecting Spaces....

[ ... ]

**7.3.2 Ventilated Spaces.** Where a *refrigerating system*, or a part thereof, is located within an air handler, in an air distribution *duct* system, or in an *occupied space* served by a mechanical ventilation system, the entire

air distribution systems *shall* be analyzed to determine the worst-case distribution of leaked *refrigerant*. The worst case or the smallest volume in which the leaked *refrigerant* disperses *shall* be used to determine the *refrigerant* quantity limit in the system, subject to the following criteria.

~~7.3.2\* **Spaces with Passive Dispersion.** For refrigeration systems not having a *refrigerant detector* in accordance with Section 7.6.5 nor having continuous air circulation, where leaked *refrigerant* from a refrigeration system can disperse into a space or *connected spaces* through an air distribution system or part thereof, the entire air distribution system *shall* be analyzed to determine the worst case distribution of leaked *refrigerant*. The *effective dispersal volume* used in calculating the *refrigerant* charge limit *shall* be the worst case or the smallest volume in which the leaked *refrigerant* disperses, subject to the following criteria.~~

7.3.2.1 **Closures.** Closures in the air distribution system, ~~such as dampers,~~ *shall* be ~~evaluated as part of the analysis as follows:~~ considered. If ~~where~~ one or more spaces of several arranged in parallel can be closed off from the source of the *refrigerant* leak, their ~~the~~ volumes of ~~such space(s)~~ *shall not* be used in the calculation.

[ ... ]

~~7.3.3\* **Spaces with Active Air Circulation.** For refrigeration systems having a *refrigerant detector* in accordance with Section 7.6.5 or having continuous air circulation, where leaked *refrigerant* can disperse into a space or *connected spaces* through an air distribution system, or part thereof, the *effective dispersal volume* used in calculating the *refrigerant* charge limit *shall* be the volume of all spaces served by the refrigeration system and volume of the *ductwork*.~~

~~7.3.4\* **Connected Spaces with Active Ventilation.** For refrigeration systems using Group A2L *refrigerant*, where two or more spaces are connected by a mechanical ventilation system meeting the requirements of Section 7.6.4 that can be used to disperse leaking *refrigerant*, the *effective dispersal volume* used in calculating the *refrigerant* charge limit *shall* be the cumulative volume of such *connected spaces*, including the volume of any transfer air *ductwork*.~~

[ ... ]

7.6.4\* **Mechanical Ventilation.** Where Section 7.3.4 is used for calculation of *effective dispersal volume*, mechanical ventilation *shall* comply with this section. Where a *ventilated enclosure* is provided to control a *refrigerant* leak, the ~~equipment refrigeration system~~ and *ventilated enclosure* *shall* be listed and installed in accordance with UL 60335-2-40<sup>18</sup> / CSA C22.2 No. 60335-2-40<sup>19</sup>, and *shall not* be required to comply with this section.

a. Mechanical ventilation *shall* be provided that will remove leaked *refrigerant* from the space where *refrigerant* leaking from the ~~equipment refrigeration system~~ is expected to accumulate. The space *shall* be provided with an exhaust or transfer fan. ~~+~~ Fans used to *exhaust air* from the space or transfer air to ~~another~~ a separate indoor space *shall* comply with the following equation:

[ ... ]

b.\* Mechanical ventilation *shall* be permitted to be continuous or activated by a *refrigerant detector*. Building fire and smoke systems ~~may~~ *shall be permitted to* override this function.

1. **Continuous Ventilation.** Where continuous ventilation is provided, ventilation function *shall* be continuously verified per Section 7.6.4(b)(3).
2. **Refrigerant Detector Activated Ventilation.** Where ventilation is activated by a *refrigerant detector*, the *refrigerant detector* *shall* be in accordance with Section 7.6.5. Upon *refrigerant detector* activation, the mechanical ventilation *shall* be ~~started~~ *activated* and *shall* continue to operate for at least five minutes after the *refrigerant detector* has sensed a drop in the *refrigerant* concentration below the setpoint value. ~~For mechanical ventilation systems used sole for refrigerant safety mitigation, ventilation~~ *Ventilation* function of *refrigerant detector* activated ventilation *shall* be verified in accordance with Section 7.6.4(b)(3) by a monthly self-test.

[ ... ]

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- c. While the ventilation system is operating, *makeup air shall* be provided, and the volume of *makeup air shall not exceed* the volume of air being exhausted or transferred out of the space. Openings for *makeup air shall* be positioned to facilitate mixing of *makeup air* with leaked *refrigerant*. Inlets for *exhaust air* and inlets used to mechanically transfer air to ~~another a separate indoor location-space~~ *shall* be located such that the bottom of the inlet is within 12 in. (30 cm) of the lowest elevation in the space where leaked *refrigerant* would be expected to accumulate.

[ ... ]

- i. The discharge air openings of the ventilation system *shall* be located so as to prevent recirculation of *exhaust air* back into the space.

[ ... ]

***Modify Informative Appendix A as follows. The remainder of Informative Appendix A remains unchanged.***

(This appendix 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.)

### **INFORMATIVE APPENDIX A—EXPLANATORY MATERIAL**

Sections of the standard with associated explanatory information in this appendix are marked with an asterisk “\*” after the section number, and the associated appendix information is located in a corresponding section number preceded by “A”.

[ ... ]

**A7.6.4 Equation.** The user should note that in the question, *LFL* is specified as pounds per cubic foot (kilogram per cubic meter for SI), while ANSI/ASHRAE Standard 34, *Designation and Safety Classification of Refrigerants*, specifies *LFL* in Table 4-1 and Table 4-2 as pounds per 1000 cubic feet [lb/1000 ft<sup>3</sup>] (grams per cubic meter [g/m<sup>3</sup>] for SI). Appropriate conversion is necessary. The user should refer to the most current addenda to ANSI/ASHRAE Standard 34 for the most current values of *LFL*.

[ ... ]



**BSR/ASHRAE Addendum s  
to ANSI/ASHRAE Standard 15-2019**

**First Public Review Draft**

**Proposed Addendum s to  
Standard 15-2019, Safety Standard  
for Refrigeration Systems**

**First Public Review (February 2022)  
(Draft shows Proposed Changes to Current Standard)**

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

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## FOREWORD

*Efforts to address impending required refrigerant changes have been ongoing for many years. ASHRAE SSPC 34 first created the A2L subcategory in 2010, and ASHRAE SSPC 15 created a working group in 2010 to begin work on how to address that group of refrigerants in ANSI/ASHRAE Standard 15. SSPC 15 published its first addenda in 2018 (addendum d and addendum h to ANSI/ASHRAE Standard 15-2016). UL and CSA published the first major revision to their safety standard (UL 60335-2-40/CSA 22.2 No. 60335-2-40 3<sup>rd</sup> edition) in 2019. Many research projects have been completed, including joint research by AHRI, ASHRAE, DOE, and California Air Resources Board, which began research project activity in 2015. One research project recently completed is AHRTI-9015, Assessment of Refrigerant Leakage Mitigation Effectiveness for Air-Conditioning and Refrigeration Equipment (the final report is publicly available at [www.ahrinet.org/App\\_Content/ahri/files/RESEARCH/AHRTI9015\\_Final.pdf](http://www.ahrinet.org/App_Content/ahri/files/RESEARCH/AHRTI9015_Final.pdf)).*

*SSPC 15 created a working group (WG02) in 2019 to study the differences in requirements of ANSI/ASHRAE Standard 15, the draft BSR/ASHRAE Standard 15.2P, and the product safety standard, and tasked the group with harmonizing the requirements, to the extent possible. The working group was opened broadly to interested stakeholders, and included participants including code consultants, fire service, government agencies, users of the standard, academia, equipment manufacturers, component manufacturers, refrigerant manufacturers, and industry associations. The results of the AHRTI-9015 research, completed by UL at their facility in Northbrook, IL, were shared with the WG02 during meetings in May 2021 and at the SSPC 15 meetings in June 2021. This proposed addendum to Standard 15-2019 makes a modification to refrigerant charge quantity limits, which aligns Standard 15 with the outcome of the research project. This modification will also make the requirements in Standard 15 more consistent with the requirements of the product safety standard.*

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

### Addendum s to Standard 15-2019

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

## 3. DEFINITIONS

### 3.1 Defined Terms

[ ... ]

**circulation:** mechanically inducing airflow within a space or spaces.

[ ... ]

**conditioned space:** an area, room, or space that is enclosed within the building thermal envelope that is directly or indirectly heated or cooled. Spaces are indirectly heated or cooled where they connect through openings with conditioned spaces, where they are separated from conditioned spaces by uninsulated walls, floors, or ceilings, or where they contain uninsulated air ducts, tubing, or other sources of heating or cooling.

[ ... ]

**ducted HVAC:** an air conditioner, heat pump, whole house dehumidifier, or whole house dehumidifying ventilator, in which conditioned air is distributed through any amount of air duct.

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First Public Review Draft

[ ... ]

**mitigation actions:** actions taken by equipment that are initiated by detection of leaked *refrigerant* by the *refrigerant detector*.

[ ... ]

**refrigerant detection system:** a system that utilizes one or more stationary devices to detect the presence of a *specified refrigerant* at a *specified* concentration and initiates one or more *mitigation actions* required by this standard.

[ ... ]

**releasable refrigerant charge ( $m_{rel}$ ):** a portion of the *refrigerant* in a refrigeration system that can be released into a space as a result of a single-point failure.

[ ... ]

**safety shut-off valve:** an automatically controlled *refrigerant* valve for the purpose of limiting the amount of *refrigerant* released into a space when a *refrigerant* leak is detected.

[ ... ]

**ventilation:** providing a space with *ventilation air*.

**\*ventilation air:** air from the outdoors or another indoor space delivered to a space via mechanical methods that is intended to dilute released *refrigerant*.

[ ... ]

***Modify Section 7 as follows. The remainder of Section 7 remains unchanged.***

## 7. RESTRICTIONS ON REFRIGERANT USE

[ ... ]

~~7.6.2.3~~ A *refrigerant detector* shall be provided in accordance with Section 7.6.5 where any of the following apply:

- a. For commercial, public assembly, and large mercantile *occupancies*, when the *refrigerant* charge of any *independent circuit* exceeds  $0.212 \times LFL$  (lb), where *LFL* is in pounds per 1000 ft<sup>3</sup> ( $6 \times LFL$  [kg] where *LFL* is in kg/m<sup>3</sup>), unless the concentration of *refrigerant* in a complete discharge from any *independent circuit* will not exceed 50% of the *RCL*
- b. For *residential occupancies*, when the *refrigerant* charge of any *independent circuit* exceeds  $0.212 \times LFL$  (lb), where *LFL* is in pounds per 1000 ft<sup>3</sup> ( $6 \times LFL$  [kg], where *LFL* is in kg/m<sup>3</sup>)
- e. When the *occupancy* classification is institutional
- d. When required by the product listing
- e. When using the provisions of Section 7.6.4

**7.6.2.3\* Manufacturer's Refrigerant Detector Requirements.** The following refrigeration systems shall have an integral *refrigerant detection system*:

- a. Ducted HVAC systems with a releasable refrigerant charge ( $m_{rel}$ ) more than 4.0 lb (1.8 kg) and with any duct openings less than 5.9 ft (1.8 m) above the finished floor.
- b. Ducted HVAC systems where spaces connected to the same supply air duct are used as the dispersal floor area to calculate volume per Section 7.3.
- c. When the occupancy classification is institutional occupancy.

~~7.6.2.4~~ When the *refrigerant detector* senses a rise in *refrigerant* concentration above the value specified in Section 7.6.5(b), the following actions shall be taken:

- a. ~~The minimum airflow rate of the supply air fan shall be in accordance with the following equation:~~

~~$$Q_{min} = 1000 \times M/LFL \quad (I-P)$$~~

~~$$Q_{min} = 60,000 \times M/LFL \quad (SI)$$~~

where

$Q_{min}$  = ~~minimum airflow rate, ft<sup>3</sup>/min (m<sup>3</sup>/h)~~

$M$  = ~~refrigerant charge of the largest independent refrigerating circuit of the system, lb (kg)~~

$LFL$  = ~~lower flammability limit, lb per 1000 ft<sup>3</sup> (g/m<sup>3</sup>)~~

- b. ~~Turn off the compressor and all other electrical devices, excluding the control power transformers, control systems, and the supply air fan. The supply air fan shall continue to operate for at least five minutes after the refrigerant detector has sensed a drop in the refrigerant concentration below the value specified in Section 7.6.5(b).~~
- c. ~~Any device that controls airflow located within the product or in ductwork that supplies air to the occupied space shall be fully open. Any device that controls airflow shall be listed.~~
- d. ~~Turn off any heaters and electrical devices located in the ductwork. The heaters and electrical devices shall remain off for at least five minutes after the refrigerant detector has sensed a drop in the refrigerant concentration below the value specified in Section 7.6.5(b).~~

**7.6.2.4\*** The refrigerant detection system shall comply with the following:

- a. Utilize a non-adjustable set point to initiate mitigation actions.
- b. Field recalibration of the refrigerant detection system shall not be permitted.
- c. Capable of detecting the loss of the refrigerant contained in the refrigeration system.
- d. Have access for replacement of refrigerant detection system components.
- e. Have self-diagnostics to determine operational status of the sensing element.
- f. Energize air circulation fans of the equipment upon failure of a self-diagnostic check.
- g. Initiate an output signal in not more than 30 seconds when exposed to a refrigerant concentration of 25% LFL (+0%, -1%).

**7.6.2.5\*** Mitigation Action Requirements. The output signal of Section 7.6.2.4(g) shall complete the following mitigation actions within 15 seconds:

- a. Energize the air circulation fan(s) of the equipment per manufacturer's instructions.
- b. Open zoning dampers, or set zone dampers to full airflow set point, that are installed in the air ducts connected to the refrigeration system.
- c. Activate mechanical ventilation, if required by Section 7.6.4.
- d. Deenergize electric resistance heat installed in the air duct that is connected to the refrigeration system.
- e. Safety shut-off valves utilized to reduce releasable refrigerant charge shall be closed.
- f. Deenergize potential ignition sources, including open flames and unclassified electrical sources of ignition with apparent power rating greater than 1 kVA, where the apparent power is the product of the circuit voltage and current rating.

[ ... ]

**7.6.4 Compressors and Pressure Vessels Located Indoors. ...**

[ ... ]

- b. The space where the equipment is located shall be provided with a mechanical ventilation system in accordance with Section 7.6.4(c) and a refrigerant detector in accordance with Section ~~7.6.2.47-6.5~~. The mechanical ventilation system shall be started when the refrigerant detector senses refrigerant in

accordance with Section ~~7.6.2.4~~~~7.6.5~~. The mechanical *ventilation* system *shall* continue to operate for at least five minutes after the *refrigerant detector* has sensed a drop in the *refrigerant* concentration below the value *specified* in Section ~~7.6.2.4(g)~~~~7.6.5(b)~~.

[ ... ]

~~7.6.5 Refrigerant Detectors. Refrigerant detectors required by Section 7.6.2 shall meet the following requirements:~~

- ~~a. Refrigerant detectors that are part of the listing shall be evaluated by the testing laboratory as part of the equipment listing.~~
- ~~b. Refrigerant detectors, as installed, shall activate the functions required by Section 7.6.2.4 within a time not to exceed 15 seconds when the refrigerant concentration reaches 25% of the LFL.~~
- ~~c. Refrigerant detectors shall be located such that refrigerant will be detected if the refrigerating system is operating or not operating. Use of more than one refrigerant detector shall be permitted.~~
  - ~~1. For refrigerating systems that are connected to the occupied space through ductwork, refrigerant detectors shall be located within the listed equipment.~~
  - ~~2. For refrigerating systems that are directly connected to the occupied space without ductwork, the refrigerant detector shall be located in the equipment, or shall be located in the occupied space at a height of not more than 12 in. (30 cm) above the floor and within a horizontal distance of not more than 3.3 ft (1.0 m) with a direct line of sight of the unit.~~
- ~~d. Refrigerant detectors shall provide a means for an automatic operational self-test as provided in the product listing. Use of a refrigerant test gas is not required. If a failure is detected, a trouble alarm shall be activated, and the actions required by Section 7.6.2.4 shall be initiated.~~
- ~~e. Refrigerant detectors shall be tested during installation to verify the set point and response time as required by Section 7.6.5(b). After installation, the refrigerant detector shall be tested to verify the set point and response time annually or at an interval not exceeding the manufacturer's installation instructions, whichever is less~~

[ ... ]

***Modify Informative Appendix A as follows. The remainder of Informative Appendix A remains unchanged.***

(This appendix 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.)

## INFORMATIVE APPENDIX A—EXPLANATORY MATERIAL

Sections of the standard with associated explanatory information in this appendix are marked with an asterisk "\*" after the section number, and the associated appendix information is located in a corresponding section number preceded by "A".

[ ... ]

### A3.1 Defined Terms

[ ... ]

***ventilation air***: the *ventilation air* requirements in ANSI/ASHRAE Standard 15 are different from those in ANSI/ASHRAE Standard 62.1, *Ventilation and Acceptable Indoor Air Quality*, in that they are not intended to control indoor air quality. Rather, *ventilation air* in Standard 15 serves as a safety mitigation method for reducing the *refrigerant* concentration within a space.

[ ... ]

BSR/ASHRAE Addendum s to ANSI/ASHRAE Standard 15-2019, *Safety Standard for Refrigeration Systems*  
First Public Review Draft

**A7.6.2.3** The requirements of Section 7.6.2.3 are intended to harmonize Standard 15 with the requirements of ANSI/ASHRAE Standard 15.2, *Safety Standard for Refrigeration Systems in Residential Applications* and UL 60335-2-40<sup>20</sup>/CSA C22.2 No. 60335-2-40<sup>21</sup>. A refrigerant detection system of equipment listed to UL 60335-2-40/CSA C22.2 No. 60335-2-40 meets the requirements of this section.

**A7.6.2.4** Validation of meeting requirements (a) to (c) and (e) to (g) can be accomplished by verifying that the refrigerant detector meets the Annex LL requirements of UL 60335-2-40<sup>20</sup>, 4<sup>th</sup> edition or CSA C22.2 No. 60335-2-40<sup>21</sup>, 4<sup>th</sup> edition.

**A7.6.2.5** The *manufacturer's* instructions can be reviewed to determine which of these requirements are performed by the equipment.



## BSR/DS 2020-03-100, Event Notifications via the Direct Standard™

## Section 4.1.1.3 Required Message Content Payloads

- 2) Messages SHALL contain **HL7 V2.3-ADT messages based on HL7 or later versions 2.5.1, where field MSH-12 SHALL contain "2.5.1". In order to accommodate existing implementations of earlier HL7 versions, HL7 messages SHALL and SHOULD support HL7 2.5.1 ADT Messages as referenced in the Rule. Such messages SHALL regardless contain** required and conditionally required data elements as defined in *Section 4.2.1*.

## Section 4.1.2 Data Elements in the Message Payload

## Additions:

43.	<u>Version ID (Intentionally Blank)</u>	<u>MSH-12 – Version ID</u>			R	
107.	<u>Primary Care Provider Identifier (NPI)</u> <u>NOTE: Type 1 NPI if the entity is an Individual</u>	<u>PD1-4.1 - Id Number</u> <u>ROL-4.1 - Role Person (with ROL-3.1 = PP)</u>			RE RE	
108.	<u>Primary Care Provider Last Name</u>	<u>PD1-4.2 - Family Name</u> <u>ROL-4.2 - Role Person</u>			RE	
109.	<u>Primary Care Provider First Name</u>	<u>PD1-4.3 - Given Name</u> <u>ROL-4.3 - Role Person</u>			RE	

## Section 4.3.2.1 MSH – Message Header

## Addition:

<u>(43)</u>	<u>Version ID</u>	<u>MSH-12 – Version ID</u>	<u>2.5.1</u>	<u>R</u>
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## Section 4.3.2.4 PD1 - Patient Additional Demographic

## Addition:

**4.3.2.4 PD1 - Patient Additional Demographic**

Primary Care Provider information will be sent in both PD1 and ROL segments to accommodate backwards compatibility for senders using the base HL7 standards version 2.5.1 and later. Receivers of ADTs will need to look in both the PD1 and ROL segments for Primary Care Provider information.

<u>Data Element Numbers</u>	<u>Element Name</u>	<u>V2 Element</u>	<u>Value Set</u>	<u>Requirement</u>
<u>(65)</u>	<u>Role</u>	<u>ROL-3.1 – Rol = PP</u>	<u>I</u>	<u>RE\$</u>
<u>(107)</u>	<u>Primary Care Provider Identifier (NPI)</u> <u>NOTE: Type 1 NPI if the entity is an Individual</u>	<u>PD1-4.1† - Id Number</u> <u>ROL-4.1*† - Role Person</u>		<u>RE  </u> <u>RE  </u>
<u>(108)</u>	<u>Primary Care Provider Last Name</u>	<u>PD1-4.2† - Family Name</u> <u>ROL-4.2*† - Role Person</u>		<u>RE  </u>
<u>(109)</u>	<u>Primary Care Provider First Name</u>	<u>PD1-4.3† - Given Name</u> <u>ROL-4.3*† - Role Person</u>		<u>RE  </u>

§ NOTE: Required for senders whose implementation is based on HL7 V2.5.1 or later

|| NOTE: Both PD1 and ROL Elements are required for senders whose implementation is based on HL7 V2.5.1 or later. Only PD1 elements are required for senders whose implementation is based on versions earlier than HL7 V2.5.1.

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

## NSF/ANSI Standard For Wastewater Technology –

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### 8.4 Analytical descriptions

#### 8.4.1 pH, TSS, BOD<sub>5</sub>, and CBOD<sub>5</sub>

The pH, TSS, and BOD<sub>5</sub> of the collected influent and the pH, TSS and CBOD<sub>5</sub> of the collected effluent 24-hour composite samples shall be determined with the appropriate methods in *Standard Methods* for each listed parameter. Grab samples shall be collected during the morning dosing period for gravity flow systems and during a time of discharge for systems that are pump discharged.

NOTE — *Standards Methods* requires pH and temperature to be sampled as grab samples.

#### 8.4.2 Color, odor, oily film, and foam

##### 8.4.2.1 General

Three composite effluent samples shall be tested during the 6-month evaluation period.

##### 8.4.2.2 Color

The apparent color of an undiluted effluent sample shall be determined with the visual comparison method described in Method 2120 B of *Standard Methods*.

##### 8.4.2.3 Odor

The odor of undiluted effluent sample shall be determined by a panel consisting of at least five evaluators tested in accordance with Method 2150 B of *Standard Methods*.

##### 8.4.2.4 Oily film and foam

Diluted effluent sample aliquots shall be visually evaluated for the presence of an oily film or foaming. The effluent composite samples shall be diluted 1:1,000 with deionized water.

*Rationale: corrections from 40i37r1 – define the dilution ratio that was removed unintentionally for oily film and foam.*

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

## NSF/ANSI/CAN Standard

# Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and other Recreational Water Facilities

Evaluation criteria for materials, components, products, equipment, and systems for use at recreational water facilities

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- 
- 

## 25 Water conditioning devices

This section contains requirements for water conditioning devices. A water conditioning device is a physical device that, without the introduction of any chemicals, treats the water by reducing:

- combined chlorine;
- chlorine consumption;
- acid consumption;
- phosphate levels;
- water consumption during filter cleaning; or
- any combination of the above.

This includes but is not limited to magnetic devices and ultraviolet light generators. This section is not intended for filtration or chemical feeding equipment.

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- 
- 

### 25.10 Ultraviolet light conditioners

Ultraviolet light conditioners shall comply with the following requirements in addition to the applicable requirements written in the preceding sections.

#### 25.10.1 Ultraviolet light exposure

UV systems shall have a prominently displayed caution statement that UV light is harmful to eyes and exposed skin and to turn off electrical supply before opening the unit.

**25.10.1.1** Ultraviolet light conditioners shall be equipped with an automatic mechanism for shutting off the power whenever the cover is removed.

Tracking #50i185r1  
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Revision to NSF/ANSI/CAN 50-2020  
Issue 185 Revision 1 (January 2022)

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~~25.10.2~~ UV systems shall have a prominently displayed caution statement that UV light is harmful to eyes and exposed skin and to turn off electrical supply before opening the unit.

**25.10.1.2** Ultraviolet light conditioners without a cover shall be provided with manufacturer's instructions that power must be shut off to the unit before exposing the lamp. A means shall be provided for visual inspection, without direct exposure, to verify the lamp is off. A warning label shall also be provided on the unit identifying the location of the indicator.

**25.10.1.3** UV systems that have been certified as only a water conditioning device, and not as ultraviolet light process equipment, shall have a statement in the manual and on the data plate that the unit has not been certified for supplemental or secondary disinfection.



**2023 BSR/RVIA EGS-1: Standard for Engine Generator Sets for Recreational Vehicle Safety Requirements**

**ONE (1) CODE CHANGE PROPOSAL**

**Appendix C. Referenced Publications**

This appendix lists publications which are referenced within this ANSI document for information purposes only. It is not considered a part of the requirements of this standard.

American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036

ANSI MC96.1- 1982 *Temperature Measurement Thermocouples*

ANSI/ASME B16.26- ~~2006~~ 2018 *Standard for Cast, Copper, Alloy Fittings for Flared Copper Tubes*

ANSI B1.20.1- 1983 (R2018) *Standard for Pipe Threads*

American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA

ASTM D471-16a 2021 ~~2006(E1)~~ *Test Method for Rubber Property/Effect of Liquids*

ASTM E145-94 (2011) *Standard Specification for Gravity—Convection and Force-Ventilation Ovens*

Defense Printing Service, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094

Military Handbook 705, Method 110.1 *Generator Sets, Electrical Measurements, & Instrumentation Methods*

Institute of Electrical and Electronic Engineers, 445 Hoes Lane, PO Box 1331, Piscataway, NJ 08855-1331

ANSI/IEEE-115-2009 *Test Procedures for Synchronous Machines*

National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101

NFPA 58- 2020 ~~2014~~ *Liquefied Petroleum Gas Code*

NFPA 70- 2020 ~~2017~~ *National Electrical Code*

NFPA 1192-2021 ~~2018~~ *Standard for Recreational Vehicles*

Society of Automotive Engineers, Inc. 400 Commonwealth Drive, Warrendale, PA 15096

SAE J30 - 1998 *Fuel and Oil Hoses*

SAE J512 - 1997 *Standard for Automotive Fittings*

SAE J1231 - 2011 *Formed Tube Ends for Hose Connections and Hose Fittings*

BSR/UL 30, Standard for Safety for *Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids*1. *Revisions to Proposed Joint UL/ULC 30, Standard for Metallic and Nonmetallic Safety Cans for Flammable and Combustible Liquids*

## PROPOSAL

1.3 These requirements cover ~~the two types of~~ safety cans ~~of two types~~, designated herein as ~~either~~ Type I ~~and or~~ Type II as follows:

- a) Type I safety cans are those ~~constructed~~ equipped with an opening (or port) which may be adapted to both pouring and filling; or
- b) Type II safety cans are those equipped with two separate openings (or ports) one for pouring and the other for filling.

1.5 These requirements are not applicable to single use or disposable containers, included those covered by ASTM F2874.

3.2 ACTUATION HANDLE (ACTUATION TRIGGER) – ~~Also referred to as an Actuating Trigger.~~ A device used to open the spring-loaded lids (caps) or valves for filling and pouring operations.

3.5 FLAME ARRESTER – A conventional type of flame mitigation device consisting of metal mesh barrier in the safety can openings that ~~prevent~~ prevents flame propagation ~~through~~ by quenching.

4.1 The total volume of a safety can shall be sufficient to contain ~~the total volume of liquid corresponding to~~ the nominal capacity of the can.

5.3 A spout opening in the body or top of a safety can shall be above the ~~highest intended~~ rated liquid level as marked in 27.4.

5.9 A Type II safety cans shall be affixed with a conductive nozzle for bonding between containers when dispensing and shall include an FMD or flame arrester.

5.11 The bottom surface of a safety can shall be recessed at least 1/8 in (3.2 mm) above the bottom perimeter of the sidewall to reduce the likelihood of puncturing or abrading the bottom.

5.12 The bottom edge of a metal safety can having a nominal capacity of 3 US gal (11.4 L) or more shall be reinforced or shall be provided with a metal support ring.

#### ~~6~~ Tops, Bottoms, and Bodies

~~6.1 The top, bottom, and body of a metallic safety can shall be of either:~~

- a) ~~Sheet brass, aluminum, copper, or stainless steel, or~~
- b) ~~Sheet steel provided with a corrosion-resistant coating that complies with the requirements in Corrosion-Resistant Coatings, Section 15.~~

~~6.2 The bottom surface of a safety can shall be recessed at least 1/8 in (3.2 mm) above the bottom perimeter of the sidewall to reduce the likelihood of puncturing or abrading the bottom.~~

~~6.3 The bottom edge of a safety can having a nominal capacity of 3 gal (11.4 L) or more shall be reinforced or shall be provided with a metal support ring. Also, see 12.3.~~

#### ~~7~~ Seams and Joints

~~7.1 Seams and joints in the top, body, and bottom of a can shall be welded, brazed, or lock-seamed. A lock-seamed joint shall be sweated with solder or effective sealant compliant with the performance testing requirements.~~

~~Exception: A safety can employing unsoldered lock-seams that complies with the Drop test, Section 20.5, need not have the lock-seams sweated with solder.~~

~~8.1 A metallic safety can with a metallic pouring spout or fill spout shall be of corrosion-resistant metal or of ferrous metal that is provided with a corrosion-resistant coating that complies with the requirements in Corrosion-Resistant Coatings, Section 14.~~

9.2 The discharge end of a flexible nozzle shall include an FMD or a flame arrester that has successfully passed Section 21, Flame Mitigation Device Effectiveness. ~~The discharge end of a flexible nozzle shall be provided with a ferrule of spark-resistant metal such as brass, bronze, copper, zinc, or stainless steel. The ferrule shall be secured in place and shall enclose all sharp or projecting edges.~~

9.4 A nozzle shall be secured to a fitting constructed for attachment to the pouring spout. This fitting, in turn, shall be attached to the pouring spout by a method that provides a leak free permanent connection that is free from leakage and conductive to the can body.

9.5 A nozzle intended for use in automotive fueling applications for pouring directly into the fuel tank of a vehicle requiring unleaded gasoline shall have a maximum outside diameter of 0.86 in (21.8 mm). When a safety can is equipped with a nozzle

having an outside diameter not greater than 0.86 in (21.8 mm), the safety can may be marked in accordance with paragraph 27.3, and shall be marked per 27.3.

12.2 A carrying handle shall be at least 4 in (102 mm) long, and not more than 1.5 in (38 mm) in width or diameter. The hand clearance shall not be less than 1 in (25 mm) from the handle to the safety can surface and 3.5 in (89 mm) from one handle support to the other.

12.3 Edges of a sheet metal handle shall be hemmed, rolled, or wired.

12.3.12.5 A safety can having a nominal capacity of 2 US gal (7.6 L) or more shall be provided with a bottom handle if it is not provided with a support ring or equivalent means for gripping the bottom of the can when pouring. Raised bottoms of at least 1/8 in (3.2 mm) may be used for meet the requirement of a bottom grips (see 5.10).

12.4 A carrying handle shall be at least 4 in (102 mm) long, and not more than 1.5 in (38 mm) in width or diameter. The hand clearance shall not be less than 1 in (25 mm) from the handle to the safety can surface and 3.5 in (89 mm) from one handle support to the other.

12.5 Edges of a sheet metal handle shall be hemmed, rolled, or wired.

13.1 A pour or fill spout, a handle, or any other fitting, shall be mechanically secured shall and be riveted, welded, brazed, shall comply with section 20.4 or otherwise mechanically secured to the safety can.

14.1 A coating on galvanized sheet steel shall comply with the coating designation G60 or A60 in Table I of the Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy Coated (Galvannealed) by the Hot-Dip Process, ANSI/ASTM A653 or evaluated for equivalent corrosion resistance per 14.3. Not less than 40 % of the zinc shall be on either side, as determined by the single-spot test described in ANSI/ASTM A653. The coating shall be free from lumps, blisters, dross, and flux, and shall not flake or peel when the sheet material is formed into a component of the safety can.

14.2 The weight of a galvanized coating may be determined by any published method. However, in case of question, coating weight shall be established in accordance with the Test Method for Weight (Mass) of Coating on Iron and Steel Articles With Zinc or Zinc-Alloy Coatings, ASTM A90/A90M.

14.3 Equivalent alternate corrosion protection methods shall be determined by an evaluation of coating or plating in accordance with the method in the Standard for Electrical Metallic Tubing, UL 797, except with the visual corrosion comparison between benchmark G60 and alternate protection conducted after exposures per Sec 23.3.3.

14.5 A metal coating that is damaged or removed during the manufacturing process shall be replaced repaired by solder or other effective means to prevent corrosion.

#### 15 Sheet Brass and Brass Rod

15.1 A brass part shall be resistant to cracking.

15.2 To determine compliance with 15.1, any brass part of the safety can, in which the zinc content exceeds 15 %, shall be subjected to the Metallic stress crack test, refer to section 23.4.1.

#### 17 Packaging

17.1 Safety can manufacturers shall supply instructions, which may be included on the labels, which instruct the consumer in the use of the safety can, including the inspection and maintenance of the removable FMD if applicable. It shall also indicate the fluids for which the safety can is qualified. The safety can shall be packaged with all required components and materials (e.g., closures, gaskets) to prepare it for use in accordance with the instructions. Instructions shall include applicable measures to maintain compliance with the applicable standards.

20.2.1 During any of the Section 20 Use and Abuse Tests, the required smooth spill free safety can pour operations per 5.7, proper valve open/close actuation per 5.8 and flow rate of at least 1.5 gpm shall be verified by the following test sequence:

a) Use a Type 1 safety can (maximum size in manufacturers' product family) filled to rated capacity to pour liquid into a nominal 1.0 US gal (3.8 L) bucket with a 6-8 inch (15.24 – 20.32 cm) diameter top. With the safety can spout or nozzle at 1.0-1.2 ft (0.3 – 0.36 m) above the bucket, fill the bucket to approximately 3/4 capacity and spout or nozzle.. with a maximum sized Type 1 safety can in the manufacturer's range filled to rated capacity, in 40 ± 5 sec in a slow transition from the stationary, vertical store position. The pour operation shall demonstrate uninhibited full opening and closing of valves and there shall be no spills. Fill a nominal 1.0 gal (3.8 L) bucket with a 6-8 inch (15.24 – 20.32 cm) diameter top to approximately 3/4 capacity with a maximum sized Type 1 safety can in the manufacturer's range filled to rated capacity, in 40 ± 5 sec in a slow transition from the stationary vertical store position at 1.0-1.2 ft (0.3 – 0.36 m) (between the bucket and spout or nozzle. The pour operation shall demonstrate uninhibited full opening and closing of valves and there shall be no spills.

b) Repeat (a) with the safety can filled to approximately 50% rated capacity, pouring for 10 ± 1 s or until the safety can is empty. Calculate the flow rate by measuring the 1.0 US gal (3.8 L) bucket weight before and after this pour operation, converting the weight difference to a volume and dividing by the time poured. There shall be no spills and the flow rate shall be 1.5 gal/min (5.7 L/min) or greater.

#### 21.4.1 General

21.4.1.1 The test procedure in 24.4.1 – 24.4.6 shall be followed, per 24.4.6, a safety can shall pass this test if no internal explosions are detected in five consecutive tests.

#### 21.4.1 Test apparatus

21.4.1.1 Rigidly mount the safety can with the spout or other opening under test oriented at a downward angle of  $45^\circ \pm 2^\circ$  from horizontal. Ensure that at least the last 7.5 cm (3 in) of any flexible spout is straight. Penetrate the safety can with a fitting sealed to the safety can wall, so as to allow the controlled inflow of premixed air and gas. Protect the gas inlet with a restricted orifice or mesh opening sufficient to prevent the flashback of premixed gases back into the supply line.

NOTE: A muffler with 40 $\mu$ m mesh openings has been found to be sufficient for this purpose.

21.4.1.2 To mitigate potential hazards due to explosions, install internal explosion burst vent(s) with total opening area in square centimeters (inches) equal to or greater than the safety can test volume in liters (US gallons) multiplied by 15 (25.6) in the walls of the safety can.

NOTE: A single layer of aluminum foil tape of 0.091 mm (0.0036 in) nominal thickness covering the opening has been shown to be a sufficient burst vent.

21.4.1.3 Also to mitigate the potential hazards due to an explosion, it is permissible to reduce the volume of the safety can. Do not interfere with the safety performance of the safety can, such as by making modifications that impact the spout, opening, or FMD under test.

NOTE: It is recommended to reduce the total internal volume of the test safety can to no greater than 3.8 L (1.0 US gal). A recommended best practice to reduce the safety can volume is to remove the bottom section of the safety can and attach a sealed plate thereby reducing the total internal volume.

#### 21.4.1.4 Supply:

a) compressed air with an inline dryer; and

b) compressed ethane gas with a purity of at least 99.5 %;

with flow regulation and control devices capable of meeting the flow rate requirements of 21.4.2.

21.4.1.5 Install an inline valve capable of rapid cutoff of the flow of air and ethane mixture, such as a solenoid valve.

NOTE: An electronic solenoid or manual valve are sufficient for this purpose.

21.4.1.6 Verify that all connections and pressure vents are sealed such that air and ethane only escape from the spout opening under test.

21.4.1.7 For Type II safety cans, test each opening separately, leaving the untested opening shut.

#### 21.4.2 Gas flow rate calculation

21.4.2.1 Find the cross-sectional open area of the spout opening under test ( $A_{open}$ ), disregarding the impact of any internal FMD components.

21.4.2.2 Calculate the total volumetric flow rate of air and ethane ( $V_{total}$ ) as:

$$V_{total} = 1.125 \times A_{open} \times S_L$$

Where the laminar burning velocity ( $S_L$ ) of ethane gas is 47 cm/s (18.5 in/s).

21.4.2.3 Determine the ethane gas flow rate ( $V_{ethane}$ ) using a mixture fraction of  $1.06 \pm 0.06$  to the stoichiometric ratio. This corresponds to an ethane flow rate range of 5.64 % to 6.27 % by volume.

$$V_{ethane} \geq 0.0564 \times V_{total}$$

$$V_{ethane} \leq 0.0627 \times V_{total}$$

21.4.2.4 Calculate the air flow rate ( $V_{air}$ ) as the balance of the total flow rate.

$$V_{air} = V_{total} - V_{ethane}$$

#### 21.4.3 External flame source

21.4.3.1 Provide an external diffusion pilot flame 5 cm (2 in) below the inverted spout opening. Connect a metal tubular fuel line directly to the ethane gas supply (not the air and ethane mixture) with a flow control valve, such as a needle valve, to adjust the flame height to just contact the open spout. Provide a means of remotely igniting the external flame using an electronic spark or other means.

#### 21.4.4 Procedure

21.4.4.1 Flow a mixture of ethane and air as calculated in 21.4.2 through the entire test vessel for a minimum of 4 total volume changes, based on the total volume of the safety can under test and as modified, if applicable.

NOTE: It is permissible to increase the flow rate prior to ignition testing to ensure that the volume is sufficiently filled with the proper mixture. Do not alter the ratio of ethane to air when increasing the total flow rate. Reduce the flow rate back to the values calculated in 21.4.2 before igniting any external flame or spark.

21.4.4.2 Flow ethane gas for the external flame source, and ignite the external ignition source. Maintain the external flame for a duration of 30 s. Then shut off the flow of air and ethane using the inline valve after 30 s or if internal ignition occurs.

#### 21.4.5 Determine explosion in trial

21.4.5.1 Use a high-speed pressure rise measurement, to determine if an explosion occurred in the safety can headspace.

NOTE: A pressure rise of more than 35 kPa (5 psi) captured every 0.01 s or less indicates an explosion has occurred.

21.4.5.2 It is permissible to determine that a safety can has failed this trial, based on another indicator of ignition, such as internal temperature rise, sound, or visual observation, but do not deem the trial a pass without confirmation from the high-speed pressure rise measurement.

21.4.5.3 If at any time, after the external diffusion pilot flame is ignited, the high-speed pressure rise indicates an ignition, deem the trial a failure.

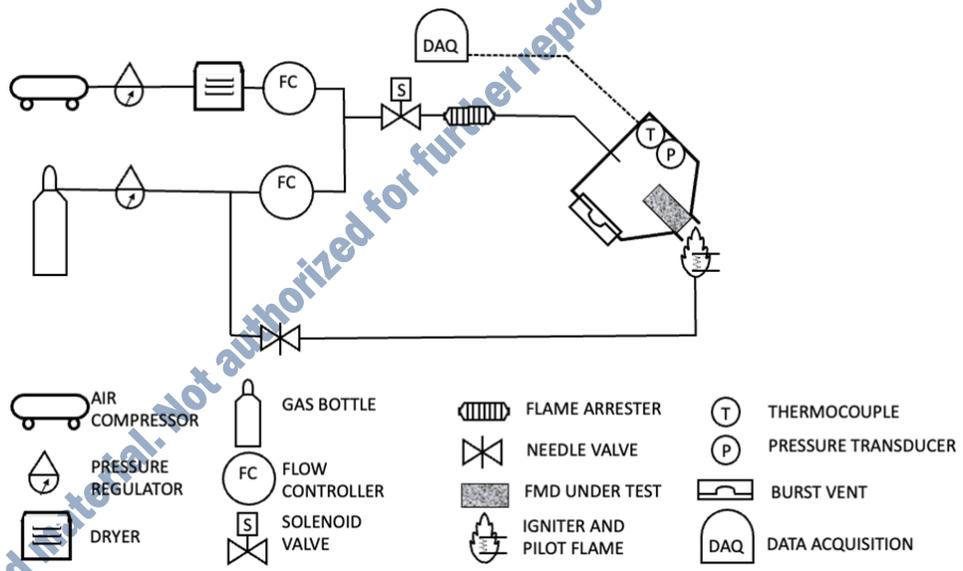
21.4.5.4 If no internal explosion is detected, the trial result shall be deemed a pass.

#### 21.4.6 Trials

21.4.6.1 Repeat 21.4.4 and 21.4.5 so that five consecutive trials are performed.

**FIGURE 21.1**

Example set up using compressed air, and ethane gas from a bottle, a data acquisition system, a thermocouple, a pressure transducer, a solenoid valve, and a needle valve, to test a safety can without a spout.



#### 21.5.4 Expanded metal mesh

21.5.4.1 A safety can equipped with EMM shall:

a) Provide adequate clearance around internal components of the safety can

b) Permit insertion and removal of spouts, screens, or other accessories, in conformance with the manufacturer's instructions.

c) Exhibit characteristics, determined in accordance with NFPA 69, Chapter 14, as follows:

1. Occupied percentage volume of the safety can;
2. Metal alloy composition and the composition and thickness of any coating
3. Surface-area-to-volume-ratio for alkane/air mixtures or other flammable gases or vapors as applicable;

4. Pore size distribution which is smaller than the quenching distance for the gas or vapor, as applicable.21.8 Expanded metal mesh21.8.1 General

21.8.1.1 Testing in accordance with 21.8 in lieu of 21.4 may be used for safety cans provided with expanded metal mesh (EMM). A safety can equipped with EMM shall:

- a) Provide adequate clearance around internal components of the safety can. Permit insertion and removal of spouts, screens, or other accessories, in conformance with the manufacturer's instructions.
- c) Exhibit characteristics, determined in accordance with NFPA 69, Chapter 14, as follows: Occupied percentage volume of the safety can

Metal alloy composition and the composition and thickness of any coating

Surface-area-to-volume-ratio for alkane/air mixtures or other flammable gases or vapors as applicable

4. Pore size distribution which is smaller than the quenching distance for the gas or vapor, as applicable

21.8.2 Verification test

21.8.2.1 FMDs based on EMM technology shall be subjected to performance testing

23.4.1.1 For accessories constructed with threaded end fittings, metal parts containing at least more than 15% zinc (excluding platings), one worst case product in all sizes shall be exposed to a moist ammonia-air mixture of minimum 20 US fl oz (600 ml) of 0.94 spg aqueous ammonia for 10 d at 35°C (95°F) in a heated water bath or oven.

MARKING AND INSTRUCTIONS27 General

27.4 Each safety can shall be permanently marked:

- a) "Safety Can TYPE 1" or "Safety Can TYPE II"
- b) Together with the nominal capacity.

28.1 Each safety cans shall be labeled in accordance with ASTM F839, Standard Specification for Cautionary Labeling of Portable Gasoline, Kerosene, and Diesel Containers for Consumer Use.

30 Packaging

30.1 The safety can shall be packaged with all required components and materials (e.g., closures, gaskets) to prepare it for use in accordance with the instructions.

31 Instructions

31.1 Safety can manufacturers shall supply instructions, which may be included on the labels, which instruct the consumer in the use of the safety can, including the inspection and maintenance of the removable FMD if applicable. It shall also indicate the fluids for which the safety can is qualified.

31.2 Instructions shall include applicable measures to maintain compliance with the applicable standards.

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## BSR/UL 207 Standard for Safety for Refrigerant-Containing Components and Accessories, Nonelectrical

### 1. Proposed revision to compliance options to include Standard Specification for Seamless Copper Tubes for Linesets – ASTM B1003-16

#### PROPOSAL

#### 10B Refrigeration Line Sets

10B.1 ~~Unless subjected to the relevant tests in Sections 12—14, c~~Copper or steel tubing or piping intended for use as a refrigeration line set shall ~~have a wall thickness complying with:~~

~~a) Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service, ASTM B280-18; Table 1: “Standard Dimensions and Weights, and Tolerances in Diameter and Wall Thickness for Straight Lengths”, for straight lengths of copper tubing;~~

~~b) ASTM B280-18; Table 2: “Standard Dimensions and Weights, and Tolerances in Diameter and Wall Thickness for Coil Lengths”, for coil copper tubing;~~

~~c) Nominal Pipe Size (NPS), Schedule 80, for steel pipe;~~

~~d) NPS, Schedule 40 for steel pipe intended for use only with refrigerants designated as Class A1 in accordance with the Standard for Designation and Safety Classification of Refrigerants, ANSI/ASHRAE 34;~~

~~e) Standard Specification for Seamless Copper Pipe, Standard Sizes, ASTM B42-15a; Table 3, “Standard Dimensions, Weights, and Tolerances”, for copper pipe; or~~

~~f) Standard Specification for Seamless Copper Water Tube, ASTM B88-16; Table 1, “Dimensions, Weights, and Tolerances in Diameter and Wall Thickness for Nominal or Standard Copper Water Tube Sizes”, for copper pipe.~~

a. Be subject to the relevant tests in Sections 12 – 14; or

b. For copper tubes intended for Air Conditioning, with an operating pressure not intended to exceed 700 psig (4.83 MPa) and an operating temperature not intended to exceed 250°F (121°C), comply with Standard Specification for Seamless Copper Tubes for Linesets, ASTM B1003-16 and be permanently marked with the name or trademark of manufacturer, ASTM B1003, 700 psi, 250 °F; or

c. Have a wall thickness complying with one of the following:

- 1) Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service, ASTM B280-18; Table 1: “Standard

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Dimensions and Weights, and Tolerances in Diameter and Wall Thickness for Straight Lengths”, for straight lengths of copper tubing; or

- 2) ASTM B280-18; Table 2: “Standard Dimensions and Weights, and Tolerances in Diameter and Wall Thickness for Coil Lengths”, for coil copper tubing; or
- 3) Nominal Pipe Size (NPS), Schedule 80, for steel pipe; or
- 4) NPS, Schedule 40 for steel pipe intended for use only with refrigerants designated as Group A1 in accordance with the Standard for Designation and Safety Classification of Refrigerants, ANSI/ASHRAE 34; or
- 5) Standard Specification for Seamless Copper Pipe, Standard Sizes, ASTM B42-15a; Table 3, “Standard Dimensions, Weights, and Tolerances”, for copper pipe; or
- 6) Standard Specification for Seamless Copper Water Tube, ASTM B88-16.: Table 1, “Dimensions, Weights, and Tolerances in Diameter and Wall Thickness for Nominal or Standard Copper Water Tube Sizes”, for type K or type L copper tube.

## 2. Proposed revisions to align with the removal of Table 11.1

### PROPOSAL

5.7 Joints on copper tubing used on components for use with Group 2, 2L, or 3 refrigerant, as classified in the Safety Code for Mechanical Refrigeration, ASHRAE 15, shall be brazed or welded joints or be refrigeration fittings complying with 10A.1. See 3A.25 and ~~Table 11.1.~~

14.2.1 Two samples of each refrigerant-containing component shall be completely filled with an incompressible, inert fluid to exclude all air, and connected to a hydraulic pump system. The pressure shall be raised gradually and maintained for 1 minute to the higher of three times the:

- a) Maximum abnormal pressure marked on the refrigerant-containing component,
- b) Minimum design pressure specified in 11.2 ~~Table 11.1~~ for the refrigerant,
- c) Design pressure marked on the component,

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d) Start-to-discharge value of the pressure relief valve for refrigerant-containing components intended to utilize carbon dioxide (R744) in a cascade system.

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## BSR/UL 213, Standard for Rubber Gasketed Fittings for Fire-Protection Service

### 2. Construction Requirement for Rubber Gasketed Fittings with Side Outlets

#### PROPOSAL

7.5 A rubber gasketed fitting with a side outlet that utilizes a protrusion inserted into a hole in the wall of a main run pipe shall be designed with a minimum material thickness of 0.07 inches (1.778 mm) for the protrusion.

### 3. Side Outlets Intended for Sprinkler Connections

#### PROPOSAL

16.2 The rubber gasketed side outlet fitting shall be installed on representative main run pipe using a 12 inch (305 mm) ± 1 inch (25 mm) long section of schedule 40 pipe in accordance with the manufacturer's installation instructions. The fitting shall be nominally centered on the pipe section. The sprinkler port in the end cap and reducer fittings used for connecting to the test sample shall be concentric with the test apparatus waterway. The side outlet test sample assembly shall be connected to a test apparatus (see Figure 16.1 for an example) using the necessary couplings, fittings, or reducer fittings. Where testing the sprinkler alone, the sprinkler shall be installed into an end cap. When testing the side outlet assembly, the end of the pipe section shall be capped or plugged to prevent water flow through the end of the main run pipe.

16.4 As an alternative to measuring the minimum discharge coefficient of the rubber gasketed side outlet fitting directly, the rubber gasketed side outlet fitting may be tested with a sprinkler installed. The nominal sprinkler K-factor required to be used for each nominal outlet size is indicated in Table 16.2. The average K-factor for a representative sprinkler sample intended to be used with the ~~hose with~~ fitting shall be determined with the sprinkler directly attached to the test apparatus described in Figure 16.1 using the test pressures referenced in 16.3. Subsequently, the same sample sprinkler is to be installed in the rubber gasketed side outlet fitting to determine the average K-factor of the assembly. The percent reduction in the average K-factor between testing the sprinkler alone and with the sprinkler installed into the rubber gasketed side outlet fitting shall then be calculated.

### 5. Marking Requirements

#### PROPOSAL

19.1 The housing of a rubber gasketed fitting shall be marked with the following, where legible and visible after installation:

- a) Name or identifying symbol of the manufacturer or private labeler;
- b) Size of fitting in accordance with a nationally or internationally recognized pipe standard that the fittings is intended to be used with, unless the fitting is intended solely for use with a proprietary sized pipe and fitting system;
- c) Distinctive model number or catalog designation;
- d) Equivalent Length value, in feet of pipe, for fittings intended for connection to sprinkler pipe as described in Section 17, Pipe Outlet Flow Characteristics Test, if not included in the installation and design instructions; and
- e) Bolt torque values or bolt tightening specifications, (when bolts are used) if not included in the installation and design instructions.
- f) Rubber gasketed fittings that use proprietary grooves shall be marked with the following: "PG" or "Prop Grv".

~~19.2A The marking for the size of the fitting shall be in accordance with a nationally or internationally recognized pipe standard that the fitting is intended to be used with, unless the fitting is intended solely for use with a proprietary sized pipe and fitting system.~~

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## BSR/UL 217, Standard for Safety for Smoke Alarms

### PROPOSALS

#### 1. Alarm Silence Feature

##### 13 Alarm Silencing Feature

13.1 Each smoke alarm shall be provided with an automatically resettable alarm silencing means that has a fixed or variable time setting which desensitizes the alarm for a maximum of 10 minutes. Alarm silencing shall not disable the smoke alarm. Sensitivity shall not be reduced to a level that is less than less than 25% of the manufacturer's minimum sensitivity setting test group as determined from the Uniformity of Operation minimum sensitivity defined in 42.6.1 (b). Each alarm shall produce a distinctive audible or visible trouble signal while in the silence mode. Following the silenced period, the alarm shall restore automatically to its intended operation. Silencing of one alarm of a multiple station system shall not prevent an alarm operation from the other alarms in the system. See Section 40, Alarm Silenced Test.

#### 2. Annex C Requirement

##### ANNEX C (NORMATIVE) INSTRUCTIONS FOR DETERMINING A RELIABILITY PREDICTION OF ELECTRONIC COMPONENTS AND MICROELECTRIC CIRCUIT

##### C0 Instructions for Determining a Reliability Prediction for Smoke Alarms

C0.1 Make a list of every component in the alarm.

C0.2 By circuit analysis or experimentation, determine the effect of any failure mode (short or open) of each component on the alarm operation and the rationale for the decision. This will determine if a component is to be considered critical, conditionally critical, or noncritical.

C0.3 A component is considered noncritical if all failure modes of the component will result in a trouble signal<sup>a</sup>, or have no effect on the intended operation of the alarm for alarm and trouble signals, and will not affect the alarm sensitivity.

C0.4 A component is considered critical if two or more failure modes of the component, which will affect the intended operation or the sensitivity of the alarm, do not result in a trouble signal<sup>a</sup>.

C0.5 A component is considered conditionally critical if only one failure mode of the component will affect the intended operation or the sensitivity of the alarm, and does not result in a trouble signal<sup>a</sup>.

<sup>a</sup> A trouble signal may be indicated by energization of an audible signal, energization of a separate visual indication (amber or orange), or de-energization of a power-on light. If a visual indication is depended on to denote a trouble condition, it shall have a documented predicted failure rate of not greater than 2.5 failures per million hours.

C0.6 Make a list of all critical and conditionally critical components in the alarm.

C0.7 For each critical and conditionally critical component, the expected failure rate, based upon a minimum confidence factor of 60 percent, may be determined from the screening burn-in or published component reliability data method.

C0.8 For each conditionally critical component, the expected failure rate may be determined by calculating only the failure rate for the mode meeting the conditions of C1.5 or by applying a 0.75 multiplying factor to the value determined by the PARTS COUNT or PARTS STRESS ANALYSIS method described in MIL HDBK 217F.

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## BSR/UL 514C, Standard for Safety for Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers

For your convenience in review, proposed new additions to the previously proposed requirements are shown underlined and proposed deletions are shown ~~lined-out~~. Previous additions dated 2021-11-05 are shown underlined and ~~lined-out~~.

### Topic 1. Withdrawal of Proposal: Assembled boxes (box with removable walls)

## PROPOSAL

~~5.1.8 - . An assembled box (a box with one or more removable wall) shall have no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.~~

### 32 Supports

#### 32.1 General

32.1.1 A bracket or other device for securing a flush-device or other box not intended to support a fixture/luminaire to a structural wall stud shall withstand a pull of 50 pounds (222 N) when tested in accordance with [32.1.2](#). The bracket may bend; but the results of the test are not acceptable if the bracket breaks, or if the box is pulled loose from the bracket. ~~For assembled boxes (outlet boxes with one or more removable walls) there shall be no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.~~

#### 32.4 Boxes intended to be installed in a finished structure

32.4.1 As a result of the test described in [32.4.2](#) – [32.4.5](#), the box supporting means shall not crack or break or result in the face of the box being permanently displaced more than 1/8 inch (3.2 mm) from the plane of the face of the test surface when measured 1 minute after the test load is removed. ~~For assembled boxes (outlet boxes with one or more removable wall) there shall be no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.~~

### 35 Mold Stress

35.1 There shall not be a change in any dimension greater than 10 percent for a box, and no openings greater than 1/16 inch (1.6 mm) between a box and the plane across the open face of the box when the box is conditioned as described in [35.2](#). ~~For assembled boxes (outlet boxes with one or more) removable walls there shall be no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.~~

### 36 Resistance to Crushing

36.1 When tested as described in [36.2](#), a force of not less than 2500 pounds (11,121 N) shall be necessary to cause a box in the face-up position to continue to yield to the crushing force at a rate greater than the rate at which the force is applied. For outlet boxes with removable walls there shall be no gaps in the walls that would permit the free

passage of a 1/32 inch (0.8 mm) drill rod. Following the Crush force an assembled box with one or more a removable wall that becomes dislodged may be reattached provided the product remains operable and undamaged with no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.

### 37 Resistance to Impact

37.1 A box tested in accordance with [37.2](#) shall not show any loss of integrity and shall not permit the free passage of a 1/32 inch (0.8 mm) drill rod through any resulting crack in the box or nailing attachment or separation between a removable wall that would permit the free passage of a 1/32 inch (0.8 mm) drill rod. Following the Impact, assembled boxes with one or more a removable wall that becomes dislodged may be reattached provided the product remains operable and undamaged with no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.

37.3 Eight of the ten sample boxes tested in accordance with [37.4](#) and [37.6](#) shall not show any loss of integrity and shall not permit the free passage of a 1/32 inch (0.8 mm) drill rod through any resulting crack in the box or nailing attachment. For assembled boxes (outlet boxes with removable walls) there shall be no gaps in the walls that would permit the free passage of a 1/32 inch (0.8 mm) drill rod.

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**BSR/UL 1203, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations**

**1. Revisions to Cross-References for Marking Requirements in Clause 21.17, 40.1.1, 40.1.3, 40.1.6, 40.1.12, 60.3, 60.21, and 60.22.**

**PROPOSAL**

21.17 Equipment is to be tested with lengths of conduit as specified in Table 21.1 when:

- a) It has no current-interrupting contacts, or all current-interrupting contacts hermetically sealed (see 21.27) against the entrance of gases or vapors or immersed in oil; and
- b) It is intended for connection to 1-1/2 inch (48.3 mm OD) and smaller trade sizes of conduit.

*Exception: Equipment intended to have sealing fittings attached is not required to be tested with lengths of conduit when it is marked in accordance with ~~60.16~~ and with 60.17.*

40.1.1 Equipment intended for permanent installation shall have provision for connection to threaded rigid metal conduit or other wiring methods in accordance with Article 502 in the National Electrical Code, ANSI/NFPA 70.

*Exception: The opening is not required to comply with this requirement when instructions are provided in accordance with ~~60.20~~ 60.21.*

40.1.3 Each entry shall be provided with one of the following constructions:

- a) A smooth and well-rounded integral conduit stop, having a throat or inner diameter as specified in Table 14.1;
- b) A smooth and well-rounded inner end as shown in Figure 14.1; or
- c) Threads not exceeding the maximum number specified in Table 14.2 for the conduit size, such that a conduit bushing is able to be installed on the end of the conduit after it is engaged with the entry threads.

*Exception: The opening is not required to comply with this requirement when instructions are provided in accordance with ~~60.18~~ 60.19.*

40.1.6 Metric threaded entries shall have a permanent marking near the supply connection opening in accordance with ~~60.24~~ 60.22.

*Exception: Equipment which uses a thread type other than NPT or NPS is not required to have the marking in ~~60.24~~ 60.22 when it is provided with an adapter to NPT or NPS thread form. The adapter shall comply with the applicable construction and performance requirements Part VIII in this Standard.*

40.1.12 A factory-installed conduit seal incorporated as part of the equipment shall:

- a) Comply with the applicable requirements in 14.1.2.2, 14.1.2.3, and Section 23, Leakage Test on Factory-Installed Conduit Seals; and
- b) Be marked in accordance with ~~60.15~~ 60.16.

60.3 The equipment shall be permanently marked as specified in (a) – (k) with a metal nameplate or plates mechanically attached, or shall be embossed, stamped, cast, or molded into the product, or shall be a nonmetallic pressure-sensitive label which complies with applicable sections of the Standard for Marking and Labeling Systems, UL 969, and shall indicate the following as applicable:

- a) The manufacturer's name or trademark;
- b) The equipment identification;
- c) Electrical ratings;
- d) For devices with a rotating shaft, the maximum rpm at which the shaft is intended to rotate;

*Exception: The rpm is not required to be marked on devices, such as a siren, where the maximum speed of the shaft is determined by an internal motor that is directly coupled to the shaft.*

e) Designation of the hazardous location in which the equipment is intended to be used: for example, "Class \_\_\_\_\_, Group \_\_\_\_\_." Also see ~~60.47~~ 60.18;

f) Enclosure-type designation. An enclosure that complies with the requirements for more than one type of enclosure is not prohibited from being marked with multiple designations;

*Exception: The designation marking for Type 7 or 9 is not required to be marked.*

g) The maximum ambient temperature rating, when other than 40°C (104°F), and/or the minimum ambient temperature rating when less than minus 25°C (minus 13°F).

h) A cautionary statement consisting of the word "CAUTION" and the following or equivalent wording: "To reduce the risk of ignition of hazardous atmospheres, disconnect the equipment from the supply circuit before opening. Keep assembly tightly closed when in operation.";

i) Maximum operating temperature or operating temperature class (T code) as specified in Table 60.1, when the operating temperature exceeds 100°C (212°F). This marking is to be based on the maximum temperature attained in the temperature tests. The operating temperature or temperature class shall be near the marking required by (e). It shall be identified as "Operating Temperature \_\_\_\_\_," or "Operating Temperature Code \_\_\_\_\_," or the equivalent; and

k) A device with a factory-installed seal shall be permanently marked "Leads Factory Sealed", or "Factory Sealed", or "Seal not Required", or the equivalent.

60.21 In accordance with 14.1.1.13 and 40.1.1, an enclosure shall be provided with instructions for drilling and tapping conduit openings. The instructions shall include the following information:

- a) Maximum number of conduit openings;
- b) Maximum and minimum trade size of conduit openings;
- c) Location of conduit openings;
- d) Type of conduit threads;
- e) Gauging requirements for field-threaded entries shall conform to:
  - 1) For NPT threaded entries, ANSI/ASME B1.20.1 except that entries shall gauge from flush to +3-1/2 turns beyond the L-1 gauging notch in lieu of the -1 to +1 turns described in ANSI/ASME B1.20.1;
  - 2) Metric threaded entries shall have a thread tolerance class of 6H.
- f) Other instructions necessary to provide for connection to threaded rigid metal conduit or cable sealing fittings in accordance with the requirements of this Standard.

60.22 Equipment having metric supply connection openings in accordance with 14.1.1.6 and 40.1.6 shall have a permanent marking which includes the supply connection thread size, and type, i.e. M20, M25, M50 etc.

## 2. Revision to Cross-Reference in Clause 56.1 of the Diaphragm Endurance Test.

### PROPOSAL

56.1 A sheet-metal diaphragm as described in ~~6.3~~ 9.3 shall withstand 100,000 complete cycles of motion. Each complete cycle is to be conducted at a rate of 1 cycle per second through twice the distance the diaphragm travels in intended operation. Such operation shall not adversely affect the integrity of the diaphragm assembly.

## 3. Revisions to Cross-References in Test Descriptions for Clause 21.29B and SB1.29B.

### PROPOSAL

21.29B All test sample joints are to be based upon the manufacturers maximum specified gap, and tested with not ~~less~~ greater than 115% of the minimum specified joint length. Specially prepared test samples having modified joint lengths, gaps and engagements shall be employed.

For Groups A, B, or A and B, test factors per 21.23 and 21.26 are also required to be introduced into the test pressure or test gap in addition to the test factors above by multiplying the test factor of 21.23 or 21.26, as applicable, by the test factor of Table 21.3A.

SB1.29B All test sample joints are to be based upon the manufacturers maximum specified gap, and tested with not ~~less~~ greater than 115% of the minimum specified joint length. Specially prepared test samples having modified joint lengths, gaps and engagements shall be employed.

For Groups A, B, or A and B, test factors per SB1.23 and SB1.26 are also required to be introduced into the test pressure or test gap in addition to the test factors above by multiplying the test factor of SB21.23 or SB21.26, as applicable, by the test factor of Table SB1.6.

## 4. Revisions of Rust Resistance Tests and Protection Against Corrosion for Clause 15.6 and Deletion of Clause 47.

### PROPOSAL

15.6 Except for flamepaths, both the inside and the outside surfaces of an explosion-proof enclosure made of ferrous-metal other than stainless steel shall be protected against corrosion by plating, galvanizing, or painting ~~with industrial grade paint~~, or other equivalent means. Enclosures constructed from other metals shall be permitted to be similarly protected.

### ~~47 Rust-Resistance Test~~

~~47.1 An enclosure of ferrous metal other than stainless steel shall comply with the requirements in Rust-Resistance Test, Section 24.~~

## 5. Revisions to Clause 42.3 Exception 3.

### PROPOSAL

42.3 Paint or a sealing material shall not be applied to the contacting surfaces of a joint.

*Exception No. 1: A baked-enamel coating shall ~~comply~~ not be applied unless it complies with the requirements in 41.1.2.*

*Exception No. 2: A sealing material shall not be applied to the contacting surfaces of a joint that is not intended to be and is not required to be opened to install or service the equipment, unless the application of the material complies with 36.2 and 43.2.*

*Exception No. 3: A metallic paint or other non-insulating coating shall not be applied to a threaded joint surface or a threaded conduit opening unless the joint surface or opening, with the paint or coating applied, complies with the requirements in 28.2.1 – 28.2.3.*

## 6. Revisions to clarify thermal shock on glass parts in Clause 25.1.

### PROPOSAL

25.1.1 A glass part of an enclosure shall withstand, without cracking or breaking, the application of a cloth saturated with 10° C (50° F) water when the equipment reaches equilibrium temperatures at rated load in a 40°C (104°F) ambient, or at rated load at rated ambient if the rated ambient temperature is greater than 40°C (104°F).

25.1.1.2 Empty enclosures shall be tested as described in 25.1.1 with the glass at the maximum rated ambient temperature or at the maximum rated window surface temperature specified in the instructions provided with the enclosure, whichever is higher.

## 7. Revisions to Clauses 21.29, 21.29A and SB1.29.

### PROPOSAL

21.29 For explosionproof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be determined by one of the following methods:

a) For explosionproof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be performed at the minimum ambient specified, ±5°C (±9°F) degrees. When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table 21.3 remain gasses, or

b) For equipment for use in Group C or D classified locations, rated not less than minus 60°C (minus 76°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in 21.3 (b), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 22.1, based upon room ambient explosion pressure tests, or

c) The reference pressure shall be determined at room ambient temperature ( $T_a$ ) using the defined test mixture(s), but at increased pressure. The absolute pressure of the test mixture (P) shall be calculated by the following formula, using  $T_a$  in °C:

$$P = 100[293 / (T_a, \text{min} + 273)] \text{ (kPa)}$$

or

$$P = 14.6959[293 / (T_a, \text{min} \pm 273)] \text{ (psi)}$$

21.29A For explosionproof equipment specified and marked for use at ambient temperatures greater than 60°C (140°F), ~~in addition to the tests of 21.29,~~ flame propagation tests shall be conducted under one of the following conditions:

a) At a temperature not less than the specified maximum ambient temperature; or

b) At normal ambient temperature using the defined test mixture at increased pressure according to the factors in Table 21.3A; or

c) At normal atmospheric pressure and temperature, but with the test gap increased by the factors noted in Table 21.3A.

These tests are in addition to the explosion tests required to determine compliance with 21.2 and 21.3(a).

SB1.29 For explosionproof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be performed determined by one of the following methods:

a) For explosionproof equipment specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F), the explosion tests shall be performed at the minimum ambient specified,  $\pm 5^\circ\text{C}$  ( $\pm 9^\circ\text{F}$ ) degrees. When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table SB1.3 remain gasses; or

b) For equipment for use in Group C or D classified locations, rated not less than minus 60°C (minus 76°F), not subject to pressure piling, and determined to comply with the flame propagation requirements in SB1.3 (a), the equipment shall alternatively be subjected to the hydrostatic pressure test using the test factors for low ambient rated equipment found in Table 22.1, based upon room ambient explosion pressure tests; or

c) The reference pressure shall be determined at ~~normal~~ room ambient temperature ( $T_a$ ) using the defined test mixture(s), but at increased pressure. The absolute pressure of the test mixture (P) shall be calculated by the following formula, using  $T_a$  in °C:

$$P = 100[293 / (T_a, \text{min} + 273)] \text{ (kPa)}$$

or

$$P = 14.6959[293 / (T_a, \text{min} \pm 273)] \text{ (psi)}$$

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## BSR/UL 2225, Standard for Cable and Cable-Fittings for Use in Hazardous (Classified) Locations

3. This proposal provides revisions to the proposal document dated October 15, 2021 per comments received.

### PROPOSAL

Table 23.1

#### Gas-air mixtures for maximum pressure tests

Class-I-g Group	Gas	Test range percent in air	Minimum number of tests
A, IIC	Acetylene	5 – 20	10
B, IIB plus Hydrogen, IIC	Hydrogen	15 – 35	15
C, IIB	Ethylene	4 – 9	10
D, IIA	Propane	3 – 7	10

23.16 For explosionproof cable fittings specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F) or for flameproof cable fittings specified and marked for use at ambient temperatures lower than minus 20°C (minus 4°F), the Explosion Tests shall be determined by one of the following methods:

- a) The Explosion Tests shall be performed at the minimum ambient specified, ±5°C (±9°F). When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table. 23.3 remain gasses: ; or
- b) Exception: For explosionproof cable fittings for use in Group A, B, C or D classified locations, rated less than minus 25°C (minus 13°F) but not less than minus 50°C (minus 58°F) or flameproof cable fittings for use in Groups IIA, IIB or IIC classified locations, rated less than minus 20°C (minus 4°F) but not less than minus 50°C (minus 58°F), the equipment shall be permitted to alternatively be subjected to the Hydrostatic Pressure Test in accordance with 24.4 and 24.5: ; or
- c) Whenever lengths of conduit are not required as part of the test setup described in 23.6, the reference pressure shall be permitted at room ambient temperature (T<sub>a</sub>) using the defined test mixture(s), but at increased pressure. The absolute pressure of the test mixture (P) shall be calculated by the following formula, using T<sub>a</sub> in °C:

$$P = 100[ 293 / (T_{a, \text{min}} + 273)] \text{ (kPa)}$$

or

$$P = 14.6959[ 293 / (T_{a, \text{min}} + 273)] \text{ (psi)}$$

UL 60335-2-3

February 25, 2022

## BSR/UL 60335-2-3 Standard for Safety of Household and Similar Electrical Appliances, Part 2: Particular Requirements for Electric Irons

### 1. Editorial Revisions to National Deviations

#### PROPOSAL

##### ~~1DV.1 D1 Modification of 1DV.1 of the UL part 1:~~

~~The articulate probe of figure 12DV shall replace the test finger of figure 1 for these products.~~

##### ~~1DV.2 D2<sub>1</sub> Modification to add the following to the second paragraph of Clause 1 of the part 2:~~

~~These requirements apply to electric irons and cordless irons rated 250 V or less. These irons are intended to be employed in accordance with the National Electrical Code, ANSI/NFPA 70. Annex DVD of Part 1 provides examples of and references for regulatory requirements that may apply to appliances.~~

##### ~~1DV.3<sub>2</sub> D2 Add the following to Note 101 of the part 2:~~

- ~~- additional requirements applicable to equipment intended for use in hazardous locations as defined in the National Electrical Code, ANSI/NFPA 70, are not included in the standard.~~

##### ~~1DV.4<sub>3</sub> D2 Add the following to Note 102 of the part 2:~~

- ~~- ironing machines, ironing presses, or other garment finishing appliances that are covered by the Standard for Garment Finishing Appliances, UL 141.~~

##### ~~8.1.1DV D1 Modification of 8.1.1DV of the UL part 1:~~

~~The articulate probe of figure 12DV shall replace the test finger of figure 1 be applied without appreciable force for these products.~~

##### ~~11.8DV.3 D2 Modification to add 11.8DV.3.1 - 11.8DV.3.3 to 11.8 of the UL part 1:~~

~~11.8DV.3.1 With reference to table 3DV, note (e) (2), the coefficient of thermal conductivity of a material can be determined by comparison with materials~~

having known coefficients. Samples of materials with known values of the coefficient constant and a sample of the material for which the coefficient is to be determined - all samples having the same dimensions - are fixed to a heated metal plate. The temperatures of the faces of the reference samples opposite the heated metal plate are plotted as a function of the constant. The constant to be determined is derived from this curve by reading the value corresponding to the temperature attained by the sample under investigation.

11.8DV.3.2 With reference to 11.8DV.1(c) and footnote n of table 3DV, item 13, parts likely to be contacted unintentionally include those parts within 12,7 mm (0,5 in) of the bottom surface of a gauge constructed as shown in figure 101DV, when the gauge is centered in the handle opening as shown in figure 102DV (C = D). For a handle having one end open, the end of the gauge is to be located 50,8 mm (2 in) from the inside surface of the closed end. If the shape of the underside of the handle prevents contact of the gauge at both points A and B simultaneously, measurements are to be made first with one point and then with the other point in contact with the underside of the handle.

11.8DV.3.3 With reference to 11.8DV.1(c) and footnote n of table 3DV, item 13, a part is not considered likely to be contacted unintentionally if it is recessed or set back 3,2 mm (1/8 in) or more from an opening having at least one dimension not larger than 9,5 mm (3/8 in).

*20.2DV D1 Modification of 20.2DV of the UL part 1:*

The articulate probe of figure 12DV shall ~~replace the test finger of figure 1~~ be applied without appreciable force for these products.

UL 60745-2-3

February 25, 2022

**BSR/UL 60745-2-3 Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-3: Particular Requirements for Grinders, Polishers and Disk-Type Sanders**

1. Revise Cl. 20.101.1DV to allow for application of 62841-2-3 testing requirements

**PROPOSAL**

**2 Normative reference**

**2DV D2 Modification: Add the following normative references to Clause 2 of the Part 2:**

**CSA C22.2 No. 62841-2-3:21**

**Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-3: Particular Requirements for Hand-Held Grinders, Disc-Type Polishers and Disc-Type Sanders**

**UL 62841-2-3**

**Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery – Safety – Part 2-3: Particular Requirements for Hand-Held Grinders, Disc-Type Polishers and Disc-Type Sanders**

20.101 All **WHEEL GUARDS** specified in accordance with 8.12.2 b) 104) shall have sufficient mechanical strength to prevent the wheel fragments from being ejected towards the operator in the event of the wheel breakage.

*Compliance is checked by submitting three samples of any recommended guard to the test specified in 20.101.1 to 20.101.4. At the manufacturer's discretion, the test may be conducted with three guards but less than three separate **GRINDERS**. After the test, the tool shall meet the acceptance criteria of 20.101.5.*

**20.101DV D2 Modification: Replace Clauses 20.101 – 20.101.5 of the Part 2 with Clauses 20.101 – 20.103 and Annex AA of UL 62841-2-3:**

**When UL 62841-2-3 clauses for the instruction manual are referenced in these clauses the following cross-reference chart shall be used to properly apply the appropriate clause from UL 62841-2-3.**

**CSA/UL 62841-2-3 Cross-Reference to CSA/UL 60745-2-3**

<b><u>CSA/UL 62841-2-3 Instruction Manual Clauses</u></b>	<b><u>Equivalent CSA/UL 60745-2-3 Clause to be Used</u></b>
<b><u>8.14.2 a) 101)</u></b>	<b><u>8.12.2 a) 101 8.12.2 b) 104)</u></b>
<b><u>8.14.2 a) 104)</u></b>	<b><u>8.12.2 a) 102)</u></b>
<b><u>8.14.2 b) 102)</u></b>	<b><u>8.12.2 b) 102)</u></b>
<b><u>8.14.2 b) 104)</u></b>	<b><u>8.12.2 a) 105)</u></b>

20.101.1 The guard shall be mounted and securely fixed to the **GRINDER** in accordance with the instructions of 8.12.2 b) 105). If the guard is adjustable, it shall be positioned as close as possible to 30° (in a range of ±10°) from the neutral or the symmetrical wheel covering position against the direction of the wheel's rotation or to its maximum setting if the adjustable range is less than 30°. See Figures 106A and 106B.

The maximum thickness grinding wheel recommended by the manufacturer with a diameter equal to the **RATED CAPACITY** of the **GRINDER** shall be mounted to the spindle in accordance with the instructions.

The **GRINDER** shall be operated at rated voltage and no-load for a minimum of 5 min. The speed of the wheel is measured and recorded.

**20.101.1DV D2 Modification: Delete the last two paragraphs of Clause 20.101.1 of the Part 2:**

**The requirements in the last two paragraphs do not apply.**

**20.101.1DV D2 Deletion: Delete Clause 20.101.1 of the Part 2:**

**Clause 20.101.1 does not apply. See Clause 20.101.**

20.101.2 A wheel as specified in 20.101.1 shall be notched into four equal segments (quadrants). For wheel Types 1, 27, 28, 29, 41 and 42, the cut is directed from the outer edge radially towards the centre (see Figure 107). For wheel Types 6 and Type 11, the cut starts across the working surface towards the mounting end (see Figure 108).

The width of each notch shall not exceed 2,5 mm. The extend of the notches shall allow for the centrifugal forces to cause the wheel to disintegrate at a speed equal to or greater than either the speed established in 20.101.1 or 90% of the **RATED SPEED** of the **GRINDER**, whichever is higher. The notched grinding wheel is mounted to the spindle in accordance with the instructions.

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**NOTE** The following Table 102 provides typical pre-cut length ranges for standard wheel dimensions.

**Table 102 - Typical pre-cut length ranges for standard wheel dimensions**

Wheel type	Wheel dimensions (diameter x thickness x bore diameter)	Average burst speed	Pre-cut length range
	mm	min <sup>-1</sup>	mm
Type 27	115 x 6 x 22,23	10 200	37,6 to 39,6
	125 x 6 x 22,23	9 800	42,7 to 45,7
	180 x 6 x 22,23	5 900	67,3 to 72,1
	230 x 6 x 22,23	5 700	83,3 to 93,5
Type 11	125 x 50 x 22,23	6 150	28
	150 x 50 x 22,23	5 400	30
Type 1	125 x 25 x 16	6 950	46
	155 x 25 x 16	5 800	57 to 60

**20.101.2DV D2 Modification: Replace Clause 20.101.2 of the Part 2 with the following:**

**The maximum thickness grinding wheel recommended by the manufacturer with a diameter equal to the rated capacity of the grinder shall be notched into four equal segments (quadrants). The width of each notch shall not exceed 2,5 mm. For WHEEL TYPES 1, 27, 28, 29, 41 and 42, the cut is directed from the outer edge radially towards the center (see Figure 107). For WHEEL TYPES 6 and Type 11, the cut starts across the working surface towards the mounting end (see Figure 108).**

**The notched grinding wheel is mounted to the spindle with any mounting means that will allow for the centrifugal forces to cause the wheel to disintegrate. The mounting means shall position the wheel at the same location relative to the guard as would occur with the flange recommended in accordance with the instructions in 8.12.2b).**

**20.101.2DV D2 Deletion: Delete Clause 20.101.2 of the Part 2:**

**Clause 20.101.2 does not apply. See Clause 20.101DV.**

*20.101.4 While monitoring the wheel speed with a tachometer, the voltage to the tool is gradually increased until the speed specified in 20.101.2 is achieved. If the wheel does not disintegrate, stop the GRINDER, increase the length of the pre-cuts and repeat the test above until the wheel bursts.*

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*Dust, minor fragments and segments remaining in the guard are ignored. Most of the four major segments will be captured by the clay wall. If any of the major segments rebound from the clay, the segment's impression must be identified. Afterward, the segments of the wheel in the clay wall are removed.*

NOTE Typically, the wheel will burst within 5 min.

**~~20.101.4DV D2 Modification: Replace Clause 20.101.4 of the Part 2 with the following:~~**

~~While monitoring the wheel speed with a tachometer, the voltage to the tool is gradually increased until the higher of the speeds established in 19.6 or 90 % of the RATED SPEED of the grinder is achieved. If the wheel does not disintegrate at this specified speed, at the manufacturer's option:~~

- ~~— either continue further increasing the speed; or~~
- ~~— stop the grinder, increase the length of the pre-cuts and repeat the test above until the wheel bursts at or above the speed specified in this clause.~~

*20.101.5 The guard and the fasteners or the guard's mounting hardware shall remain in place. Deformation, hairline cracks or scratches and gouges to the guard and mounting hardware are acceptable.*

*As a result of the wheel's disintegration, the guard shall not have rotated in the direction of the wheel rotation by more than 90° (see Figures 106A and 106B). If the guard covers 360° of the wheel's periphery, the 90° limitation on the guard's rotation is not applicable.*

*The impression of the impact in the clay wall from the major segments shall be within the fragment zone. The fragment zone is defined by extending a straight line through the midpoints of the two side handles onto the clay wall facing the unguarded wheel in the position of the GRINDER just prior to the wheel bursting (see Figure 110A).*

**~~20.101.5DV D2 Modification: Replace Clause 20.101.5 of the Part 2 with the following:~~**

~~The wheel guard has met the requirements of 20.101 if the following results have been achieved:~~

- ~~a) the wheel burst speed was at or higher than required by first paragraph of 20.101.4;~~
- ~~b) the guard and the fasteners or the guard's mounting hardware shall remain in place. Deformation, hairline cracks or scratches and gouges to the guard and mounting hardware are acceptable;~~

~~c) the guard shall not have rotated in the direction of the wheel rotation by more than 90° (see Figures 106A) and 106B). If the guard covers 360° of the wheel's periphery, the 90° limitation on the guard's rotation is not applicable;~~

~~d) the impression of the impact in the clay wall from the major segments shall be within the fragment zone. There shall be no major fragments or impressions of fragments outside the fragment zone (the operator zone). The fragment zone is defined by extending a straight line through the midpoints of the two side handles onto the clay wall facing the unguarded wheel in the position of the grinder just prior to the wheel bursting (see Figure 110A). After the wheel's disintegration, most of the four major wheel segments will be captured by the clay wall. If any of the major segments rebound from the clay, the segment's impression must be identified. Dust, minor fragments and segments remaining in the guard are ignored.~~

~~If the wheel guard has failed any of the b) – d) requirements at the wheel burst speed that was above the speed specified by the first paragraph of 20.101.4c, the test shall be repeated with the increased length of segment pre-cuts.~~

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UL 60745-2-13

February 25, 2022

## BSR/UL UL 60745-2-13 Standard for Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-13: Particular Requirements for Chain Saws

### 1. Revision to address consistency of safety instructions for chainsaws

#### PROPOSAL

##### 1 Scope

This clause of Part 1 is applicable, except as follows:

##### *Addition:*

This standard applies to chain saws for cutting wood and designed for use by one person. This standard does not cover chain saws designed for use in conjunction with a guide-plate and riving knife or in any other way such as with a support or as a stationary or transportable machine.

##### **1DV DR Modification: For the United States of America only, modify the last paragraph of Clause 1 of the Part 2 as follows:**

This standard does not apply to chain saws for tree service as defined in ISO 11681-2, pole cutters and pruners.

##### **1DV D1 Deleted February 17, 2017**

K.8.12.1.1 Replacement of the 3rd bullet of part 2:

- **Hold the power tool by insulated gripping surfaces only, because the saw chain may contact hidden wiring.** Saw chains contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

##### **K.8.12.1.1DV1 DR Replacement: Replace 5th bullet of Clause 8.12.1.1 with the following:**

- **Do not operate a chain saw, on a ladder, from a rooftop, or any unstable support.** Operation of a chain saw in this manner could result in serious personal injury.

##### **K.8.12.1.1 DV2 DR Addition: Add to Clause K.8.12.1.1:**

**Do not operate a chain saw in a tree unless you have been specifically trained to do so.** Operation of a chain saw in a tree without proper training could increase the risk of serious personal injury.