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## CONTENTS





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

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

***Revision***

BSR/AHRI Standard 1350 (I-P)-202x, Mechanical Performance Rating of Central Station Air-Handling Unit Casings (revision of ANSI/AHRI Standard 1350 (I-P)-2014)

Stakeholders: Groups and individuals known to be, or who have indicated that they are, directly and materially affected by the standard, including manufacturers, testers, regulators, trade or professional organizations, and associations representing consumers.
Project Need: The purpose of this standard is to establish for Central Station Air-Handling Unit Casings: Definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.
Scope: This standard applies to the enclosure which houses the fans, coils, filters, and other components of the Central Station Air-Handling Unit (CSAHU). This standard establishes the test requirements, rating requirements, and minimum data requirements for Casing Deflection Rating Class, Casing Air Leakage Class, Thermal Transmittance Class with Leakage, Thermal Transmittance Class without Leakage, Thermal Bridging Class, Filter Bypass Leakage, and Acoustic Insulation of Casing.

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

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

***Revision***

BSR/AHRI Standard 1351 (SI)-202x, Mechanical Performance Rating of Central Station Air-Handling Unit Casings (revision of ANSI/AHRI Standard 1351 (SI)-2015)

Stakeholders: Groups and individuals known to be, or who have indicated that they are, directly and materially affected by the standard, including manufacturers, testers, regulators, trade or professional organizations, and associations representing consumers.
Project Need: The purpose of this standard is to establish for Central Station Air-Handling Unit Casings: definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.
Scope: This standard applies to the enclosure which houses the fans, coils, filters, and other components of the Central Station Air-Handling Unit (CSAHU). This standard establishes the test requirements, rating requirements, and minimum data requirements for Casing Deflection Rating Class, Casing Air Leakage Class, Thermal Transmittance Class with Leakage, Thermal Transmittance Class without Leakage, Thermal Bridging Class, Filter Bypass Leakage, and Acoustic Insulation of Casing.

## ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 www.astm.org
Contact: Laura Klineburger; accreditation@astm.org

***New Standard***

BSR/ASTM E1546-202x, Guide for Development of Fire-Hazard-Assessment Standards (new standard)

Stakeholders: Fire Safety Engineering industries.
Project Need: This guide is intended for use by those undertaking the development of fire-hazard-assessment standards. Such standards are expected to be useful to manufacturers, architects, specification writers, and authorities having jurisdiction.
Scope: This guide covers the development of fire-hazard-assessment standards. This guide is directed toward development of standards that will provide procedures for assessing fire hazards harmful to people, animals, or property.

## CPA (Composite Panel Association)

19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176 www.CompositePanel.org
Contact: Gary Heroux; gheroux@cpamail.org

***Revision***

BSR A208.1-202x, Particleboard (revision of ANSI A208.1-2016)

Stakeholders: Wood products, furniture, cabinets, fixtures.
Project Need: Update the formaldehyde emission requirements and referenced test methods along with editorial corrections.
Scope: The purpose of the Standard is to establish a nationally recognized voluntary consensus standard for particleboard which provides a common basis for understanding throughout the particleboard industry and among and between those specifying and using industry products.

## CPA (Composite Panel Association)

19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176 www.CompositePanel.org
Contact: Gary Heroux; gheroux@cpamail.org

***Revision***

BSR A208.2-202x, Medium Density Fiberboard (MDF) for Interior Applications (revision of ANSI A208.2-2016)

Stakeholders: Wood products, furniture, cabinets, fixtures.
Project Need: Update the formaldehyde emission requirements and referenced test methods along with editorial corrections.
Scope: The purpose of this Standard is to establish a nationally recognized voluntary consensus standard for medium density fiberboard (MDF) for interior applications which can serve as a common basis for understanding among those manufacturing, specifying, or using MDF products.

## NEMA (ASC W1) (National Electrical Manufacturers Association)

1300 North 17th Street, Rosslyn, VA 22209 www.nema.org
Contact: Khaled Masri; Khaled.Masri@nema.org

***New Standard***

BSR/NEMA EW 6-202x, Precautionary Labeling for Arc-Welding and Cutting Products (new standard)

Stakeholders: Arc welding manufacturers, testing labs, and industrial users.
Project Need: Provide a basis of common understanding within the electric welding and cutting industry regarding precautionary labeling of arc welding and cutting products
Scope: This publication specifies the wording, format, and symbols for precautionary labeling used on arc welding and cutting products. This publication also includes factors to be considered in deciding whether precautionary labeling is necessary.

## TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201 www.tiaonline.org
Contact: Teesha Jenkins; standards-process@tiaonline.org

***New National Adoption***

BSR/TIA 455-133-B-202x, FOTP-133 IEC-60793-1-22, Optical Fibres - Part 1-22: Measurement Methods and Test Procedures Length Measurement (identical national adoption of IEC-60793-1-22)

Stakeholders: Users and manufacturers of telecom, datacom.
Project Need: Adopt identical ISO or IEC Standard.
Scope: Adopt IEC-60793-1-22 Optical Fibres Part 1-22. This part of IEC 60793 establishes uniform requirements for measuring the length and elongation of optical fibre (typically within cable).

## UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062 https://ul.org/
Contact: Megan Monsen; megan.monsen@ul.org

***New Standard***

BSR/UL 498B-202x, Standard for Safety for Receptacles with Integral Switching Means (new standard)

Stakeholders: Manufacturers of receptacles with integral switching means, retailers, consumers, trade associations, government, AHJs.
Project Need: Based on stakeholder input, the UL 498 standards are being reorganized and created to improve efficiencies by coordinating requirements for attachment plugs and receptacles along the specific construction, performance, and application. Obtaining national recognition of this standard supports regional and international certification programs and the overall ongoing and planned harmonization activity for attachment plugs and receptacles.
Scope: These requirements cover a receptacle with integral switching means rated 600 V or less, used in ordinary dry locations and intended for connection to a branch circuit in accordance with the National Electrical Code, NFPA 70. A receptacle with integral switching means covered by this standard shall meet the following requirements: (a) No voltage greater than 600 V above ground will be present in the device; (b) An isolation transformer, if provided, will generally furnish power at a lower potential than the primary voltage; (c) The output of the device will not be located in a circuit operating at greater than 600 V above ground; (d) The switching device shall be integral to the receptacle; (e) A receptacle that is marked with the symbol shown in Table sa8.1 Reference No. 2 and does not employ an integral switching means intended for energy management and building automation, are covered by the Standard for Attachment Plugs and Receptacles, UL 498. It also covers receptacles with integral switching means intended for energy management and building automation, in accordance with Article 406 of the National Electrical Code, NFPA 70. This standard may supplement other UL standards.

# Call for Comment on Standards Proposals

## American National Standards

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

**Ordering Instructions for "Call-for-Comment" Listings**

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

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

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## Comment Deadline: April 18, 2021

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

1791 Tullie Circle, NE, Atlanta, GA 30329 p: (678) 539-1214 w: www.ashrae.org

#### *Addenda*

BSR/ASHRAE Addendum 62.2b-202x, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2019)

Disentangling the requirements of ventilation rate, control, and operation makes the Standard easier to follow, enforce, and maintain over time. This proposed addendum clears up the issue that SSPC 62.2 has been struggling with regarding to whom the controls should be readily accessible. It is now clear that the dwelling unit occupant is the target of the readily accessible requirement except in the case of continuous local mechanical exhaust in multifamily dwelling units.

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

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

1791 Tullie Circle, NE, Atlanta, GA 30329 p: (678) 539-1214 w: www.ashrae.org

#### *Addenda*

BSR/ASHRAE Addendum 62.2e-202x, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2019)

This proposed addendum makes the air leakage rate for compartmentalization in multifamily dwellings more stringent. This change will reduce air and contaminant transfer between dwelling units in multifamily buildings, that is the intent of this section of Standard 62.2. The achievability of the proposed leakage rate is supported by recent measurements of air leakage rates in several thousand multifamily units.

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

# Comment Deadline: April 18, 2021

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

180 Technology Parkway NW, Peachtree Corners, GA 30092 p: (678) 539-2114 w: www.ashrae.org

### *Addenda*

BSR/ASHRAE Addendum q to BSR/ASHRAE Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This addendum adds the zeotropic refrigerant blend R-473A to Tables 4-2 and D-2.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

180 Technology Parkway NW, Peachtree Corners, GA 30092 p: (678) 539-2114 w: www.ashrae.org

### *Addenda*

BSR/ASHRAE Addendum r to BSR/ASHRAE Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This addendum adds the zeotropic refrigerant blend R-427C to Tables 4-2 and D-2.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

180 Technology Parkway NW, Peachtree Corners, GA 30092 p: (678) 539-2114 w: www.ashrae.org

### *Addenda*

BSR/ASHRAE Addendum s to BSR/ASHRAE Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This addendum adds the zeotropic refrigerant blend R-448B to Tables 4-2 and D-2.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

## IIAR (International Institute of Ammonia Refrigeration)

1001 N. Fairfax Street, Suite 503, Alexandria, VA 22314-1797 p: (703) 312-4200 w: www.iiar.org

### *Revision*

BSR/IIAR 2-202x, Standard for the Design of Safe Ammonia Refrigeration Systems (revision of ANSI/IIAR 2-2014)

This safety standard provides the minimum requirements for the design of safe closed-circuit ammonia refrigeration systems.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: www.iiar.org or eric.smith@iiar.org

# Comment Deadline: April 18, 2021

## NENA (National Emergency Number Association)

1700 Diagonal Road, Suite 500, Alexandria, VA 22314 p: (727) 312-3230 w: www.nena.org

### *New Standard*

BSR/NENA STA-010.3-202X, NENA i3 Standard for Next Generation 9-1-1 (new standard)

This work will review and add to the current NENA standards for the Next Generation 9-1-1 core service architecture that provides call and data handling functionality between 9-1-1 call originators and 9-1-1 call centers (PSAPs). The existing NENA standard has been developed over the 2003-2014 timeframe to replace E9-1-1 functionality throughout at least the USA, and has been the model for European and Canadian work for similar purposes. This is known in short form as "i3". The work under this PINS is for version 3 of the NG 9-1-1 core services architectural standard and NENA's intent is to submit the entirety of NENA i3v3 standard to ANSI development process accreditation. This work is expected to be accomplished in three related NENA Working Groups. This work will update current NENA standards in the areas of: (1) Network Routing, Performance and Security; (2) Core, Ancillary and Transitional Functions; (3) Data Definition, including Location, GIS, and Additional Data, including XML; (4) Next Generation 9-1-1 PSAP Multimedia and Other Data Interfaces; (5) PSAP Management-Testing interface; and (6) Potential of Convergence of i3 Standard for Use with an IMS-Based Emergency Services IP Network. To contribute to this work, contact standardscoord@nena.org.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: download & comment at https://dev.nena.org/higherlogic/ws/public/document?document_id=22277&wg_id=eca27a3d-a4c7-4d67-bb06-b3bb241df44e or email standardscoord@nena.org

## NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

### *Revision*

BSR/NSF 455-4-202x (i23r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211 Current Good Manufacturing Practice for Finished Pharmaceuticals, well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Rachel Brooker; rbrooker@nsf.org

## NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

### *Revision*

BSR/NSF 455-4-202x (i24r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211 Current Good Manufacturing Practice for Finished Pharmaceuticals, well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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Send comments (with optional copy to psa@ansi.org) to: Rachel Brooker; rbrooker@nsf.org

# Comment Deadline: April 18, 2021

## NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

### *Revision*

BSR/NSF 455-4-202x (i25r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211 Current Good Manufacturing Practice for Finished Pharmaceuticals, well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

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BSR/NSF 455-4-202x (i27r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

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## NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

### *Revision*

BSR/NSF 455-4-202x (i31r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211 Current Good Manufacturing Practice for Finished Pharmaceuticals, well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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## NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

### *Revision*

BSR/NSF 455-4-202x (i33r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211 Current Good Manufacturing Practice for Finished Pharmaceuticals, well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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# Comment Deadline: April 18, 2021

## NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

### *Revision*

BSR/NSF 455-4-202x (i34r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General and 21 CFR Part 211 Current Good Manufacturing Practice for Finished Pharmaceuticals, well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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## UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 p: (919) 549-1851 w: https://ul.org/

### *New National Adoption*

BSR/UL 80079-36-202x, Standard for Safety for Explosive Atmospheres - Part 36: Non-Electrical Equipment for Explosive Atmospheres - Basic Method and Requirements (national adoption with modifications of ISO/IEC 80079-36)

(1) This proposal provides revisions to the proposal document dated September 25, 2020 per comments received.

Click here to view these changes in full
Send comments (with optional copy to 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 p: (919) 549-1851 w: https://ul.org/

### *New National Adoption*

BSR/UL 80079-37-202x, Safety for Explosive Atmospheres - Part 37: Non-Electrical Equipment for Explosive Atmospheres -Non Electrical Type of Protection Constructional Safety c, Control of Ignition Source b Liquid Immersion k (national adoption with modifications of ISO/IEC 80079-37)

(1) This proposal provides revisions to the proposal document dated September 25, 2020 per comments received.

Click here to view these changes in full
Send comments (with optional copy to 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, P.O. Box 13995, Research Triangle Park, NC 27709-3995 p: (919) 549-1391 w: https://ul.org/

### *New Standard*

BSR/UL 62841-2-3-202x, Standard for 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 (new standard)

This proposal for UL 62841-2-3 covers: Proposed Adoption of the First Edition Of IEC 62841-2-3, Standard for 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, as the first edition of UL 62841-2-3.

Click here to view these changes in full
Send comments (with optional copy to 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 18, 2021

## UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada p: (613) 368-4419 w: https://ul.org/

### *Revision*

BSR/UL 444-202X, Standard for Safety for Communications Cables (revision of ANSI/UL 444-2018)

The following topics are being recirculated: (1) PR28579 - Introduction of Optional Suffixes HF, LSHF and ST1; (2) PR29271 - Use of an Additional 14 AWG Conductor in a Multi-conductor Communications Cable; (3) Criteria for FT6 flame test classification; (4) Delete Annex C - Cable substitution; (5) Add a definition – Grounding/Bonding Conductor.

Click here to view these changes in full
Send comments (with optional copy to 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 Pfingsten Road, Northbrook, IL 60062-2096 p: (847) 664-2023 w: https://ul.org/

### *Revision*

BSR/UL 499-202x, Standard for Safety for Electric Heating Appliances (revision of ANSI/UL 499-2017)

This proposal for UL 499 covers: (1) Battery-operated electric heating appliances.

Click here to view these changes in full
Send comments (with optional copy to 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 Pfingsten Road, Northbrook, IL 60062-2096 p: (847) 664-2023 w: https://ul.org/

### *Revision*

BSR/UL 705-202x, Standard for Safety for Power Ventilators (revision of ANSI/UL 705-2019)

This proposal for UL 705 covers: (1) Updating the Standard to Include Additional Requirements for Ventilator for Heat and Smoke Control; (2) Deletion of the reference to withdrawn standard, UL 508C.

Click here to view these changes in full
Send comments (with optional copy to 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 p: (919) 549-0956 w: https://ul.org/

### *Revision*

BSR/UL 1479-202X, Standard for Fire Tests of Penetration Firestops (revision of ANSI/UL 1479-2015)

(1) Water leakage testing (recirculation).

Click here to view these changes in full
Send comments (with optional copy to 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: May 3, 2021

## AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 p: (719) 453-1036 w: www.aafs.org

### *New Standard*

BSR/ASB Std 024-202x, Standard for Training and Certification of Canine Detection of Humans: Location Check Using Prescented Canines (new standard)

This document provides the requirements for pre-scented canine - location check search using a canine team to search for and identify a specific person's (target) scent at a given location. This standard promotes consistency across agencies, departments, and organizations utilizing pre-scented canines' location check search and provide the judicial system optimized protocol. Please note that comments on a re-circulation will only be accepted on revised sections of a document; Comments made to text not revised from the original public comment period will not be accepted.

Single copy price: Free
Obtain an electronic copy from: Redline version, and comments can be viewed on the AAFS Standards Board website at: http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/.
Order from: www.asbstandardsboard.org
Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

## AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 p: (719) 453-1036 w: www.aafs.org

### *New Standard*

BSR/ASB Std 026-202x, Standard for Training and Certification of Canine Detection of Humans: An Aged Trail Using Prescented Canines (new standard)

This document provides the requirements for training, certification, and documentation pertaining to pre-scented canine-aged track/trail search. Pre-scented canine aged trail searches use a canine team (canine and handler) to search for and follow aged trails of a specific person's (target) scent over different surface types. An aged track/trail is a human-scent pathway that has been present for some period of time, typically expressed with a time frame associated with the track/trail (e.g., a 24-hour or older track/trail). Please note that comments on a re-circulation will only be accepted on revised sections of a document; Comments made to text not revised from the original public comment period will not be accepted.

Single copy price: Free
Obtain an electronic copy from: Redline version, and comments can be viewed on the AAFS Standards Board website at: http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/.
Order from: www.asbstandardsboard.org
Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

## AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 p: (719) 453-1036 w: www.aafs.org

### *New Standard*

BSR/ASB Std 027-202x, Standard for Training and Certification of Canine Detection of Humans: Patrol Canine Team (new standard)

This document provides standards for the training, certification, and documentation pertaining to canine teams (canine and handler) trained to search for specific person(s), location(s), and/or article(s) by starting from the last known position. This pertains to trails less than 24 hours old. Please note that comments on a re-circulation will only be accepted on revised sections of a document; Comments made to text not revised from the original public comment period will not be accepted.

Single copy price: Free
Obtain an electronic copy from: www.asbstandardsboard.org
Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

# Comment Deadline: May 3, 2021

## AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 p: (719) 453-1036 w: www.aafs.org

### *New Standard*

BSR/ASB Std 121-202x, Standard for the Analytical Scope and Sensitivity of Forensic Toxicological Urine Testing of Urine in Drug-Facilitated Crime Investigations (new standard)

This document delineates the minimum requirements for target analytes and analytical sensitivity for the forensic toxicological testing of urine specimens collected from alleged victims of drug-facilitated crimes (DFC). This document does not cover the analysis of blood and other evidence that may be collected in DFC cases. Please note that comments on a re-circulation will only be accepted on revised sections of a document; Comments made to text not revised from the original public comment period will not be accepted.

Single copy price: Free
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Order from: www.asbstandardsboard.org
Send comments (with optional copy to psa@ansi.org) to: asb@aafs.org

## ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 p: (410) 990-4460 w: www.abycinc.org

### *New Standard*

BSR/ABYC H-27-202x, Seacocks, Thru-Hull Fittings, and Drain Plugs (new standard)

This standard applies to the selection of materials, design, construction, and installation of seacocks, thru-hull fittings, drain plugs, and other fittings intended for the passage of water in or out of a boat that penetrate the hull at or below the maximum-heeled waterline. This standard applies to all boats.

Single copy price: $50.00
Obtain an electronic copy from: www.abycinc.org
Send comments (with optional copy to psa@ansi.org) to: comments@abycinc.org

## ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 p: (410) 990-4460 w: www.abycinc.org

### *Revision*

BSR/ABYC H-5-202x, Boat Load Capacity (revision of ANSI/ABYC H-5-2017)

This standard applies to all boats less than 26 ft (7.9 m) in length overall (LOA) for the determination of maximum weight and persons capacity. This standard applies to all boats with upper decks for the determination of the capacity of upper decks.

Single copy price: $50.00
Obtain an electronic copy from: www.abycinc.org
Send comments (with optional copy to psa@ansi.org) to: comments@abycinc.org

## ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 p: (410) 990-4460 w: www.abycinc.org

### *Revision*

BSR/ABYC H-26-202x, Powering of Boats (revision of ANSI/ABYC H-26-2016)

This standard applies to boats propelled by machinery, including catamarans, and addresses the maximum power for propulsion of outboard boats; the suitability of power installed in inboard boats; and maneuvering speed.

Single copy price: $50.00
Obtain an electronic copy from: www.abycinc.org
Send comments (with optional copy to psa@ansi.org) to: comments@abycinc.org

# Comment Deadline: May 3, 2021

## ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 p: (410) 990-4460 w: www.abycinc.org

### *Revision*

BSR/ABYC H-33-202x, Diesel Fuel Systems (revision of ANSI/ABYC H-33-2016)

This standard addresses the design, choice of materials, construction, installation, repair, and maintenance of permanently installed diesel fuel systems and applies to all parts of permanently installed diesel fuel systems from the fuel fill opening to the point of connection to the propulsion engine and/or to any auxiliary equipment on all boats with diesel engines.

Single copy price: $50.00
Obtain an electronic copy from: www.abycinc.org
Send comments (with optional copy to psa@ansi.org) to: comments@abycinc.org

## AISI (American Iron and Steel Institute)

3425 Drighton Court, Bethlehem, PA 18020-1335 p: (610) 691-6334 w: www.steel.org

### *New Standard*

BSR/AISI S250-202x, North American Standard for Thermal Transmittance of Building Envelopes with Cold-Formed Steel Framing (new standard)

This Standard applies to the overall thermal transmittance (U-factor) of building envelopes containing cold-formed steel framing. This Standard is intended to be used to determine thermal transmittance (U-factors) for assessing the energy code compliance of building envelopes for the following: (a) floor assemblies, (b) above-grade wall assemblies, and (c) roof/ceiling assemblies.

Single copy price: Free
Obtain an electronic copy from: hchen@steel.org
Send comments (with optional copy to psa@ansi.org) to: hchen@steel.org

## APA (APA - The Engineered Wood Association)

7011 South 19th Street, Tacoma, WA 98466 p: (253) 620-7467 w: www.apawood.org

### *Revision*

BSR/APA PRR 410-202x, Standard for Performance-Rated Engineered Wood Rim Boards (revision of ANSI/APA PRR 410-2016)

This standard provides dimensions and tolerances, performance requirements, test methods, quality assurance, and trademarking for engineered wood rim boards.

Single copy price: Free
Obtain an electronic copy from: borjen.yeh@apawood.org
Order from: Borjen Yeh; borjen.yeh@apawood.org
Send comments (with optional copy to psa@ansi.org) to: Same

## AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 p: (800) 443-9353 308 w: www.aws.org

### *New Standard*

BSR/AWS B2.1-4-217-202x, Standard Welding Procedure Specification (SWPS) for Gas Tungsten Arc Welding of Chromium-Molybdenum Steel (M-4/P-4, Group 1 or 2), ER80S-B2, 1/8 inch [3 mm] through 1/2 inch [13 mm] Thick, As-Welded Condition; 1/8 inch [3 mm] through 3/4 inch [19 mm] Thick, PWHT Condition, Primarily Pipe Applications (new standard)

This standard contains the essential welding variables for chromium-molybdenum steel in the thickness range of 1/8 inch [3 mm] through 1/2 inch [13 mm] in the as-welded condition; or 1/8 inch [3 mm] through 3/4 inch [19 mm] in the postweld heat-treated (PWHT) condition, using manual gas tungsten arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove welds. This standard welding procedure specification (SWPS) was developed primarily for pipe applications.

Single copy price: $136.00
Obtain an electronic copy from: jrosario@aws.org
Order from: Jennifer Rosario; jrosario@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

# Comment Deadline: May 3, 2021

## AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 p: (800) 443-9353 308 w: www.aws.org

### *New Standard*

BSR/AWS B2.1-4-218-202x, Standard Welding Procedure Specification (SWPS) for Shielded Metal Arc Welding of Chromium-Molybdenum Steel (M-4/P-4, Group 1 or 2), E8018-B2, 1/8 inch [3 mm] through 1/2 inch [13 mm] Thick, As-Welded Condition; 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, PWHT Condition, Primarily Pipe Applications (new standard)

This standard contains the essential welding variables for chromium-molybdenum steel in the thickness range of 1/8 inch [3 mm] through 1/2 inch [13 mm] in the as-welded condition; or 1/8 inch [3 mm] through 1-1/2 inch [38 mm] in the postweld heat-treated (PWHT) condition, using manual shielded metal arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove welds. This standard welding procedure specification (SWPS) was developed primarily for pipe applications.

Single copy price: $136.00
Obtain an electronic copy from: jrosario@aws.org
Order from: Jennifer Rosario; jrosario@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

## AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 p: (800) 443-9353 308 w: www.aws.org

### *New Standard*

BSR/AWS B2.1-4-219-202x, Standard Welding Procedure Specification (SWPS) for Gas Tungsten Arc Welding followed by Shielded Metal Arc Welding of Chromium-Molybdenum Steel (M-4/P-4, Group 1 or 2), ER80S-B2 and E8018-B2, 1/8 inch [3 mm] through 1/2 inch [13 mm] Thick, As-Welded Condition; 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, PWHT Condition, Primarily Pipe Applications (new standard)

This standard contains the essential welding variables for chromium-molybdenum steel in the thickness range of 1/8 inch [3 mm] through 1/2 inch [13 mm] in the as-welded condition; or 1/8 inch [3 mm] through 1-1/2 inch [38 mm] in the postweld heat-treated (PWHT) condition, using manual gas tungsten arc welding followed by manual shielded metal arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove welds. This standard welding procedure specification (SWPS) was developed primarily for pipe applications.

Single copy price: $136.00
Obtain an electronic copy from: jrosario@aws.org
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Send comments (with optional copy to psa@ansi.org) to: Same

## AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 p: (800) 443-9353 308 w: www.aws.org

### *New Standard*

BSR/AWS B2.1-4-220-202x, Standard Welding Procedure Specification (SWPS) for Gas Tungsten Arc Welding (Consumable Insert Root) of Chromium-Molybdenum Steel (M-4/P-4, Group 1 or 2), IN515 and ER80S-B2, 1/8 inch [3 mm] through 1/2 inch [13 mm] Thick, As-Welded Condition; 1/8 inch [3 mm] through 3/4 inch [19 mm] Thick, PWHT Condition, Primarily Pipe Applications (new standard)

This standard contains the essential welding variables for chromium-molybdenum steel in the thickness range of 1/8 inch [3 mm] through 1/2 inch [13 mm] in the as-welded condition; or 1/8 inch [3 mm] through 3/4 inch [19 mm] in the postweld heat-treated (PWHT) condition, using manual gas tungsten arc welding with a consumable insert root. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove welds. This standard welding procedure specification (SWPS) was developed primarily for pipe applications.

Single copy price: $136.00
Obtain an electronic copy from: jrosario@aws.org
Order from: Jennifer Rosario; jrosario@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

# Comment Deadline: May 3, 2021

## AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 p: (800) 443-9353 308 w: www.aws.org

### *New Standard*

BSR/AWS B2.1-4-221-202x, Standard Welding Procedure Specification (SWPS) for Gas Tungsten Arc Welding (Consumable Insert Root) followed by Shielded Metal Arc Welding of Chromium-Molybdenum Steel (M-4/P-4, Group 1 or 2), IN515, ER80S-B2, and E8018-B2, 1/8 inch [3 mm] through 1/2 inch [13 mm] Thick, As-Welded Condition; 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, PWHT Condition, Primarily Pipe Applications (new standard)

This standard contains the essential welding variables for chromium-molybdenum steel in the thickness range of 1/8 inch [3 mm] through 1/2 inch [13 mm] in the as-welded condition; or 1/8 inch [3 mm] through 1-1/2 inch [38 mm] in the postweld heat-treated (PWHT) condition, using manual gas tungsten arc welding with a consumable insert root, followed by shielded metal arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove welds. This standard welding procedure specification (SWPS) was developed primarily for pipe applications.

Single copy price: $136.00
Obtain an electronic copy from: jrosario@aws.org
Order from: Jennifer Rosario; jrosario@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

## AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 p: (800) 443-9353 308 w: www.aws.org

### *Revision*

BSR/AWS B2.1/B2.1M-202x, Specification for Welding Procedure and Performance Qualification (revision of ANSI/AWS B2.1/B2.1M-2013)

This specification provides the requirements for qualification of welding procedure specifications, welders, and welding operators for manual, semiautomatic, mechanized, and automatic welding. The welding processes included are electrogas welding, electron beam welding, electroslag welding, flux-cored arc welding, gas metal arc welding, gas tungsten arc welding, laser beam welding, oxyfuel gas welding, plasma arc welding, shielded metal arc welding, stud arc welding, and submerged arc welding. Base metals, filler metals, qualification variables, welding designs, and testing requirements are also included.

Single copy price: $132.00
Obtain an electronic copy from: jrosario@aws.org
Order from: Jennifer Rosario; jrosario@aws.org
Send comments (with optional copy to psa@ansi.org) to: Same

## BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 p: (860) 944-4264 w: www.buildershardware.com

### *Reaffirmation*

BSR/BHMA A156.7-2016 (R202x), Standard for Template Hinge Dimensions (reaffirmation of ANSI/BHMA A156.7-2016)

The purpose of this Standard is to establish nationally recognized dimensions for builders template hinges which are used on metal doors and frames. This Standard is intended to assure the interchangeability of template hinges and to provide a uniform method for template identification.

Single copy price: $36.00
Obtain an electronic copy from: mptierney@snet.net
Order from: Michael Tierney; mtierney@kellencompany.com
Send comments (with optional copy to psa@ansi.org) to: Same

# Comment Deadline: May 3, 2021

## BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 p: (860) 944-4264 w: www.buildershardware.com

### *Revision*

BSR/BHMA A156.1-202x, Standard for Butts and Hinges (revision of ANSI/BHMA A156.1-202x)

This Standard establishes requirements for butts and hinges. Cycle tests, lateral and vertical wear tests, friction tests, strength tests, material and dimensional requirements are included.

Single copy price: $36.00
Obtain an electronic copy from: mptierney@snet.net
Order from: Michael Tierney; mtierney@kellencompany.com
Send comments (with optional copy to psa@ansi.org) to: Same

## FCI (Fluid Controls Institute)

1300 Sumner Avenue, Cleveland, OH 44115 p: (216) 241-7333 w: www.fluidcontrolsinstitute.org

### *Revision*

BSR/FCI 79-1-202x, Standard for Proof of Pressure Ratings for Pressure Regulators and Temperature Regulators (revision of ANSI/FCI 79-1-2016)

The purpose of this standard is to create common guidelines for establishing pressure ratings for use by manufacturers, users, specifiers and approval bodies in order to provide consistent pressure containment integrity.

Single copy price: Free
Obtain an electronic copy from: fci@fluidcontrolsinstitute.org
Send comments (with optional copy to psa@ansi.org) to: Leslie Schraff, fci@fluidcontrolsinstitute.org

## NEMA (ASC C136) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 p: (703) 841-3234 w: www.nema.org

### *New Standard*

BSR C136.52-202x, LED Drivers with Integral Revenue Grade Energy Measurement Means (new standard)

This standard describes methods and requirements for the measurement of energy consumption and the reporting of the consumption for outdoor lighting applications in a standard data format to meet revenue grade requirements using drivers or ballasts with built-in energy measurement and reporting features. This standard does not address the communication of the data captured from the point of measurement. This standard also only addresses power consumed; it does not address two-way metering.

Single copy price: $45.00
Obtain an electronic copy from: david.richmond@nema.org
Order from: David Richmond; David.Richmond@nema.org
Send comments (with optional copy to psa@ansi.org) to: Same

## NEMA (ASC C136) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 p: (703) 841-3234 w: www.nema.org

### *Stabilized Maintenance*

BSR C136.26-2010 (S202x), Multiple Parallel Wired Sockets (stabilized maintenance of ANSI C136.26-2010 (S2020))

This standard covers medium and mogul screw base sockets as used in multiple fixture circuits or in luminaires designed and intended for parallel wired circuits and used in lighting roadways and other areas open to general use by the public.

Single copy price: $50.00
Obtain an electronic copy from: david.richmond@nema.org
Order from: David Richmond; David.Richmond@nema.org
Send comments (with optional copy to psa@ansi.org) to: Same

# Comment Deadline: May 3, 2021

## NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: 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 2022 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 (for example ww.nfpa.org/101next), can easily access the document's information page. All Comments on standards in the Annual 2022 Revision Cycle must be submitted by May 11, 2021. 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.

***Revision***

BSR/NFPA 25-202x, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems (revision of ANSI/NFPA 25-2020)

1.1 Scope. This document establishes the minimum requirements for the periodic inspection, testing, and maintenance of water-based fire protection systems and the actions to undertake when changes in occupancy, use, process, materials, hazard, or water supply that potentially impact the performance of the water-based system are planned or identified. 1.1.1 Coordination with NFPA 72 Testing Requirements. This standard does not address all of the inspection, testing, and maintenance of the electrical components of the automatic fire detection equipment used to activate preaction and deluge systems that are addressed by NFPA 72 . 1.1.1.1 The inspection, testing, and maintenance required by this standard and NFPA 72 shall be coordinated so that the system operates as intended. 1.1.1.2* All inspections, testing, and maintenance required by NFPA 72 shall conform to NFPA 72, and all inspections, testing, and maintenance required by this standard shall conform to this standard. A.1.1.1.2 There are times when a single inspection or test can meet the requirements of both NFPA 25 and NFPA 72 (e.g., operation of a tamper switch). This standard does not necessarily require that two separate inspections or tests be conducted on the same component, provided the inspection or test…

Obtain an electronic copy from: www.nfpa.org/25Next
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# Comment Deadline: May 3, 2021

## NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: 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 2022 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 (for example ww.nfpa.org/101next), can easily access the document's information page. All Comments on standards in the Annual 2022 Revision Cycle must be submitted by May 11, 2021. 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.

### *Revision*

BSR/NFPA 86-202x, Standard for Ovens and Furnaces (revision of ANSI/NFPA 86-2019)

This standard shall apply to Class A, Class B, Class C, and Class D ovens, dryers, and furnaces; thermal oxidizers; and any other heated enclosure used for processing of materials and related equipment. A.1.1 Explosions and fires in fuel-fired and electric heat utilization equipment constitute a loss potential in life, property, and production. This standard is a compilation of guidelines, rules, and methods applicable to the safe operation of this type of equipment. Conditions and regulations that are not covered in this standard — such as toxic vapors; hazardous materials; noise levels; heat stress; and local, state, and federal regulations (EPA and OSHA) — should be considered in the design and operation of furnaces. Most failures can be traced to human error. The most significant failures include inadequate training of operators, lack of proper maintenance, and improper application of equipment. Users and designers must utilize engineering skill to bring together that proper combination of controls and training necessary for the safe operation of equipment. This standard classifies furnaces as follows: (1) Class A ovens and furnaces are heat utilization equipment operating at approximately atmospheric pressure wherein there is a potential explosion or fire hazard that could be occasioned by…

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

## NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

### *New Standard*

BSR/NFPA 715-202x, Standard for the Installation of Fuel Gases Detection and Warning Equipment (new standard)

This standard shall be concerned with life safety and protection of property. This standard shall cover the selection, design, application, installation, location, performance, inspection, testing, and maintenance of fuel gas detection and warning equipment in buildings and structures. This standard shall contain requirements for the selection, installation, operation, and maintenance of equipment that detects concentrations of fuel gases that could pose a life or property safety risk.

Obtain an electronic copy from: www.nfpa.org/715Next
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# Comment Deadline: May 3, 2021

## NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

### *Revision*

BSR/NFPA 130-202x, Standard for Fixed Guideway Transit and Passenger Rail Systems (revision of ANSI/NFPA 130-2020)

This standard shall cover life safety from fire and fire protection requirements for fixed guideway transit and passenger rail systems, including, but not limited to, stations, trainways, emergency ventilation systems, vehicles, emergency procedures, communications, and control systems. Vehicle maintenance facilities are not addressed by this standard because requirements for that occupancy are provided in other codes and standards. Where vehicle maintenance facilities are integrated or co-located with occupancies covered by this standard, special considerations beyond this standard shall be necessary. Fixed guideway transit and passenger rail stations shall pertain to stations accommodating only passengers and employees of the fixed guideway transit and passenger rail systems and incidental occupancies in the stations. This standard establishes minimum requirements for each of the identified subsystems. This standard shall not cover requirements for the following: (1) Conventional freight systems; (2) Buses and trolley coaches; (3) Circus trains; (4) Tourist, scenic, historic, or excursion operations; (5) Any other system of transportation not included in the definition of fixed guideway transit system (see 3.3.63.1) or passenger rail system (see 3.3.63.2); and (6) Shelter stops…

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

## UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 p: (919) 549-1851 w: https://ul.org/

### *Reaffirmation*

BSR/UL 60079-7-2017 (R202x), Standard for Safety for Explosive Atmospheres - Part 7: Equipment Protection by Increased Safety e (reaffirm a national adoption ANSI/UL 60079-7-2017)

This proposal for UL 60079-7 covers: Reaffirmation and continuance of the fifth edition of the Standard for Safety for Explosive Atmospheres – Part 7: Equipment Protection by Increased Safety “e”, UL 60079-7, as an standard.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) 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 p: (919) 549-1851 w: https://ul.org/

### *Reaffirmation*

BSR/UL 920001-2011 (R202x), Standard for Safety for Performance Requirements for Toxic Gas Detectors (reaffirmation of ANSI/UL 920001-2011 (R2015))

This proposal for UL 920001 covers: Reaffirmation and continuance of the second edition of the Standard for Safety for Performance Requirements for Toxic Gas Detectors, UL 920001, as an standard.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

# Comment Deadline: May 18, 2021

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Reaffirmation*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ASME B30.19-2016 (R202x), Cableways (reaffirmation of ANSI/ASME B30.19-2016)

The scope of B30.19 applies to all load transporting, hoisting, and lowering cable-supported systems operating on and supported from track cable(s).

Single copy price: $65.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Kathleen Peterson, petersonk@asme.org

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Reaffirmation*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ASME B89.1.8-2011 (R202x), Performance Evaluation of Displacement-Measuring Laser Interferometers (reaffirmation of ANSI/ASME B89.1.8-2011 (R2016))

This Standard establishes requirements and methods for the specification, evaluation, setup, and use of laser interferometers.

Single copy price: $46.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Justin Cassamassino, cassasmassinoj@asme.org

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Reaffirmation*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ASME B107.600-2016 (R202x), Screwdrivers and Screw Bits (reaffirmation of ANSI/ASME B107.600-2016)

This standard provides performance and safety requirements for non-insulated hand-driven screwdrivers and hand-driven hexagonal shank screwdriver bits intended for manual operation in driving or removing screws. The screwdrivers and bits are of the types normally used by cabinetmakers, carpenters, sheet metal workers, production workers, mechanics, etc.

Single copy price: $82.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Daniel Papert, papertd@asme.org

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Reaffirmation*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ASME HRT-1-2016 (R202x), Rules for Hoisting, Rigging, and Transporting Equipment for Nuclear Facilities (reaffirmation of ANSI/ASME HRT-1-2016)

This Standard provides requirements for the design and use of hoisting, rigging, and transporting equipment used from the time nuclear plant components are delivered at the point of receipt for the plant until the operating phase of the plant. Such equipment shall be designed in accordance with the guidelines of this Standard, or alternatively, in accordance with accepted industry or consensus standards applicable to the type of handling equipment use. This standard applies to the following types of load handling: (1) Those performed with single-load path handling systems; and (2) Those performed with dual load path handling systems.

Single copy price: $40.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Jihoon Oh, ohj@asme.org

# Comment Deadline: May 18, 2021

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Reaffirmation*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ASME PTC 6A-2000 (R202x), Appendix to PTC 6 on Steam Turbines (reaffirmation of ANSI/ASME PTC 6A-2000 (R2016))

This Appendix has been prepared to facilitate the calculation and correction of turbine test results by furnishing numerical examples of the procedures outlined in The Performance Test Code on Steam Turbines, ASME PTC 6.

Single copy price: $132.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Donnie Alonzo, dalonzo@asme.org

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Stabilized Maintenance*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ASME PTC 4.2-1969 (S202x), Coal Pulverizers (stabilized maintenance of ANSI/ASME PTC 4.2-1969 (R2016))

This Code establishes procedures for conducting performance tests for coal pulverizers to determine capacity, fineness of product, raw coal feed, grindability, moisture, sizing, and power consumption. This Code applies to the pulverizing system as a whole, including all the component parts necessary to take the raw coal, hot air, and tempering air at the system inlet and deliver pulverized coal in proper mixture with air and/or flue gas at the desired temperature at the outlet of the system.

Single copy price: $88.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Donnie Alonzo, dalonzo@asme.org

## ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

### *Withdrawal*

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

ANSI/ASME EA-2-2009 (R2015), Energy Assessment for Pumping Systems (withdrawal of ANSI/ASME EA-2-2009 (R2015))

This Standard covers pumping systems, which are defined as one or more pumps and those interacting or interrelating elements that together accomplish the desired work of moving a fluid. A pumping system thus generally includes pump(s), driver, drives, distribution piping, valves, sealing systems, controls, instrumentation, and end-use equipment such as heat exchangers. This Standard addresses open- and closed-loop pumping systems typically used in industry, and is also applicable to other applications.

Single copy price: $43.00
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (with optional copy to psa@ansi.org) to: Justin Cassamassino, cassasmassinoj@asme.org

# Withdrawal of Technical Reports Registered with ANSI

Withdrawal of a Technical Report that is registered with ANSI is determined by the responsible ANSI-Accredited Standards Developer. The following Technical Reports are hereby withdrawn in accordance with the Developers own procedures.

## RIA (Robotic Industries Association)

900 Victors Way, Suite 140, Ann Arbor, MI 48108-5210 p: (734) 994-6088 w: www.robotics.org

RIA TR R15.406-2014, Technical Report for Industrial Robots and Robot Systems - Safety Requirements - Safeguarding

# Final Actions on American National Standards

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

### AARST (American Association of Radon Scientists and Technologists)

527 Justice Street, Hendersonville, NC 28739 p: (202) 830-1110 w: www.aarst.org

***Addenda***

ANSI/AARST MALB 01-Addenda-2021, Protocol for Conducting Measurements of Radon and Radon Decay Products In Schools and Large Buildings (addenda to ANSI/AARST MALB-2014) Final Action Date: 3/8/2021

***Addenda***

ANSI/AARST MAMF 01-Addenda-2021, Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings (addenda to ANSI/AARST MAMF-2017) Final Action Date: 3/8/2021

### ASA (ASC S1) (Acoustical Society of America)

1305 Walt Whitman Road, Suite 300, Melville, NY 11747 p: (516) 576-2341 w: www.acousticalsociety.org

***New National Adoption***

ANSI/ASA S1.22-2021/IEC 60263-2020, Scales and sizes for plotting frequency characteristics and polar diagrams (identical national adoption of IEC 60263:2020) Final Action Date: 3/8/2021

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

2950 Niles Road, Saint Joseph, MI 49085 p: (269) 757-1213 w: https://www.asabe.org/

***New National Adoption***

ANSI/ASABE AD4254-6-2020, Agricultural machinery - Safety - Part 6: Sprayers and liquid fertilizer distributors (national adoption of ISO 4254-6:2020 with modifications and revision of ANSI/ASABE AD4254 -6:2009 AUG2013 (R2017)) Final Action Date: 3/8/2021

### ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org

***Revision***

ANSI/ASME B31Q-2021, Pipeline Personnel Qualification (revision of ANSI/ASME B31Q-2018) Final Action Date: 3/9/2021

***Revision***

ANSI/ASME BPVC Section II-2021, Part A - Ferrous Material SpecificationsPart B - Nonferrous Material SpecificationsPart D - Materials Properties (revision of ANSI/ASME BPVC Section II-2019) Final Action Date: 3/11/2021

### ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

***Reaffirmation***

ANSI/ASTM E1323-2015 (R2021), Guide for Evaluating Laboratory Measurement Practices and the Statistical Analysis of the Resulting Data (reaffirmation of ANSI/ASTM E1323-2015) Final Action Date: 9/1/2020

***Revision***

ANSI/ASTM D1655-2021, Specification for Aviation Turbine Fuels (revision of ANSI/ASTM D1655-2020B) Final Action Date: 9/22/2020

## ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

***Revision***
ANSI/ASTM D3241-2021, Test Method for Thermal Oxidation Stability of Aviation Turbine Fuels (revision of ANSI/ASTM D3241-2020A) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM D4054-2021, Practice for Evaluation of New Aviation Turbine Fuels and Fuel Additives (revision of ANSI/ASTM D4054-2020A) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM D5452-2021, Test Method for Particulate Contamination in Aviation Fuels by Laboratory Filtration (revision of ANSI/ASTM D5452-2012) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM D6299-2021, Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance (revision of ANSI/ASTM D6299-2020) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM D7566-2021, Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons (revision of ANSI/ASTM D7566-2020A) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM F1361-2021, Test Method for Performance of Open Deep Fat Fryers (revision of ANSI/ASTM F1361-2017) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM F1696-2021, Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines (revision of ANSI/ASTM F1696-2018) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM F1920-2021, Test Method for Performance of Rack Conveyor Commercial Dishwashing Machines (revision of ANSI/ASTM F1920-2015) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM F2238-2021, Test Method for Performance of Rapid Cook Ovens (revision of ANSI/ASTM F2238 -2016) Final Action Date: 9/22/2020

***Revision***
ANSI/ASTM F2520-2021, Specification for Reach-in Refrigerators, Freezers, Combination Refrigerator/Freezers, and Thaw Cabinets (revision of ANSI/ASTM F2520-2005 (R2012)) Final Action Date: 8/25/2020

***Revision***
ANSI/ASTM F2861-2021, Test Method for Enhanced Performance of Combination Oven in Various Modes (revision of ANSI/ASTM F2861-2017) Final Action Date: 9/22/2020

**AWWA (American Water Works Association)**
6666 W. Quincy Avenue, Denver, CO 80235 p: (303) 347-6178 w: www.awwa.org

***Revision***
ANSI/AWWA B304-2021, Liquid Oxygen for Ozone Generation for Water, Wastewater, and Reclaimed Water Systems (revision of ANSI/AWWA B304-2018) Final Action Date: 3/11/2021

**CSA (CSA America Standards Inc.)**
8501 E. Pleasant Valley Road, Cleveland, OH 44131 p: (216) 524-4990 w: www.csagroup.org

***Addenda***
ANSI Z21.90a-2021/CSA 6.24A-2021, Gas Convenience Outlets and Optional Enclosures, same as CSA 6.24a (addenda to ANSI Z21.90-2019) Final Action Date: 3/9/2021

**DSI (Dental Standards Institute, Inc.)**
109 Bushaway Road, Suite 100, Wayzata, MN 55391 p: (763) 290-0004 w: https://dentalstandardsinstitute.com/

***New Standard***
ANSI/DSI DCNST1.1-2020, DSI DCNST1.1:20XX Verification and Displaying of Dental Patient Chart Notes (DCN) (new standard) Final Action Date: 3/8/2021

**ESTA (Entertainment Services and Technology Association)**
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 p: (212) 244-1505 w: www.esta.org

***New Standard***
ANSI ES1.7-2021, Event Safety Requirements - Weather Preparedness (new standard) Final Action Date: 3/8/2021

***Reaffirmation***
ANSI E1.15-2006 (R2021), Entertainment Technology--Recommended Practices and Guidelines for the Assembly and Use of Theatrical Boom & Base Assemblies (reaffirmation of ANSI E1.15-2006 (R2016)) Final Action Date: 3/8/2021

**IEEE (ASC C63) (Institute of Electrical and Electronics Engineers)**
445 Hoes Lane, Piscataway, NJ 08854 p: (732) 562-3874 w: www.ieee.org

***New Standard***
ANSI C63.30-2021, Standard for compliance testing of Wireless Power Transfer Products (new standard) Fina Action Date: 3/8/2021

**NEMA (ASC C8) (National Electrical Manufacturers Association)**
1300 North 17th Street, Suite 900, Arlington, VA 22209 p: (571) 426-3226 w: www.nema.org

***Reaffirmation***
ANSI/NEMA HP 9-2014 (R2021), Electrical and Electronic Ethylene-Propylene Diene Elastomer (EPDM) Insulated Hook-Up Wire, Types EP (Rated 125°C; 600 V) and EPD (Rated 125°C; 5000 V) (reaffirmation of ANSI/NEMA HP 9-2014) Final Action Date: 3/9/2021

***Revision***
ANSI NEMA HP 4-2021, Electrical and Electronic FEP (Fluorinated Ethylene Propylene) Insulated High Temperature Hook-Up Wire, Types KT (250 Volt), K (600 Volt), and KK (1000 Volt) (revision of ANSI/NEMA HP 4-2012) Final Action Date: 3/9/2021

**NSF (NSF International)**
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org

***New Standard***
ANSI/NSF 456-2021 (i1r1), Vaccine Storage (new standard) Final Action Date: 3/8/2021

***Revision***
ANSI/NSF 4-2021 (i31r1), Commercial Cooking, Rethermalization, and Powered Hot Food Holding and Transportation Equipment (revision of ANSI/NSF 4-2019) Final Action Date: 3/8/2021

***Revision***
ANSI/NSF 6-2021 (i18r1), Dispensing Freezers (revision of ANSI/NSF 6-2018) Final Action Date: 3/8/2021

***Revision***
ANSI/NSF 8-2021 (i19r1), Commercial Powered Food Preparation Equipment (revision of ANSI/NSF 8-2018) Final Action Date: 3/8/2021

***Revision***
ANSI/NSF 25-2021 (i15r1), Vending Machines for Food and Beverages (revision of ANSI/NSF 25-2017) Final Action Date: 3/8/2021

**PLASTICS (Plastics Industry Association)**
1425 K Street, NW, Suite 500, Washington, DC 20005 p: (202) 974-5217 w: www.plasticsindustry.org

***Revision***
ANSI/PLASTICS B151.27-2021, Safety Requirements for Robot / Injection Molding Machine Systems (revision and redesignation of ANSI/SPI B151.27-2013) Final Action Date: 3/8/2021

**UL (Underwriters Laboratories)**
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 p: (919) 549-0973 w: https://ul.org/

***Revision***
ANSI/UL 154-2021, Standard for Carbon-Dioxide Fire Extinguishers (revision of ANSI/UL 154-2009 (R2019)) Final Action Date: 3/9/2021

***Revision***
ANSI/UL 493-2021, Standard for Safety for Thermoplastic-Insulated Underground Feeder and Branch-Circuit Cables (revision of ANSI/UL 493-2020) Final Action Date: 3/11/2021

***Revision***
ANSI/UL 2166-2021, Standard for Halocarbon Clean Agent Extinguishing System Units (revision of ANSI/UL 2166-2020) Final Action Date: 3/12/2021

***Revision***
ANSI/UL 2167-2021, Standard for Water Mist Nozzles for Fire Protection Service (revision of ANSI/UL 2167 -2011 (R2017)) Final Action Date: 3/9/2021

# Call for Members (ANS Consensus Bodies)

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

**ABYC (American Boat and Yacht Council)**
613 Third Street, Suite 10, Annapolis, MD 21403 p: (410) 990-4460 w: www.abycinc.org
Sara Moulton; smoulton@abycinc.org

BSR/ABYC H-33-202x, Diesel Fuel Systems (revision of ANSI/ABYC H-33-2016)

New consensus body members sought in the following categories: manufacturer - boats, trade associations, insurance/survey, specialist service, government, consumer/general interest.

**AHRI (Air-Conditioning, Heating, and Refrigeration Institute)**
2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 p: (703) 293-4887 w: www.ahrinet.org
Karl Best; kbest@ahrinet.org

BSR/AHRI Standard 1350 (I-P)-202x, Mechanical Performance Rating of Central Station Air-handling Unit Casings (revision of ANSI/AHRI Standard 1350 (I-P)-2014)

BSR/AHRI Standard 1351 (SI)-202x, Mechanical Performance Rating of Central Station Air-handling Unit Casings (revision of ANSI/AHRI Standard 1351 (SI)-2015)

**ASME (American Society of Mechanical Engineers)**
Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 p: (212) 591-8489 w: www.asme.org
Terrell Henry; ansibox@asme.org

ANSI/ASME EA-2-2009 (R2015), Energy Assessment for Pumping Systems (withdrawal of ANSI/ASME EA -2-2009 (R2015))

BSR/ASME PTC 4.2-1969 (S202x), Coal Pulverizers (stabilized maintenance of ANSI/ASME PTC 4.2-1969 (R2016))

BSR/ASME PTC 6A-2000 (R202x), Appendix to PTC 6 on Steam Turbines (reaffirmation of ANSI/ASME PTC 6A-2000 (R2016))

**BHMA (Builders Hardware Manufacturers Association)**
17 Faulkner Drive, Niantic, CT 06357 p: (860) 944-4264 w: www.buildershardware.com
Michael Tierney; mtierney@kellencompany.com

BSR/BHMA A156.1-202x, BHMA A156.1 Standard for Butts and Hinges (revision of ANSI/BHMA A156.1 -202x)

BSR/BHMA A156.7-2016 (R202x), Standard for Template Hinge Dimensions (reaffirmation of ANSI/BHMA A156.7-2016)

**CPA (Composite Panel Association)**
19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176 p: (301) 606-6740 w: www.CompositePanel.org
Gary Heroux; gheroux@cpamail.org

BSR A208.1-202x, Particleboard (revision of ANSI A208.1-2016)

**FCI (Fluid Controls Institute)**
1300 Sumner Avenue, Cleveland, OH 44115 p: (216) 241-7333 w: www.fluidcontrolsinstitute.org
Leslie Schraff; fci@fluidcontrolsinstitute.org

BSR/FCI 79-1-202x, Standard for Proof of Pressure Ratings for Pressure Regulators and Temperature Regulators (revision of ANSI/FCI 79-1-2016)

**NEMA (ASC C136) (National Electrical Manufacturers Association)**
1300 North 17th Street, Suite 900, Rosslyn, VA 22209 p: (703) 841-3234 w: www.nema.org
David Richmond; David.Richmond@nema.org

BSR C136.26-2010 (S202x), Multiple Parallel Wired Sockets (stabilized maintenance of ANSI C136.26 -2010 (S2020))

BSR C136.52-202x, LED Drivers with integral Revenue Grade Energy Measurement Means (new standard)

**NEMA (ASC W1) (National Electrical Manufacturers Association)**
1300 North 17th Street, Rosslyn, VA 22209 p: (703) 841-3278 w: www.nema.org
Khaled Masri; Khaled.Masri@nema.org

BSR/NEMA EW 6-202x, Precautionary Labeling for Arc-Welding and Cutting Products (new standard)

**NSF (NSF International)**
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-6866 w: www.nsf.org
Rachel Brooker; rbrooker@nsf.org

BSR/NSF 455-4-202x (i23r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF 455-4-202x (i24r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF 455-4-202x (i25r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF 455-4-202x (i27r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF 455-4-202x (i31r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF 455-4-202x (i33r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF 455-4-202x (i34r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

**TIA (Telecommunications Industry Association)**
1320 North Courthouse Road, Suite 200, Arlington, VA 22201 p: (703) 907-7706 w: www.tiaonline.org
Teesha Jenkins; standards-process@tiaonline.org

BSR/TIA 455-133-B-202x, FOTP-133 IEC-60793-1-22 Optical Fibres Part 1-22: Measurement Methods and Test Procedures Length Measurement (identical national adoption of IEC-60793-1-22)

**UL (Underwriters Laboratories)**
333 Pfingsten Road, Northbrook, IL 60062 p: (847) 664-1292 w: https://ul.org/
Megan Monsen; megan.monsen@ul.org

BSR/UL 498B-202x, Standard for Safety for Receptacles with Integral Switching Means (new standard)

# Call for Members (ANS Consensus Bodies)

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

## ANSI Accredited Standards Developer

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

AAMI (www.aami.org) is actively seeking participation in the following standards development work and in the interest categories specified:

BSR/AAMI/ISO 5840-1-202x, Cardiovascular implants - Cardiac valve prostheses - Part 1: General requirements (identica national adoption of ISO 5840-1:2020 and revision of ANSI/AAMI/ISO 5840-1-2015).
US adoption of AAMI/ISO 5840-1-202x, Cardiovascular implants - Cardiac valve prostheses - Part 1: General requirements. Applicable to heart valve substitutes intended for implantation and provides general requirements. Subsequent parts of the ISO 5840 series provide specific requirements. Applicable to newly developed and modified heart valve substitutes and to the accessory devices, packaging, and labelling required for their implantation and for determining the appropriate size of the heart valve substitute to be implanted. Seeking industry, user, regulator and general interest participation.

BSR/AAMI/ISO 5840-2-202x, Cardiovascular implants - Cardiac valve prostheses - Part 2: Surgically implanted heart valve substitutes (identical national adoption of ISO 5840-2:2020 and revision of ANSI/AAMI/ISO 5840-2-2015).
US adoption of AAMI/ISO 5840-2-202x, Cardiovascular implants - Cardiac valve prostheses - Part 2: Surgically implanted heart valve substitutes. Applicable to heart valve substitutes intended for implantation in human hearts, generally requiring cardiopulmonary bypass and generally with direct visualization. Applicable to both newly developed and modified surgical heart valve substitutes and to the accessory devices, packaging, and labelling required for their implantation and for determining the appropriate size of the surgical heart valve substitute to be implanted. Seeking industry, user, regulator and general interest participation.

BSR/AAMI/ISO 5840-3-202x, Cardiovascular implants - Cardiac valve prostheses - Part 3: Heart valve substitutes implanted by transcatheter techniques (national adoption of ISO 5840-3:2020 with modifications and revision of ANSI/AAMI/ISO 5840-3-2012).
US adoption of AAMI/ISO 5840-3-202x, Cardiovascular implants - Cardiac valve prostheses - Part 3: Heart valve substitutes implanted by transcatheter techniques. Applicable to all devices intended for implantation as a transcatheter heart valve substitute. Applicable to transcatheter heart valve substitutes and to the accessory devices, packaging and labelling required for their implantation and for determining the appropriate size of heart valve substitute to be implanted. Seeking industry, user, regulator and general interest participation.

BSR/AAMI/ISO 25539-2-202x, Cardiovascular implants - Endovascular devices - Part 2: Vascular stents (identical national adoption of ISO 25539-2:2020, Cardiovascular implants - Endovascular devices - Part 2: Vascular stents, and revision of ANSI/AAMI/ISO 25539-2-2012).
US adoption of AAMI/ISO 25539-2-202x, Cardiovascular implants - Endovascular devices - Part 2: Vascular stents. Specifies requirements for the evaluation of stent systems (vascular stents and delivery systems) and requirements with respect to nomenclature, design attributes and information supplied by the manufacturer, based upon current medical knowledge. Guidance for the development of in vitro test methods is included. Seeking industry, user, regulator and general interest participation.

# Call for Members (ANS Consensus Bodies)

## ANSI Accredited Standards Developer

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

The InterNational Committee for Information Technology Standards (INCITS), an ANSI accredited SDO, is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal de jure IT standards. INCITS' mission is to promote the effective use of Information and Communication Technology through standardization in a way that balances the interests of all stakeholders and increases the global competitiveness of the member organizations.
The INCITS Executive Board serves as the consensus body with oversight of its 40+ Technical Committees. Additionally, the INCITS Executive Board has the international leadership role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

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

Membership in all interest categories is always welcome; however, the INCITS Executive Board seeks to broaden its membership base in the following categories:
• Service Providers
• Users
• Standards Development Organizations and Consortia
• Academic Institutions

## ANSI Accredited Standards Developer

### SCTE (Society of Cable Telecommunications Engineers)

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

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

Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at www.scte.org or by e-mail from standards@scte.org.

# American National Standards (ANS) Announcements

## Corrections

### NENA (National Emergency Number Association

**Changes to Designations & Titles of Proposed ANS**

The National Emergency Number Association (NENA) has revised the designations and titles of the following standards projects under development. Upon their request, APCO has been removed as a co-sponsor for these proposals.

BSR/NENA STA-024.1-201X, NENA Standard for the Conveyance of Emergency Incident Data Documents (EIDDs) between Agencies, Systems and Applications

BSR/NENA STA-025.1-201X, NENA NG9- 1-1 Management Considerations for EIDD Interoperability

Please direct inquiries to Delaine Arnold; darnold@nena.org

# Accreditation Announcements (Standards Developers)

## Approval of Reaccreditation – ASD

### ALI (ASC A14) - American Ladder InstituteSafety in the Design, Construction, Testing, Selection, Care & use of Ladders

**Effective March 16, 2021**

The reaccreditation of Accredited Standards Committee A14, Safety in the Design, Construction, Testing, Selection, Care & use of Ladders has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on ASC A14-sponsored American National Standards, effective March 16, 2021. For additional information, please contact the Secretariat of ASC A14: Ms. Pam O'Brien, Executive Director, American Ladder Institute, 330 N. Wabash Avenue, Suite 2000, Chicago, IL 60611-6610; phone: 312.673.5752; email: pobrien@americanladderinstitute.org

## Approval of Reaccreditation – ASD

### CAPA - Certified Automotive Parts Association

**Effective March 17, 2021**

The reaccreditation of the Certified Automotive Parts Association (CAPA), an ANSI Member and Accredited Standards Developer, has been approved at the direction of ANSI's Executive Standards Council under its recently revised operating procedures for documenting consensus on CAPA-sponsored American National Standards, effective March 17 2021. For additional information, please contact: Ms. Bernadette Kronberg, Program Manager, Transportation Technologies, Intertek, 4700 Broadmoor SE, Ste. 200, Kentwood, MI 49512; phone: 616.656.7483; email:bernadette.kronberg@intertek.com

# Meeting Notices (Standards Developers)

## ANSI Accredited Standards Developer

### Natural Gas Transportation Technical Committee (CSA Group)

**Thursday, April 22, 2021**

CSA Group will hold the Natural Gas Transportation Technical Committee meeting by WebEx on Thursday, April 22, 2021 from 1 pm to 3 pm Eastern. For more information on the meeting and the agenda, contact Julie Cairns atjulie.cairns@csagroup.org.

# American National Standards (ANS) Process

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

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

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

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

If you have a question about the ANS process and cannot find the answer, please email us at: psa@ansi.org . Please also visit Standards Boost Business at www.standardsboostbusiness.org for resources about why standards matter, testimonials, case studies, FAQs and more.

If you are interested in purchasing an American National Standard, please visit https://webstore.ansi.org

# American National Standards Under Continuous Maintenance

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

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

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

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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)**
- **IES (Illuminating Engineering Society)**
- **ITI (InterNational Committee for Information Technology Standards)**
- **MHI (Material Handling Industry)**
- **NAHBRC (NAHB Research Center, Inc.)**
- **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, select “American National Standards Maintained Under Continuous Maintenance.” Questions? psa@ansi.org.

# ANSI-Accredited Standards Developers Contacts

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment 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 Standards Action Editor at standact@ansi.org.

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# ISO & IEC Draft International Standards

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

**COMMENTS**

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

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

**ORDERING INSTRUCTIONS**

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

## ISO Standards

### ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

ISO/DIS 81060-3.2, Non-invasive sphygmomanometers - Part 3: Clinical investigation of continuous automated measurement type - 4/29/2021, $112.00

### APPLICATIONS OF STATISTICAL METHODS (TC 69)

ISO/DIS 3951-1, Sampling procedures for inspection by variables - Part 1: Specification for single sampling plans indexed by acceptance quality limit (AQL) for lot-by-lot inspection for a single quality characteristic and a single AQL - 5/24/2021, $165.00

### BIOTECHNOLOGY (TC 276)

ISO/DIS 20397-1, Biotechnology - General requirements for massively parallel sequencing - Part 1: Nucleic acid and library preparation - 5/24/2021, $67.00

### CLEANING EQUIPMENT FOR AIR AND OTHER GASES (TC 142)

ISO/DIS 10121-3, Test methods for assessing the performance of gas-phase air cleaning media and devices for general ventilation - Part 3: Classification system for GPACDs applied to treatment of outdoor air - 5/29/2021, $82.00

### CLINICAL LABORATORY TESTING AND IN VITRO DIAGNOSTIC TEST SYSTEMS (TC 212)

ISO/DIS 20776-2, Clinical laboratory testing and in vitro diagnostic test systems - Susceptibility testing of infectious agents and evaluation of performance of antimicrobial susceptibility test - Part 2: Evaluation of performance of antimicrobial susceptibility test devices against reference broth micro-dilution - 5/24/2021, $82.00

### CORROSION OF METALS AND ALLOYS (TC 156)

ISO/DIS 24020, Corrosion of metals and alloys - Standard test method for particle-free erosion corrosion of metallic materials by jet-in-slit - 5/27/2021, $53.00

### CRANES (TC 96)

ISO/DIS 12210, Cranes - Anchoring devices for in-service and out-of-service conditions - 5/27/2021, $33.00

### EQUIPMENT FOR FIRE PROTECTION AND FIRE FIGHTING (TC 21)

ISO/DIS 14520-1, Gaseous fire-extinguishing systems - Physical properties and system design - Part 1: General requirements - 6/3/2021, FREE

### ERGONOMICS (TC 159)

ISO/DIS 15537, Principles for selecting and using test persons for testing anthropometric aspects of industrial products and designs - 5/30/2021, $53.00

### FERTILIZERS AND SOIL CONDITIONERS (TC 134)

ISO/DIS 7851, Fertilizers, soil conditioners and beneficial substances - Classification - 5/29/2021, $53.00

### FINE CERAMICS (TC 206)

ISO/DIS 20507, Fine ceramics (advanced ceramics, advanced technical ceramics) - Vocabulary - 5/31/2021, $112.00

### FLOOR COVERINGS (TC 219)

ISO/DIS 24338, Laminate floor coverings - Determination of abrasion resistance - 5/27/2021, $77.00

### INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

ISO/DIS 8000-1, Data quality - Part 1: Overview - 5/31/2021, $82.00

### MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)

ISO/DIS 6368, Petroleum, petrochemical and natural gas industries - Dry gas sealing systems for axial, centrifugal, and rotary screw compressors and expanders - 5/27/2021, $40.00

**OPTICS AND OPTICAL INSTRUMENTS (TC 172)**

ISO/DIS 21395-2, Optics and photonics - Test method for refractive index of optical glasses - Part 2: V-block Refractometer Method - 5/24/2021, $88.00

**PLASTICS (TC 61)**

ISO/DIS 11359-2, Plastics - Thermomechanical analysis (TMA) - Part 2: Determination of coefficient of linear thermal expansion and glass transition temperature - 5/29/2021, $46.00

**QUALITY MANAGEMENT AND CORRESPONDING GENERAL ASPECTS FOR MEDICAL DEVICES (TC 210)**

ISO/DIS 80369-2, Small bore connectors for liquids and gases in healthcare applications - Part 2: Connectors for breathing systems and driving gases applications - 11/8/2029, $119.00

**REFRIGERATION (TC 86)**

ISO/DIS 16494, Heat recovery ventilators and energy recovery ventilators - Method of test for performance - 5/28/2021, $107.00

**ROAD VEHICLES (TC 22)**

ISO/DIS 7876-5, Fuel injection equipment - Vocabulary - Part 5: Common rail fuel injection system - 5/27/2021, $40.00

ISO/DIS 14229-3, Road vehicles - Unified diagnostic services (UDS) - Part 3: Unified diagnostic services on CAN implementation (UDSonCAN) - 5/30/2021, $82.00

**RUBBER AND RUBBER PRODUCTS (TC 45)**

ISO/DIS 4664-1, Rubber, vulcanized or thermoplastic - Determination of dynamic properties - Part 1: General guidance - 5/28/2021, $102.00

**SAFETY OF AMUSEMENT RIDES AND AMUSEMENT DEVICES (TC 254)**

ISO/DIS 17842-2, Safety of amusement rides and amusement devices - Part 2: Operation and use - 5/29/2021, $93.00

**SUSTAINABLE DEVELOPMENT IN COMMUNITIES (TC 268)**

ISO/DIS 37182, Smart community infrastructures - Smart transportation for energy saving in bus transportation services - 5/30/2021, $53.00

**TRADITIONAL CHINESE MEDICINE (TC 249)**

ISO/DIS 23958-1, Traditional Chinese Medicine - Dermal needle for single use - Part 1: Tapping type - 5/24/2021, $53.00

ISO/DIS 23958-2, Traditional Chinese Medicine - Dermal needle for single use - Part 2: Roller Type - 5/31/2021, $53.00

**TRANSFUSION, INFUSION AND INJECTION EQUIPMENT FOR MEDICAL USE (TC 76)**

ISO/DIS 3749, Glass syringes - Determination of extractable Tungsten - 5/30/2021, $46.00

**VULNERABLE CONSUMERS (TC 311)**

ISO/DIS 22458, Consumer vulnerability - Requirements and guidelines for the design and delivery of inclusive service - 5/24/2021, $98.00

**WATER RE-USE (TC 282)**

ISO/DIS 24416, Water reuse in urban areas - Guidelines for water reuse safety evaluation: Stability evaluation of reclaimed water - 5/29/2021, $107.00

**WELDING AND ALLIED PROCESSES (TC 44)**

ISO/DIS 17636-2, Non-destructive testing of welds - Radiographic testing - Part 2: X- and gamma-ray techniques with digital detectors - 5/29/2021, $134.00

ISO/DIS 18278-1, Resistance welding - Weldability - Part 1: General requirements for the evaluation of weldability for resistance spot, seam and projection welding of metallic materials - 5/27/2021, $67.00

# IEC Standards

CABPUB/190/DTS, ISO/IEC DTS 17021-13, Conformity assessment - Requirements for bodies providing audit and certification of management systems - Part 13: Competence requirements for auditing and certification of compliance management systems, 06/04/2021

2/2043/CDV, IEC 60034-1 ED14: Rotating electrical machines - Part 1: Rating and performance, 06/04/2021

4/403/NP, PNW 4-403 ED1: Standardized specifications for Metallic Additive Manufacturing in hydraulic turbines applications: Part 1 - Additive Manufacturing technologies for metallic components of hydraulic turbines, 04/09/2021

4/404/NP, PNW 4-404 ED1: Standardized specifications for Metallic Additive Manufacturing in hydraulic turbines applications: Part 2 - Focus on Wire Arc Additive Manufacturing (WAAM), 04/09/2021

4/405/NP, PNW 4-405 ED1: Standardized specifications for Metallic Additive Manufacturing in hydraulic turbines applications: Part 3 - Focus on Cold Spray Additive Manufacturing (CSAM), 04/09/2021

8A/80/DTS, IEC TS 63102 ED1: Grid code compliance assessment methods for grid connection of wind and PV power plants, 06/04/2021

13/1831/FDIS, IEC 62053-41 ED1: Electricity metering equipment - Particular requirements - Part 41: Static meters for DC energy (classes 0,5 and 1), 04/23/2021

14/1064/CD, IEC 60076-19 ED1: Power transformers - Part 19: Rules for the determination of uncertainties in the measurement of the losses on power transformers, 06/04/2021

34/807/CD, IEC 62493/AMD1 ED2: Amendment 1 - Assessment of lighting equipment related to human exposure to electromagnetic fields, 06/04/2021

34D/1596(F)/CDV, IEC 60598-2-20 ED5: Luminaires - Part 2-20: Particular requirements - Lighting chains, 05/28/2021

45/921/FDIS, IEC 61452 ED2: Nuclear instrumentation - Measurement of activity or emission rate of gamma-ray emitting radionuclides - Calibration and use of germanium-based spectrometers, 04/23/2021

47E/737A/CDV, IEC 60747-5-15 ED1: Semiconductor devices - Part 5 -15: Optoelectronic devices - Light emitting diodes - Test method of the flat-band voltage based on the electroreflectance spectroscopy, 05/07/2021

47E/743A/NP, PNW 47E-743 ED1: Semiconductor devices - Part 5 -16: Optoelectronic devices - Light emitting diodes - Test method of the flat-band voltage based on the photocurrent spectroscopy, 05/21/2021

48B/2876/FDIS, Connectors for electrical and electronic equipment - Product requirements - Part 2-010: Circular connectors - Detail specification for connectors with outer or inner push-pull locking mechanism, based on mating interfaces according to IEC 61076-2 -101, IEC 61076-2-109, IEC 61076-2-111 and IEC 61076-2-113, 04/23/2021

56/1918A/CD, IEC 60300-3-10 ED2: Dependability management - Part 3-10: Application guide - Maintainability and maintenance, 05/07/2021

57/2366/FDIS, IEC 61970-600-1 ED1: Energy management system application program interface (EMS-API) - Part 600-1: Common Grid Model Exchange Specification (CGMES) - Structure and rules, 04/23/2021

57/2367/CD, IEC TS 62351-100-6 ED1: Power systems management and associated information exchange - Data and communications security - Part 100-6: Conformance testing for IEC 62351-6, 06/04/2021

59C/262/CDV, IEC 60704-2-18 ED1: Household and similar electrical appliances - Test code for the determination of airborne acoustica noise - Part 2-18: Particular requirements for electric water heaters, 06/04/2021

59K/328/FDIS, IEC 60350-1/AMD1 ED2: Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring performance, 04/23/2021

59K/329/FDIS, IEC 60350-2/AMD1 ED2: Amendment 1 - Household electric cooking appliances - Part 2: Hobs - Methods for measuring performance, 04/23/2021

65A/995/CD, IEC 63303 ED1: Human-Machine Interfaces for Process Automation Systems, 06/04/2021

82/1845(F)/CDV, IEC 62093 ED2: Power conversion equipment for photovoltaic systems - Design qualification testing, 05/28/2021

86A/2085/CDV, IEC 60794-3-40 ED2: Optical fibre cables - Part 3-40: Outdoor cables - Family specification for cables for storm and sanitary sewers, 06/04/2021

86A/2090/CD, IEC 60793-2-10/AMD1 ED7: Amendment 1 - Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres, 05/07/2021

86B/4445/CD, IEC 61300-2-22 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-22: Tests - Change of temperature, 06/04/2021

86B/4446/CD, IEC 61753-022-13 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 022-13: Fibre optic connectors terminated on multimode fibre for category OP+ HD - Extended outdoor protected environment with additional heat dissipation, 06/04/2021

86B/4447/CD, IEC 61753-022-07 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 022-07: Hardened fibre optic connectors terminated on multimode fibre for category A - Outdoor aerial environment, 06/04/2021

110/1303/NP, PNW 110-1303 ED1: 3D display devices - Part 52-1: Fundamental measurement methods of aerial display - Optical, 05/07/2021

113/586/CD, IEC TS 62565-5-1 ED1: Nanomanufacturing - Material specification - Part 5-1: Nanoporous activated carbon for electrochemical capacitor - Blank detail specification, 06/04/2021

113/587/CD, IEC TS 62565-5-2 ED1: Nanomanufacturing - Material specification - Part 5-2: Nano-enabled electrode of electrochemical capacitor - Blank detail specification, 06/04/2021

120/224/CD, IEC TS 62933-2-2 ED1: Electric Energy Storage Systems; Part 2-2: Unit parameters and testing methods - Applications and Performance testing, 05/07/2021

121A/418/DTS, IEC TS 60947-7-5 ED1: Low-voltage switchgear and controlgear - Part 7-5: Ancillary equipment - Terminal blocks for aluminium conductors, 06/04/2021

JTC1-SC41/213/NP, PNW JTC1-SC41-213 ED1: Internet of Things (IoT) - General principles of evaluation indicator for IoT systems, 06/04/2021

JTC1-SC41/214/NP, PNW JTC1-SC41-214 ED1: Internet of Things (IoT) - Information exchange requirements of IoT-based storage safety monitoring system for major hazard installations of dangerous chemicals, 06/04/2021

JTC1-SC41/215/NP, PNW JTC1-SC41-215 ED1: Internet of Things (IoT) - Overview and general requirements of IoT system for ecological environment monitoring, 06/04/2021

JTC1-SC41/216/FDIS, ISO/IEC 30165 ED1: Internet of Things (IoT) - Real-time IoT framework, 05/07/2021

# Newly Published ISO & IEC Standards

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

## ISO Standards

### AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO 23662:2021, Definitions and technical criteria for foods and food ingredients suitable for vegetarians or vegans and for labelling and claims, $48.00

### BUILDING CONSTRUCTION (TC 59)

ISO 13638:2021, Building and civil engineering sealants - Determination of resistance to prolonged exposure to water, $73.00

### HEALTH INFORMATICS (TC 215)

ISO 17090-1:2021, Health informatics - Public key infrastructure - Part 1: Overview of digital certificate services, $200.00

ISO 17090-3:2021, Health informatics - Public key infrastructure - Part 3: Policy management of certification authority, $175.00

### HYDROMETRIC DETERMINATIONS (TC 113)

ISO 24578:2021, Hydrometry - Acoustic Doppler profiler - Method and application for measurement of flow in open channels from a moving boat, $200.00

### IMPLANTS FOR SURGERY (TC 150)

ISO 13779-3/Amd1:2021, Implants for surgery - Hydroxyapatite - Part 3: Chemical analysis and characterization of crystallinity ratio and phase purity - Amendment 1, $20.00

### JEWELLERY (TC 174)

ISO 11426:2021, Jewellery and precious metals - Determination of gold - Cupellation method (fire assay), $73.00

### OTHER

IWA 34:2021, Womens entrepreneurship - Key definitions and general criteria, $111.00

### PACKAGING (TC 122)

ISO 22982-1:2021, Transport packaging - Temperature-controlled transport packages for parcel shipping - Part 1: General requirements, $73.00

ISO 22982-2:2021, Transport Packaging - Temperature controlled transport packages for parcel shipping - Part 2: General specifications of testing, $73.00

### PAINTS AND VARNISHES (TC 35)

ISO 22553-13:2021, Paints and varnishes - Electro-deposition coatings - Part 13: Determination of re-solving behaviour, $48.00

ISO 22553-14:2021, Paints and varnishes - Electro-deposition coatings - Part 14: Deposition behaviour, $48.00

### PLASTICS (TC 61)

ISO 16929:2021, Plastics - Determination of the degree of disintegration of plastic materials under defined composting conditions in a pilot-scale test, $73.00

ISO 23512:2021, Plastics - Joining of thermoplastic moulded components - Specification of variables for thermal joining processes, $200.00

ISO 23741:2021, Plastics - Determination of spray water delivery during spray cycles when using a xenon arc weathering test apparatus, $48.00

### QUALITY MANAGEMENT AND QUALITY ASSURANCE (TC 176)

ISO 10013:2021, Quality management systems - Guidance for documented information, $111.00

### ROAD VEHICLES (TC 22)

ISO 6727:2021, Road vehicles - Motorcycles and mopeds - Symbols for controls, indicators and tell-tales, $149.00

### SOLID RECOVERED FUELS (TC 300)

ISO 22167:2021, Solid recovered fuels - Determination of content of volatile matter, $111.00

### SURFACE CHEMICAL ANALYSIS (TC 201)

ISO 22581:2021, Surface chemical analysis - Near real-time information from the X-ray photoelectron spectroscopy survey scan - Rules for identification of, and correction for, surface contamination by carbon-containing compounds, $111.00

### TEXTILES (TC 38)

ISO 22818:2021, Textiles - Determination of short-chain chlorinated paraffins (SCCP) and middle-chain chlorinated paraffins (MCCP) in textile products out of different matrices by use of gas chromatography negative ion chemical ionization mass spectrometry (GC-NCI-MS), $111.00

### TRACTORS AND MACHINERY FOR AGRICULTURE AND FORESTRY (TC 23)

ISO 15886-3:2021, Agricultural irrigation equipment - Sprinklers - Part 3: Characterization of distribution and test methods, $149.00

### TYRES, RIMS AND VALVES (TC 31)

ISO 5775-2:2021, Bicycle tyres and rims - Part 2: Rims, $111.00

### WELDING AND ALLIED PROCESSES (TC 44)

ISO 5179:2021, Investigation of brazeability with spreading and gap-filling test, $73.00

## ISO Technical Specifications

### BIOLOGICAL EVALUATION OF MEDICAL AND DENTAL MATERIALS AND DEVICES (TC 194)

ISO/TS 37137-1:2021, Biological evaluation of absorbable medical devices - Part 1: General requirements, $73.00

### FIRE SAFETY (TC 92)

ISO/TS 21397:2021, FTIR analysis of fire effluents in cone calorimeter tests, $73.00

### MICROBEAM ANALYSIS (TC 202)

ISO/TS 21383:2021, Microbeam analysis - Scanning electron microscopy - Qualification of the scanning electron microscope for quantitative measurements, $225.00

### NANOTECHNOLOGIES (TC 229)

ISO/TS 21356-1:2021, Nanotechnologies - Structural characterization of graphene - Part 1: Graphene from powders and dispersions, $200.00

## ISO/IEC JTC 1 Technical Reports

ISO/IEC TR 24029-1:2021, Artificial Intelligence (AI) - Assessment of the robustness of neural networks - Part 1: Overview, $175.00

## ISO/IEC JTC 1, Information Technology

ISO/IEC 10118-1/Amd1:2021, Information technology - Security techniques - Hash-functions - Part 1: General - Amendment 1: Padding methods for sponge functions, $20.00

ISO/IEC 30163:2021, Internet of Things (IoT) - System requirements of IoT/SN technology-based integrated platform for chattel asset monitoring supporting financial services, $149.00

ISO/IEC 39794-6:2021, Information technology - Extensible biometric data interchange formats - Part 6: Iris image data, $200.00

ISO/IEC TS 27022:2021, Information technology - Guidance on information security management system processes, $200.00

# IEC Standards

### AUDIO, VIDEO AND MULTIMEDIA SYSTEMS AND EQUIPMENT (TC 100)

IEC 62827-2 Ed. 1.0 b:2017, Wireless power transfer - Management - Part 2: Multiple device control management, $354.00

IEC 62680-1-2 Ed. 5.0 b:2021, Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification, $443.00

### CABLES, WIRES, WAVEGUIDES, R.F. CONNECTORS, AND ACCESSORIES FOR COMMUNICATION AND SIGNALLING (TC 46)

IEC 61169-60 Ed. 1.0 b:2021, Radio-frequency connectors - Part 60: Sectional specification for RF coaxial connectors with push on mating - Characteristic impedance 50 Ohm (type SMPM), $259.00

### EVALUATION AND QUALIFICATION OF ELECTRICAL INSULATING MATERIALS AND SYSTEMS (TC 112)

IEC 60216-3 Ed. 3.0 b:2021, Electrical insulating materials - Thermal endurance properties - Part 3: Instructions for calculating thermal endurance characteristics, $354.00

S+ IEC 60216-3 Ed. 3.0 en:2021 (Redline version), Electrical insulating materials - Thermal endurance properties - Part 3: Instructions for calculating thermal endurance characteristics, $460.00

### LASER EQUIPMENT (TC 76)

IEC 60825-SER Ed. 1.0 b:2021, Safety of laser products - ALL PARTS, $2842.00

IEC 60825-2 Ed. 4.0 b:2021, Safety of laser products - Part 2: Safety of optical fibre communication systems (OFCSs), $354.00

### POWER SYSTEM CONTROL AND ASSOCIATED COMMUNICATIONS (TC 57)

IEC 61970-SER Ed. 1.0 b:2021, Energy management system application program interface (EMS-API) - ALL PARTS, $4022.00

IEC 62351-SER Ed. 1.0 en:2021, Power systems management and associated information exchange - Data and communications security - ALL PARTS, $5329.00

IEC 61968-13 Ed. 2.0 b:2021, Application integration at electric utilities - System interfaces for distribution management - Part 13: Common distribution power system model profiles, $443.00

IEC 61970-457 Ed. 1.0 en:2021, Energy management system application program interface (EMS-API) - Part 457: Dynamics profile, $443.00

IEC 62325-451-7 Ed. 1.0 b:2021, Framework for energy market communications - Part 451-7: Balancing processes, contextual and assembly models for European style market, $430.00

### ROTATING MACHINERY (TC 2)

IEC 60034-SER Ed. 1.0 b:2021, Rotating electrical machines - ALL PARTS, $8936.00

### SEMICONDUCTOR DEVICES (TC 47)

IEC 61967-4 Ed. 2.0 b:2021, Integrated circuits - Measurement of electromagnetic emissions - Part 4: Measurement of conducted emissions - 1 ohm/150 ohm direct coupling method, $310.00

S+ IEC 61967-4 Ed. 2.0 en:2021 (Redline version), Integrated circuits - Measurement of electromagnetic emissions - Part 4: Measurement of conducted emissions - 1 ohm/150 ohm direct coupling method, $404.00

### SURFACE MOUNTING TECHNOLOGY (TC 91)

IEC 61189-5-301 Ed. 1.0 b:2021, Test methods for electrical materials, printed boards and other interconnection structures and assemblies - Part 5-301: General test methods for materials and assemblies - Soldering paste using fine solder particles, $259.00

### SWITCHGEAR AND CONTROLGEAR AND THEIR ASSEMBLIES FOR LOW VOLTAGE (TC 121)

IEC 60947-SER Ed. 1.0 b:2021, Low-voltage switchgear and controlgear - ALL PARTS, $6915.00

IEC 60947-6-1 Ed. 3.0 b:2021, Low-voltage switchgear and controlgear - Part 6-1: Multiple function equipment - Transfer switching equipment, $392.00

## IEC Technical Specifications

### ROTATING MACHINERY (TC 2)

IEC/TS 60034-31 Ed. 2.0 en:2021, Rotating electrical machines - Part 31: Selection of energy-efficient motors including variable speed applications - Application guidelines, $392.00

# Accreditation Announcements (U.S. TAGs to ISO)

## Approval of Accreditation – U.S. TAG to ISO

### ISO TC 59, Buildings and civil engineering works

**Effective March 10, 2021**

ANSI's Executive Standards Council (ExSC) has formally approved the accreditation of the U.S. Technical Advisory Group to ISO TC 59, Buildings and civil engineering works and the appointment of the International Code Council (ICC) as TAG Administrator, effective March 10, 2021. The TAG will operate under the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures. For additional information, please contact: Ms. Judy Zakreski, Vice President of Global Services, International Code Council, 500 New Jersey Avenue, Sixth Floor, Washington, DC 20001; phone: 202.730.3978; email:jzakreski@iccsafe.org

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

### TC 118/SC 3, Pneumatic tools and machines

**Comment Deadline: April 19, 2021**

The International Staple, Nail and Tool Association (ISANTA), an ANSI Member and Accredited Standards Developer (ASD), has submitted an Application for Accreditation for a new proposed U.S. Technical Advisory Group (TAG) to ISO TC 118/SC 3, Pneumatic tools and machines, and a request for approval as TAG Administrator. The proposed TAG intends to operate using the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures.

To obtain a copy of the TAG application or to offer comments, please contact: Mr. Jeff Henry, Executive Director, ISANTA 8735 W. Higgins Road, Suite 300, Chicago, IL 60631; phone: 847.375.6402; email:jhenry@isanta.org. Please submit any comments to ISANTA by April 19, 2021 (please copy jthompso@ansi.org) .

# International Organization for Standardization (ISO)

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

### Chain of Custody

**Comment Deadline: March 26, 2021**

NEN, the ISO member body for the Netherlands and secretariat of ISO Project Committee 308 (ISO/PC 308), has submitted to ISO a proposal for a new field of ISO technical activity on Chain of custody, with the following scope statement

Standardization in the field of chain of custody (CoC) for products and associated processes with specified characteristics, with the aim of ensuring that associated claims are reliable.

Please note that NEN proposed a new work item proposal on this subject in 2016 which was approved, and the standard ISO 22095:2020 (Chain of custody — General terminology and models) was developed under ISO/PC 308. This proposal is to convert ISO/PC 308 into a technical committee with an extended work program.
Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (sot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, March 26, 2021.
Organizations interested in participating in the U.S. TAG or obtaining additional information should contact the U.S. TAG Administrator, Grace Roh,(Grace.Roh@ul.com) of Underwriters Laboratories.

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

### Roofing and Waterproofing Building Materials

**Comment Deadline: April 23, 2021**

GOST R, the ISO member body for Russia, has submitted to ISO a proposal for a new field of ISO technical activity on Roofing and waterproofing building materials, with the following scope statement:

Standardization of materials and components used for roofs design and construction processes, as well as materials used for waterproofing in construction.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (sot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on April 23, 2021.

# International Organization for Standardization (ISO)

## New Secretariats

### ISO/TC 260 – Human Resource Management

**Comment Deadline: March 26, 2021**

The HR Certification Institute (HRCI) has requested to be delegated the responsibilities of the administration of the ISO/TC 260 secretariat. HCRI which will retain ANSI staff to perform direct administration services related to the ISO/TC 260 Secretariat. The secretariat was previously held by ANSI staff and the U.S. TAG to ISO/TC 260 has approved the secretariat transfer to HCRI.

ISO/TC 260 operates under the following scope:

Standardization in the field of human resource management.

Organizations wishing to comment on the delegation of the responsibilities should contact ANSI's ISO Team (isot@ansi.org).

# Meeting Notices (International)

## ANSI Accredited U.S TAG to ISO

### U.S. TAG to ISO/TC 229 Nanotechnologies

**Virtual Meeting April 14-15, 2021**

The ANSI-Accredited U.S. TAG to ISO/TC 229 Nanotechnologies will meet virtually on April 14-15, 2021. For additional information or to join the U.S. TAG, please contact Heather Benko (hbenko@ansi.org) at ANSI.

# Registration of Organization Names in the United States

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

## Public Review

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

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

# Proposed Foreign Government Regulations

## Call for Comment

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

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

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

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

**BSR/ASHRAE Addendum b**
**to ANSI/ASHRAE Standard 62.2-2019**

**Public Review Draft**

# Proposed Addendum b to Standard 62.2-2019, Ventilation and Acceptable Indoor Air Quality in Residential Buildings

**Second Public Review (February 2021)**
**(Draft shows Proposed Independent Substantive Changes to Previous Public Review Draft)**

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

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

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**ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305**

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# FOREWORD

*Disentangling the requirements of ventilation rate, control, and operation makes the Standard easier to follow, enforce, and maintain over time. This proposed addendum clears up the issue that SSPC 62.2 has been struggling with regarding to whom the controls should be readily accessible. It is now clear that the dwelling unit occupant is the target of the readily accessible requirement except in the case of continuous local mechanical exhaust in multifamily dwelling units.*

***[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the 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 b to 62.2-2019

***Revise Sections 5.1 as shown below.***

**5.1 Local Mechanical Exhaust.** A local mechanical exhaust system shall be designed and installed ~~provided~~ in each kitchen and bathroom and shall be one of the following:

a. A demand-controlled local mechanical exhaust system meeting the requirements of Section 5.2; or

b. A continuous local mechanical exhaust system meeting the requirements of Section 5.3.

**Exception to 5.1(b):** Nonenclosed kitchens shall be provided with a demand-controlled local mechanical exhaust system meeting the requirements of Section 5.2.

**Exception to 5.1:** *Alternative Ventilation*. Other design methods that provide the required minimum exhaust airflow rates shall be permitted when approved by a licensed design professional.

***Revise Sections 5.3 as shown below.***

**5.3 Continuous Local Mechanical Exhaust.** A continuous local mechanical exhaust system shall be designed and installed ~~provided~~. ~~The system may be part of a balanced mechanical ventilation system.~~

**BSR/ASHRAE Addendum e**
**to ANSI/ASHRAE Standard 62.2-2019**

**Public Review Draft**

# Proposed Addendum e to Standard 62.2-2019, Ventilation and Acceptable Indoor Air Quality in Residential Buildings

**First Public Review (February 2021)**
**(Draft shows Proposed Changes to Current Standard)**

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

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

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# FOREWORD

*This proposed addendum makes the air leakage rate for compartmentalization in multifamily dwellings more stringent. This change will reduce air and contaminant transfer between dwelling units in multifamily buildings, that is the intent of this section of Standard 62.2. The achievability of the proposed leakage rate is supported by recent measurements of air leakage rates in several thousand multifamily units.*

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

## Addendum e to 62.2-2019

***Revise Section 6.1.1 as shown below.***

**6.1.1 Compliance for Attached Dwelling Units.** Attached dwelling units, except existing units as described in Normative Appendix A, Section A6, shall demonstrate compliance with Section 6.1 by verifying a leakage rate less than or equal to ~~0.3~~ 0.2 cfm per $ft^2$ (~~150~~ 100 L/s per 100 $m^2$) of the dwelling-unit envelope area by means of a blower door test at a test pressure of 50 Pa. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380. For horizontally attached single-family dwelling units that are being evaluated for the infiltration credit in Section 4.1.2, the procedure specified in Section 4.1.2 shall be an alternative to the procedure of this section.

**BSR/ASHRAE Addendum q**
**to ANSI/ASHRAE Standard 34-2019**

## Public Review Draft

# Proposed Addendum q to Standard 34-2019, Designation and Safety Classification of Refrigerants

**First Public Review (March 2021)**
**(Draft shows Proposed Changes to Current Standard)**

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

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# FOREWORD

*This addendum adds the zeotropic refrigerant blend R-473A to Tables 4-2 and D-2.*

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

## Addendum q to Standard 34-2019

***Modify Tables 4-2 and D-2 as shown.***

**Table 4-2 Data and Safety Classifications for Refrigerant Blends**

Refrigerant Number = 473A
Composition (Mass %) = R-1132a/23/744/125 (20.0/10.0/60.0/10.0)
Composition tolerances = +0.5,-1.0/±1.0/±2.0/±1.0
OEL = 1700 ppm v/v
Safety Group = A1
RCL = 36,000 ppm v/v; 4.8 lb/Mcf; 77 g/m$^3$
Highly Toxic or Toxic Under Code Classification = Neither

**Table D-2 Data Classifications for Refrigerant Blends**

Refrigerant Number = 473A
Composition (Mass %) = R-1132a/23/744/125 (20.0/10.0/60.0/10.0)
Average Relative Molar Mass = 52.58 g/mol
Bubble Point (°F) = -126.0
Dew Point (°F) = -117.0
Bubble Point (°C) = -87.6
Dew Point (°C) = -83.0

**BSR/ASHRAE Addendum r**
**to ANSI/ASHRAE Standard 34-2019**

## Public Review Draft

# Proposed Addendum r to Standard 34-2019, Designation and Safety Classification of Refrigerants

**First Public Review (March 2021)**
**(Draft shows Proposed Changes to Current Standard)**

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

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# FOREWORD

*This addendum adds the zeotropic refrigerant blend R-427C to Tables 4-2 and D-2.*

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

## Addendum r to Standard 34-2019

***Modify Tables 4-2 and D-2 as shown.***

**Table 4-2 Data and Safety Classifications for Refrigerant Blends**

Refrigerant Number = 427C
Composition (Mass %) = R-32/125/143a/134a (25.0/25.0/10.0/40.0)
Composition tolerances = ±1.0/±2.0/±1.0/±2.0
OEL = 1000 ppm v/v
Safety Group = A1
RCL = 96,000 ppm v/v; 20.0 lb/Mcf; 330 g/m$^3$
Highly Toxic or Toxic Under Code Classification = Neither

**Table D-2 Data Classifications for Refrigerant Blends**

Refrigerant Number = 427C
Composition (Mass %) = R-32/125/143a/134a (25.0/25.0/10.0/40.0)
Average Relative Molar Mass = 83.3 g/mol
Bubble Point (°F) = -50.6
Dew Point (°F) = -38.9
Bubble Point (°C) = -45.9
Dew Point (°C) = -39.4

**BSR/ASHRAE Addendum s**
**to ANSI/ASHRAE Standard 34-2019**

**Public Review Draft**

# Proposed Addendum s to Standard 34-2019, Designation and Safety Classification of Refrigerants

**First Public Review (March 2021)**
**(Draft shows Proposed Changes to Current Standard)**

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

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

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# FOREWORD

*This addendum adds the zeotropic refrigerant blend R-448B to Tables 4-2 and D-2.*

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

## Addendum s to Standard 34-2019

***Modify Tables 4-2 and D-2 as shown.***

**Table 4-2 Data and Safety Classifications for Refrigerant Blends**

Refrigerant Number = 448B
Composition (Mass %) = R-32/125/1234yf/134a/1234ze(E) (21.0/21.0/20.0/31.0/7.0)
Composition tolerances = +0.5,-2.0/+2.0,-0.5/+0.5,-2.0/+2.0,-1.0/+0.5,-2.0
OEL = 850 ppm v/v
Safety Group = A1
RCL = 97,000 ppm v/v; 22.0 lb/Mcf; 350 g/m$^3$
Highly Toxic or Toxic Under Code Classification = Neither

**Table D-2 Data Classifications for Refrigerant Blends**

Refrigerant Number = 448B
Composition (Mass %) = R-32/125/1234yf/134a/1234ze(E) (21.0/21.0/20.0/31.0/7.0)
Average Relative Molar Mass = 89.3 g/mol
Bubble Point (°F) = -47.3
Dew Point (°F) = -35.1
Bubble Point (°C) = -44.1
Dew Point (°C) = -37.4

**BSR/IIAR 2-202x, Public Review 3**
**Standard for Design of Safe Closed-Circuit**
**Ammonia Refrigeration Systems**

**Reviewers please note: This draft of BSR/IIAR 2-202x is submitted for public review in accordance with IIAR and ANSI rules regarding standards that are maintained on a periodic basis. For this effort, substantive changes are shown in strikeout and underline format. Comments on these changes are welcome. *Additional text is provided for context, but it is not open for public review*. To gain additional context, commenters are welcome to contact IIAR for a complete version of the standard, however only the changes shown here are open to comment.**
**Please submit your comments and substantiation via the IIAR web-based comment submission tool.**

**Chapter 2 Definitions**

**pumpout:** The removal of ammonia from a system or a portion of the system. ~~thereof to enable safe servicing.~~

**replacement in-kind:** an identical replacement~~.~~ or any alternative specifically provided for in the design specification, if the alternative does not in any way adversely affect the function or safety of the item or associated items.

**car seal**: a simple device used to lock or seal a valve in the open or closed position to prevent unauthorized operation of the valve. Valve operation can only take place by cutting the seal, thereby giving evidence of either tampering or activity. Car seals are visually distinct from devices used in lockout/tagout programs.

**machinery room**: An enclosed space that is designed specifically to safely house refrigeration equipment that ~~shall comply~~complies with the requirements set forth in IIAR 2, Chapters 4 and 6.

**hydrostatic pressure relief valve:** A *pressure relief valve* designed to automatically open to relieve liquid *pressure* in excess of its design relief setting and is primarily used for the protection of *piping* or equipment where liquid *refrigerant* could become trapped between two *valves* and subject to thermal expansion. In the specific application of trapped liquid in a pressure vessel or any other ASME stamped equipment, the ASME B&PV Code requires ASME rated and certified relief valves known as “liquid pressure” or “liquid service” relief valves.

**4.2.4 *Public Assembly, Commercial, Residential, and Large Mercantile Occupancies.** Where not prohibited by the AHJ,~~Where approved,~~ ammonia refrigeration equipment shall be permitted outside of a machinery room for applications in a public assembly occupancy, commercial occupancy, or large mercantile occupancy. The quantity of ammonia shall be limited such that a complete discharge from any independent refrigerant circuit will not result in an ammonia concentration exceeding 300 ppm in any room or area where equipment containing ammonia is located. The calculation procedure for determining the concentration level shall comply with Section 5.3

**5.9.3 Oil Removal.** Oil removal shall be accomplished by one or more of the following:

1. A rigid-piped oil return or transfer system.
2. A vessel equipped with a shut-off valve in series with a self-closing shut-off valve. All piping to atmosphere for oil draining shall be designed to be capped when not in use.~~, in accordance with Section 13.3.2.6.~~
3 .A valve and piping assembly at the draining point where oil is removed from the system. At a minimum, a shut-off valve in series with a self-closing shut-off valve is required. All piping to atmosphere for oil draining shall be designed to be ~~-~~capped when not in use. ~~when not in use, in accordance with Section 13.3.2.6.~~

**5.9.4 *Temporary Piping.** Where draining of oil requires the use of temporarily attached rigid piping, such piping shall be supported and shall be free of visually detectable leakage at the joints when in use. ~~have tight connections.~~

**5.12.2 Charging Connection Security.** Refrigeration system charging connections shall be equipped with a check valve during charging to prevent the backflow of refrigerant from the system. The charging connection shall be designed to be plugged or capped when not in use. When located outdoors, ~~they~~charging connections shall be designed to be locked or otherwise restricted to access by authorized personnel only.

**5.13.2 Ultimate Strength.** Pressure-containing equipment shall comply with Sections 5.13.2.1 and 5.13.2.2.

**EXCEPTIONS:** The following shall be permitted to comply with Section 5.13.2.3 in lieu of complying with Sections 5.13.2.1 and 5.13.2.2:

~~1. Heat transfer components with ammonia as the working fluid, if they are not part of a pressure vessel and designed in accordance with ASME B31.5;~~

~~2.~~1. Pressure gauges; and

~~3.~~2. Control mechanisms.

**5.13.2.1** Pressure-containing equipment shall be in accordance with one of the following:

1. Listed individually;
2. Listed as part of the complete refrigeration system;
3. Listed as a subassembly;
4. Designed, constructed, tested and ~~-~~assembled, in accordance with ASME B31.5; or ~~and proof tested to have an ultimate strength sufficient to withstand three times the design pressure for which it is rated; or~~
5. Designed in accordance with ASME B&PVC, Section VIII, Division 1.

**5.14.4 *Emergency Shut-off Valve Identification and Tagging.** Valves listed in the system emergency shutdown procedure ~~required for emergency shutdown of the system~~ shall be clearly and uniquely identified as emergency shut off valves at the valves themselves and in the system schematic drawings.

**5.16.7 Refrigerant Piping**. Refrigerant piping having an external surface temperature of 140°F (60°C) or higher and located outside the machinery room at a height less than 7.25 ft (2.2 m) above the floor or working surfaces, located adjacent to passageways, aisles, walkover stairs, or landings, shall have means to prevent contact by personnel such as insulation, guards, fence or railing barriers or other means in compliance with local, state or federal regulation.~~be provided with one of the following: 1)insulation 2) caution signs 3) guards to prevent contact.~~

**6.13.2.4** *Detection of ammonia concentrations that exceed a detector's upper detection limit or 40,000 ppm (25% LFL), whichever is lower, shall activate visual indicators and an audible alarm and shall activate emergency ventilation where such is required in accordance with Section 6.14.7. If the detectors within the machinery room have more than one sensing range~~there is more than one detector within the machinery room,~~ the detector with the highest range of detection capability is permitted to be used to activate this alarm response. Once activated, emergency ventilation, and visual indicators shall continue to operate until being manually reset by a switch located in the machinery room. Audible alarms shall continue to operate until they are manually reset by a switch located in the machinery room or alternatively in an area remote from the machinery room. In addition, the following equipment in the machinery room shall be automatically de-energized and shall remain de-energized until being manually reset:

1. Refrigerant compressors,
2. Refrigerant pumps, and
3. Normally closed automatic refrigerant valves that are not part of an emergency control system

**6.14.2 General Ventilation and Air Conditioning Equipment.** Machinery room ventilation fans and air conditioning equipment that are not part of an emergency ventilation system shall be automatically de-energized and associated fan dampers, where provided, shall automatically close upon detection of ammonia in accordance with Section 6.13.2.3.

**EXCEPTION**: Exhaust fans that are not designated as emergency exhaust fans are permitted to remain energized upon detection of ammonia in accordance with section 6.13.2.3. Such exhaust fans shall be in accordance with Sections 6.14.3.2 through 6.14.3.6

**6.14.3.5** Emergency exhaust fans shall be constructed such that a shift of the impeller or shaft will not permit two ferrous parts of the fan to rub or strike. ~~equipped with spark-resistant blades.~~

**6.14.6 Temperature Control Ventilation**

**6.14.6.1** *Temperature control mechanical ventilation design capacity shall be the volume required to limit the room dry-bulb temperature to 104°F (40°C), taking into account the ambient heating effect of equipment in the room and with the make-up air entering the room at the ~~highest summer~~annual 1% ~~-~~design dry-bulb temperature. The emergency ventilation system shall be permitted to be used to supplement temperature control ventilation, and vice versa.

**6.14.7.1***Emergency mechanical ventilation systems shall provide not less than 30 air changes per hour based on the gross machinery room volume. The emergency ventilation system shall be permitted to include temperature control ventilation fans that meet the requirements of Section 6.14.3 and Section 6.14.6.3, Item 2.

**EXCEPTIONS:**

1. Where not prohibited by the AHJ ~~approved~~, emergency mechanical ventilation shall not be required for a refrigeration system that will not yield an ammonia concentration exceeding 40,000 ppm in the machinery room following a release of the entire charge from the largest independent refrigerant circuit, based on the volume calculation determined in accordance with Section 5.3. The designer shall provide a copy of the calculations to be retained at the site.

**6.14.7.6** ~~*~~A means of proving emergency airflow shall be provided. The means of proving emergency airflow shall be capable of sensing a change in air flow of 25% or more, either by direct airflow measurement or indirect sensor readings. Failure to prove airflow when the emergency ventilation fans are energized shall provide notice to a monitored location. Devices that can be used to prove emergency airflow include but are not limited to: 1) pressure differential switches 2) sail switches 3) current monitors.

**7.2.3*Detection and Alarms.** Level 1 detection and alarm shall be provided in accordance with Section 17.7.1. The detection and alarm system shall comply with Chapter 17.

**EXCEPTIONS**:

2.Where ~~approved~~not prohibited ~~-~~by the AHJ, rooms or areas in industrial occupancies that are normally occupied 24 hours/day and are regularly patrolled when the rooms' functions are idled for scheduled downtime and are provided with an alternative to fixed detection and alarm equipment do not require level 1 detection and alarm. A means for emergency notification and initiation of alarm response in accordance with section 17.7.1 shall be provided.

3.EDITOR's NOTE: This exception was relocated from section 17.7 and slightly modified Where not prohibited by the AHJ, alternatives to fixed ammonia leak detectors shall be permitted for areas with high humidity or other harsh environmental conditions that are incompatible with detection devices. A means for emergency notification and initiation of alarm response in accordance with section 17.7.1 shall be provided.

**10.2.2*Clearances.** Condensers shall be ~~installed~~positioned ~~to prevent short-circuiting of airflow and~~ to assure that necessary airflow requirements are met.

**11.4.2.1***Forced-air evaporators shall be positioned ~~to prevent short circuiting of airflow and~~ to assure that necessary airflow requirements are met.

**13.5.1** Refrigerant piping crossing walkway areas inside a building shall be not less than 7.25 ft (2.2 m) above the floor.

**EXCEPTION:** Where not prohibited by the AHJ~~approved~~, piping shall be permitted to be located less than 7.25 ft (2.2 m) above the floor provided that it is placed against the ceiling of such space. Any projection from the ceiling over a means of egress shall not reach a point less than 6 ft.-8 in. (2.0 m) from the floor.

**15.1.2** It is permitted to protect system piping and equipment from overpressure through piping that is connected to pressure vessels equipped with overpressure protection. A full-area~~,~~ locked or car-sealed open ~~car-sealed-open~~ shut-off valve ~~-~~downstream of a pressure relief device that relieves internal to a different part of the system that provides overpressure protection, is not considered an obstruction when used in relief discharge piping. The pressure drop through the relief path of pressure relief devices shall be analyzed and documented. Vessels and equipment that relieve into the system must comply with Sections 15.3.7 and 15.3.8.

**15.2.6** Pressure relief devices intended for liquid refrigerant pressure relief ~~shall be connected below the anticipated liquid ammonia level and~~ shall discharge internal to the system.

**15.2.7** Where atmospheric relief devices are located in refrigerated spaces, precautions shall be taken to prevent moisture migration into the valve body or relief vent line.

**15.2.9 Marking of Relief Devices**

**15.2.9.1** Pressure relief devices shall be marked by the manufacturer with the data required in ASME B&PVC, Section VIII, Division 1. Calibration and set pressure adjustments to pressure relief devices shall be performed by the relief device manufacturer or a company holding a certification for this work. The employee of that device manufacturer or company holding a certification who last set and calibrated the pressure relief device shall seal the valve in accordance with ASME B&PVC. ~~with a car seal.~~

**15.3.9** Where combustible material is stored or installed within 20 ft (6.1 m) of equipment that is protected with vapor pressure relief devices, the relief device capacity factor, *f*, in the formulas shall be increased to $f = 1.25$ ($f = 0.1$). This increased capacity factor is not applicable to materials that are integral to the building's construction when they are in accordance with the building code. The rated discharge capacity of a pressure relief device shall be determined in accordance with ASME B&PVC, Section VIII, Division 1. The marking of relief devices shall be in accordance with Section 15.2.9.

**15.4.1***Stop valves shall not be installed in the inlet piping of pressure relief devices. Where installed in the outlet piping of pressure relief devices, the pressure drop effects of full area stop valves shall be taken into account in the engineering of the relief vent piping system. Where used, any stop valve installed in relief outlet piping shall be locked open. This includes both stop valves installed in the outlet of two relief valves mounted on a dual manifold, regardless of the position of the three way valve. When a stop valve installed in the downstream piping of a relief device is closed, the part of the system that the relief device was protecting shall remain protected by other means in accordance with this standard ~~a parallel relief valve shall be provided~~, or ~~the protected part of the system shall have~~ shall be capable of having the ammonia removed and being opened to atmosphere.

**15.4.6** ~~Atmospheric relief piping shall be used only for relieving ammonia vapor from refrigerant relief devices.~~ Liquids and other refrigerants shall not be vented into a common relief piping system used to convey ammonia vapor.

~~-~~**15.4.7** The overpressure relief of oil or ammonia-laden oil shall relieve back into the closed-circuit system or shall be relieved in such a way that the oil is captured, and the ammonia vapor is vented in accordance with Section 15.5.1.

**15.6 Equipment and Piping Hydrostatic ~~and Liquid~~ Overpressure Protection.** Pressure vessels or any other ASME-stamped piece of equipment expected to operate completely filled with liquid must be equipped with certified pressure relief devices designed for liquid pressure relief per the ASME B&PV Code [UG-125(f)]. Overpressure protection for non-ASME-stamped liquid-filled components shall be provided when required by Section 15.6.1.

**15.6.4 ~~Liquid~~ Overpressure Protection for ASME-stamped Equipment ~~required~~.** Relief valves used for hydrostatic (liquid ~~pressure~~service) protection of vessels and equipment constructed in accordance with the ASME B&PV code are required to be constructed and marked in accordance with the ASME B&PV Code.

**15.6.6 Hydrostatic Protection for Pressure Vessels and Equipment with Non-Volatile Liquid.** Pressure vessels and equipment built and stamped in accordance with ASME B&PVC, Section VIII, Division 1 intended to operate completely filled with a non-volatile liquid and are connected to the ammonia refrigeration system shall comply with the overpressure protection requirements of this section.

**17.7 *Detection and Alarm Levels.** Where this standard specifies an ammonia detection and alarm concentration, the operational criteria shall be as specified in this section.

~~**EXCEPTION:** Where not prohibited approved by the AHJ, alternatives to fixed ammonia leak detectors shall be permitted for areas with high humidity or other harsh environmental conditions that are incompatible with detection devices.~~

**EDITOR'S NOTE: This exception was relocated to section 7.2.3 and slightly modified.**

# NENA i3 Standard for Next Generation 9-1-1

**ANS CANDIDATE NENA-STA-010.3-202Y**

**Only highlighted text open for Public Review 3 Comment.**
**For reference only, entire draft is available here.**

#### 3.1.1.1 INVITE (initial call)

The INVITE method is used to initiate an interactive call. The standard INVITE/200 OK/ACK sequence MUST be followed, with allowance for provisional (1XX) responses.

An emergency call has a Route header field containing next-hop data obtained from the ECRF based on the location of the call, and a Request-URI containing a Service URN. Nominally, the Service URN SHOULD be "urn:service:sos" or a subservice. In most jurisdictions, subservices such as "urn:service:sos.police", "urn:service:sos.fire" and "urn:service:sos.ambulance" appearing on a call presented to the Next Generation 9-1-1 Core Services (NGCS) are routed as they would be without the subservice. ~~The first element of the NGCS encountering a call with a subservice MUST rewrite the Request-URI to "urn:service:sos".~~

#### 4.12.3.1 LogEvents

The Logging Service stores LogEvents as a JWS. A LogEvent object contains:

| Name | Condition | Description |
|---|---|---|
| ~~logEventIdentifier~~ | ~~MANDATORY~~ | ~~LogEvent Identifier as described in Section 2.1.8~~ |
| clientAssignedIdentifier | OPTIONAL | An identifier assigned by the client |
| logEventType | MANDATORY | LogEvent type as described in Section 4.12.3.7 |
| timestamp | MANDATORY | A Timestamp as defined in Section 2.3 |
| elementId | MANDATORY | Element identifier (Section 2.1.3) of the element that logged the event |
| agencyId | MANDATORY ~~Conditional: REQUIRED if Element Identifier not supplied, may be supplied otherwise~~ | AgencyId (Section 2.1.1) of the agency that logged the event |

| Name | Condition | Description |
|---|---|---|
| agencyAgentId | Conditional: REQUIRED if the log record is traceable to an agent. If the log record is only attributable to an element or agency, this element will not be included. | The ~~agentId~~ Agent Identifier (Section ~~2.1.1~~ 2.1.2) of an agent ~~at the agency listed in the listed in the AgencyId tag, See Section 2.1.2.~~ that logged the event. |
| agencyPositionId | OPTIONAL | Identifier for the position that is handling a call. |
| callId | Conditional: REQUIRED if event is associated with a call | The Ccall Iidentifier of a call, see Section 2.1.6 |
| incidentId | Conditional: REQUIRED if event is associated with an Incident | The Incident Tracking Identifier associated with the call, see Section 2.1.7 |
| callIdSIP | Conditional: REQUIRED if event is associated with a SIP call | CallId from SIP |
| ipAddressPort | Conditional: REQUIRED if logging element knows the identity of the other element | Normalized IP address and port number string or Fully Qualified Domain Name of another element that participated in a transaction that triggered this LogEvent (e.g., an element that sent or responded to a query). This is not the address of the element that logs the event. ~~<ref IPv6 format statement>~~For IPv6 addresses, the maximum uncompressed form is recommended and may be required in a future version of this document. (See *A Recommendation for Ipv6 Address Text Representation*, RFC 5952 [196]. |
| extension | OPTIONAL, occurs 0 or more times | Optional private extension parameters |
| ~~rtsp~~ | ~~OPTIONAL~~ | ~~rtsp parameters returned from RecMediaStartEvent. MUST NOT be populated when storing a LogEvent~~ |

The Logging Service stores and retrieves a JWS [171] of the entire LogEvent (see Section 5.10), including all extensions. The signer (using its credentials traceable to the PCA) is: the Agent if an agencyAgentId is provided, otherwise it is the Element.

- ~~The Agency if an AgencyID is provided and no agencyAgentID is provided;~~
- ~~The Element if an ElementID is provided;~~
- ~~The Agent, if an AgentID is provided.~~

The signature is optional, but policy of the agency may require its use.

The clientAssignedIdentifier is not used by the Logging Service but is preserved by it.

The callId ~~CallIdURN~~ and incidentId ~~IncidentIdURN~~ are provided on all legs of a dialog-forming SIP transaction initial message (INVITE or MESSAGE). Stateless proxies may not know the IDs and thus may not be able to provide them, and some implementations may not be able to provide the IDs on other messages in the transaction. The Logging Service will need to find such messages via callIdSIP ~~(via the SIP call identifier) and log the callId and incidentId~~.

**…**

#### 4.12.3.1.1 Retrieve LogEvents

On a successful GET, a logEventArray is returned:

**logEventArray**

| Name | Condition | Description |
|---|---|---|
| count | MANDATORY | Number of items in the array |
| totalCount | MANDATORY | Total number of items found |
| logEventContainers ~~logEvents~~ | MANDATORY | Array of LogEventContainer objects~~, each in JWS format (Base64 encoded header, payload and signature)~~ |

A LogEventContainer contains:

| | | |
|---|---|---|
| logEventId | MANDATORY | LogEvent Identifier assigned by the logging service as described in Section 2.1.8 |
| rtsp | CONDITIONAL | rtsp parameters returned from RecMediaStartEvent. MUST be returned if media was recorded |
| logEvent | MANDATORY | A LogEvent in JWS format |

**…**

#### 4.12.3.1.3 LogEvents by LogEvent Identifier

Retrieves a log event by ~~based on~~ its logEventId~~LogEvent Identifier~~. Event is returned as a LogEventContainer (See Section 4.12.3.1.1).

...

### 4.15.4 Service/Agency Locator Record

The data returned by dereferencing a service/agency locator record URI is a JSON data structure containing the following elements:

| Name | Condition | Use |
|---|---|---|
| recordId | MANDATORY | Id of this record at this S/AL |
| serviceAgencyId | MANDATORY | ServiceId or AgencyId of the Service or Agency |
| serviceAgencyName | MANDATORY | Official name of Service or Agency |
| serviceAgencyJcard | MANDATORY | Service operator or Agency Contact information. The name of the service or agency is found in the first 'org' field of the jCard. |
| serviceAgencyTypes | MANDATORY | Array of Service or Agency Type (psap, police, fire, …) |

## 10.29 "Status Codes" Registry

IANA is requested to add the following entries to the StatusCodes registry:

| Status Code | Description | Reference |
|---|---|---|
| ~~200~~ | ~~OK~~ | ~~This document~~ |
| ~~201~~ | ~~Successfully Created~~ | ~~This document~~ |
| ~~307~~ | ~~Temporary Redirect~~ | ~~This document~~ |
| 333 | Iterative Refer | This document |
| ~~401~~ | ~~Unauthorized~~ | ~~This document~~ |
| ~~404~~ | ~~Not Found~~ | ~~This document~~ |

## 10.32 "GIS Layers" Registry

IANA is requested to add the following entries to the GIS Layers registry:

| Name | Reference |
|---|---|
| RoadCenterline | This document |
| SiteStructurePoint | This document |
| PSAPPolygon | This document |
| PolicePolygon | This document |
| FirePolygon | This document |
| FireForestPolygon | This document |
| FireAirportPolygon | This document |
| FireMilitaryPolygon | This document |
| PrivatePolygon | This document |

| Name | Reference |
|---|---|
| EMSPolygon | This document |
| EmsPrivatePolygon | This document |
| EmsAirPolygon | This document |
| EmsMilitaryPolygon | This document |
| PoisonControlPolygon | This document |
| MountainRescuePolygon | This document |
| CoastGuardPolygon | This document |
| PoliceCountyPolygon | This document |
| PoliceStateProvincialPolygon | This document |
| PoliceFederalPolygon | This document |
| PoliceFederalFbiPolygon | This document |
| PoliceFederalRcmpPolygon | This document |
| PoliceFederalSecretServicePolygon | This document |
| PoliceFederalDeaPolygon | This document |
| PoliceFederalMarshalPolygon | This document |
| PoliceFederalCustomsBorderProtectionPolygon | This document |
| PoliceFederalImmigrationCustomsPolygon | This document |
| PoliceFederalAtfPolygon | This document |
| PoliceFederalParkPolygon | This document |
| PoliceFederalDiplomaticSecurityPolygon | This document |
| PoliceFederalProtectiveServicePolygon | This document |
| PoliceSheriffPolygon | This document |
| PoliceMilitaryPolygon | This document |
| PoliceCampusPolygon | This document |
| PolicePrivatePolygon | This document |
| PoliceAirportPolygon | This document |
| PoliceHousingPolygon | This document |
| PoliceParkPolygon | This document |
| StreetNameAliasTable | This document |
| LandmarkNamePartTable | This document |
| LandmarkNameCompleteAliasTable | This document |
| A1Polygon | This document |
| A2Polygon | This document |
| A3Polygon | This document |
| A4Polygon | This document |
| A5Polygon | This document |
| RailroadCenterLine | This document |
| HydrologyLine | This document |
| HydrologyPolygon | This document |
| CellSectorPoint | This document |
| LocationMarkerPoint | This document |

**Tracking number 455-4i23r1** **Revision to NSF/ANSI 455-4-2020**
 **Issue 23 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 5 Audit process

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### 5.6 Reporting / grading

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#### 5.6.3 Finalize the audit report and determine audit grade

The auditor edits or updates the audit report, as necessary, taking in consideration the evaluation and modifications noted by the technical reviewer.

The amended report is routed to the technical review team for final review. The technical reviewer either approves the amended report or requests further modifications.

Once the audit report is finalized, the audit grade is assigned. The purpose of the audit grade shall be to provide an overall cGMP rating for the site. The grade is based on the number and severity of the nonconformances observed during the audit. The nonconformances and grade are reviewed and verified by the CB. The number and severity of nonconformances are communicated in the final audit report.

Table 5.2 below presents the grade to be awarded as a result of the audit nonconformances.

**Table 5.2**
**Summary of grading model**

| Grade | Critical | Major | Minor |
|---|---|---|---|
| A | 0 | 0 | ≤ 6 |
| B | 0 | 0 | 7 to 12 |
| B | 0 | 1 | ≤ 6 |
| C | 0 | 0 | 13 to 18 |
| C | 0 | 1 | 7 to 12 |
| C | 0 | 2 | ≤ 6 |
| D | 0 | 0 | ≥ 19 |
| D | 0 | 1 | ≥ 13 |
| D | 0 | ≥ 2 | — 7 to 12 |
| D | 0 | ≥ 3 | — |
| D | ≥ 1 | — | — |

After the audit is finalized and the audit grade is assigned, the report is approved by the CB. The final audit report is archived by the CB.

The total final review and report publication process shall be completed within 10 business days from the end of the audit. The complete audit report process shall be completed within 30 business days from the time of the audit.

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**Tracking number 455-4i24r1** **Revision to NSF/ANSI 455-4-2020**
 **Issue 24 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 1 General

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### 1.2 Scope

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210 *Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General* and 21 CFR Part 211 *Current Good Manufacturing Practice for Finished Pharmaceuticals*, International Council for Harmonisation of Technical Requirements for Pharmaceutical for Human Use (ICH) Quality Guidelines, 1, 7 and 10, as well ~~as~~ incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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**Tracking number 455-4i25r1** **Revision to NSF/ANSI 455-4-2020**
 **Issue 25 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 4 Audit requirements

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### 4.1 Context of the organization

**4.1.1** Manufacturers of OTC drug products shall have a current drug establishment registration with the US FDA ~~[US FDA Registration]~~, or country equivalent.

### 4.2 Leadership

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**Tracking number 455-4i27r1**
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**Revision to NSF/ANSI 455-4-2020**
**Issue 27 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 4 Audit requirements

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### 4.6 Performance evaluation

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**4.6.16** Procedures have been established for the collection of reserve samples for each lot of finished material. [21 CFR § 211.170]

**4.6.17** All products bear an expiration date that is supported by stability data generated under GMP / ICH requirements, except as allowed ~~under 21 CFR § 211.137~~ per country of sale regulations. [21 CFR § 211.137, ~~&~~ 21 CFR § 211.166, & ICH Q1A-Q1F]

**4.6.18** Stability program shall include selection of stability batches, stability scheduling, qualification and maintenance of the stability chambers, monitoring of the chambers, handling excursions, and inventory accountability. [21 CFR § 211.166 & 21 CFR § 211.94]

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**Tracking number 455-4i31r1**
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**Revision to NSF/ANSI 455-4-2020**
**Issue 31 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 4 Audit requirements

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### 4.6 Performance evaluation

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**4.6.18** Stability program shall include selection of stability batches, stability scheduling, qualification and maintenance of the stability chambers, monitoring of the chambers, handling excursions, and inventory accountability. [21 CFR § 211.166 & 21 CFR § 211.94]

**4.6.19** Laboratory records shall have complete data to assure compliance with established specifications and standards to include, but not limited to sample description, method statement, sample weight or measure, all data, calculations, test results, signatures, etc. [21 CFR § 211.194]

### 4.7 Improvement

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**Tracking number 455-4i33r1**
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**Revision to NSF/ANSI 455-4-2020**
**Issue 33 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 4 Audit requirements

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### 4.6 Performance evaluation

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**4.6.18** Stability program shall include selection of stability batches, stability scheduling, qualification and maintenance of the stability chambers, monitoring of the chambers, handling excursions, and inventory accountability. [21 CFR § 211.166 & 21 CFR § 211.94]

[Section 4.6.19 does not currently exist is the standard but is being balloted for addition in 455-4i31r1]

**4.6.20** The Quality Unit shall retest or reexamine components, drug product containers and closures for identity, strength, purity and quality after long storage periods, exposure to air, heat and conditions to ensure no adverse effects. [21 CFR § 211.87]

### 4.7 Improvement

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**Tracking number 455-4i34r1**
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**Revision to NSF/ANSI 455-4-2020**
**Issue 34 Revision 1 (March 2021)**



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

NSF/ANSI Standard
for Good Manufacturing Practices –

# Good Manufacturing Practices for Over-the-Counter Drugs

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## 4 Audit requirements

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### 4.5 Operation

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**4.5.56** Specifications have been established for in-process materials (as appropriate) and for finished products. [21 CFR § 211.100 & 21 CFR § 211.110]

**4.5.57** A business continuity plan shall be established to ensure that the safety of the products remain intact throughout its life cycle and are not impacted by a disaster or unplanned incident. The plan is reviewed and tested on a regular basis in accordance with the organization's risk assessment.

### 4.6 Performance evaluation

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**BSR/UL 80079-36, Standard for Safety for *Explosive Atmospheres - Part 36: Non-Electrical Equipment for Explosive Atmospheres – Basic Method and Requirements***

**1. *This proposal provides revisions to the proposal document dated September25, 2020 per comments received.***

**PROPOSAL**

## 1. Scope

**1DV DE Modification of Clause 1 to replace with the following:**

*Special Note from the Project Manager – only the changes to the original proposal is being shown for Clause 1.*

**DR Where references are made to IEC and ISO standards, the reference requirements found in these standards shall apply as modified by any applicable US National Differences for that standard (see Clause 2).**

**Table 1 *(5 of 5)***

| Clause of ~~IEC~~ UL 60079-0 | | ~~IEC~~ UL 60079-0 application to | | | |
|---|---|---|---|---|---|
| Ed 6.0 (2011) (Inf.) | Clause / Sub-Clause Title (Normative) | ~~ISO~~ UL 80079-36 | ~~ISO~~ UL 80079-37 | | |
| | | | "c" | "b" | "k" |
| 30 | Instructions | Modified (see Error! Reference source not found.) | (*) | (*) | (*) |
| 30.1 | General | Applies | (*) | (*) | (*) |
| 30.2 | Cells and batteries | Excluded | - | - | - |
| 30.3 | Electrical machines | Excluded | - | - | - |
| 30.4 | Ventilating fans | Excluded | - | - | - |
| (*) This requirement concerns also equipment protected by types of protection "c", "b" and "k". | | | | | |
| Applies – This requirement of ~~IEC~~ UL 60079-0 is applied without change.<br>Excluded – This requirement of ~~IEC~~ UL 60079-0 does not apply.<br>Modified – This requirement of ~~IEC~~ UL 60079-0 is modified as detailed in this standard. | | | | | |
| DE The applicable requirements of ~~IEC~~ UL 60079-0 are identified by the clause title which is normative. This document was written referring to the specific requirements of ~~IEC~~ UL 60079-0 Ed. 6.0:~~2011~~ 2013, The clause numbers for the 6th edition are shown for information only. This is to enable the General Requirements ~~IEC~~ UL 60079-0 Ed. 5.0:~~2007~~ 2009 or UL 60079-0 Ed. 7.0:2019 to be used where necessary with this part of ISO 80079. Where there were no requirements for the 5th edition or where there is a conflict between requirements, the 6th edition requirements should be considered. | | | | | |

## 2. Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

**2DV DR Modification of Clause 2 references to replace with the following:**

~~**IEC 60079-0,** ***Explosive atmospheres – Part 0: Equipment – General requirements***~~

~~**IEC 60079-1,** ***Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures "d"***~~

~~**IEC 60079-2,** ***Explosive atmospheres – Part 2: Equipment protection by pressurized enclosure "p"***~~

~~**IEC 60079-28,** ***Explosive atmospheres – Part 28: Protection of equipment and transmission systems using optical radiation***~~

~~**IEC 60079-31,** ***Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"***~~

~~**ISO 80079-37:—,** ***Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"***~~

~~**ISO/IEC 80079-38,** ***Explosive Atmospheres – Part 38: Equipment and components in explosive atmospheres in underground mines***~~

~~**ANSI/**~~**UL 746B,** ***Polymeric Materials – Long Term Property Evaluations***

**UL 60079-0,** ***Explosive atmospheres – Part 0: Equipment – General requirements***

**UL 60079-1,** ***Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures "d"***

**UL 60079-2,** ***Explosive atmospheres – Part 2: Equipment protection by pressurized enclosure "p"***

**UL 60079-28,** ***Explosive atmospheres – Part 28: Protection of equipment and transmission systems using optical radiation***

**UL 60079-31,** ***Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"***

**UL 80079-37,** ***Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety "c", control of ignition source "b", liquid immersion "k"***

## 5 Ignition hazard assessment

### 5.1 General requirements

**5.1DV DR Modification of Clause 5.1 to replace with the following:**

*Special Note from the Project Manager – only the changes to the original proposal is being shown for Clause 5.1.*

**DR Non-electrical equipment for explosive atmospheres shall comply with the applicable requirements for equipment for use in ordinary (unclassified) locations.**

**NOTE 1 Requirements for safety of equipment in ordinary (unclassified) locations can be found in ANSI Standards, NEMA Standards, Federal Regulations, etc. Equipment listed by a Nationally Recognized Testing Laboratory is considered to meet the applicable requirements found in these standards. A list of commonly applied standards can be found at http://webstore.ansi.org.**

**NOTE 2 Examples of ordinary (unclassified) location non-electrical requirements to be considered include requirements regarding the accessibility of hot surfaces, moving parts and sharp edges.**

**5.2.3.3 For EPL Gc or Dc**

*Special Note from the Project Manager – 5.2.3.3 ND removed.*

In the case of EPL Gc or Dc, the listed ignition sources shall include all potential ignition sources that are effective or may become effective during normal operation. It shall also indicate the measures used to minimize the likelihood of the ignition according to this standard and to the specific type of protection standards listed in the scope of this standard which have been applied.

**6.4.2 Assessment of sparks generated by single impacts**

**6.4.2.1 Assessment of single impact sparks as Potential Ignition Sources**

**6.4.2.1DV.1 DR Modification of Clause 6.4.2.1, first paragraph to replace with the following:**

**This assessment does not apply to ignition sources:**

- **originating from grinding and friction (see** Error! Reference source not found.**); ~~and~~**
- **single impact sparks in ~~mining (see ISO/IEC 80079-38).~~ Group I applications; and**
- **single impact sparks on oil or gas well drilling or servicing rigs as excluded by 29 CFR 1910.119.**

**11.2 General**

*Special Note from the Project Manager – only the changes to the original item l) is being shown for Clause 11.2.*

**11.2DV DR Modification of Clause 11.2, item l) to replace with the following:**

**l) Specific Conditions of Use apply, ~~the symbol "X" shall be placed after the certificate reference described~~ as referenced in** Error! Reference source not found. **above, the ~~. The~~ use of a warning marking giving appropriate instructions can be used as an alternative ~~to the requirement for the "X" marking~~.**

**BSR/UL 80079-37, Standard for Safety for *Explosive Atmospheres - Part 37: Non-Electrical Equipment for Explosive Atmospheres –Non Electrical Type of Protection Constructional Safety "c", Control of Ignition Source "b" Liquid Immersion "k"***

**1. *This proposal provides revisions to the proposal document dated September25, 2020 per comments received.***

**PROPOSAL**

## 1. Scope

**1DV DR Modification of Clause 1 to replace with the following:**

**Where references are made to IEC and ISO standards, the referenced requirements found in these standards shall apply as modified by any applicable US National Differences for that standard (see clause 2).**

## 2. Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

**2DV DR Modification of Clause 2 references to replace with the following:**

~~***IEC 60079-0, Explosive atmospheres – Part 0: Equipment – General requirements***~~

**IEC TS 60079-32-1, *Explosive atmospheres – Part 32-1: Electrostatic hazards, Guidance***

~~***IEC 60529, Degrees of protection provided by enclosures (IP Code)***~~

**ISO 281, *Rolling bearings – Dynamic load ratings and rating life***

**ISO 1813, *Belt drives – V-ribbed belts, joined V-belts and V-belts including wide section belts and hexagonal belts – Electrical conductivity of antistatic belts: Characteristics and methods of test***

***ISO 9563*, *Belt drives – Electrical conductivity of antistatic endless synchronous belts – Characteristics and test method***

**ISO 4413, *Hydraulic fluid power – General rules and safety requirements for systems and their components***

**ISO 4414, *Pneumatic fluid power – General rules and safety requirements for systems and their components***

**ISO 19353, *Safety of machinery – Fire prevention and protection***

~~**ISO 80079-36: 2016, *Explosive atmospheres – Non-electrical equipment for explosive atmospheres – Part 1: Basic method and requirements***~~

**EN 13237, *Potentially explosive atmospheres – Terms and definitions for equipment and protective systems intended for use in potentially explosive atmospheres***

**EN 13501-1, *Fire classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests***

***NEMA ANSI/IEC 60529, Degrees of protection provided by enclosures (IP Code)***

***UL 60079-0, Explosive atmospheres – Part 0: Equipment – General requirements***

**UL 80079-36: 2016, *Explosive atmospheres – Non-electrical equipment for explosive atmospheres – Part 1: Basic method and requirements***

***5.4 Equipment lubricants, coolants and fluids***

**5.4DV DR Modification of Clause 5.4 to replace with the following:**

**Lubricants and coolants, which are required for the protection against incendive hot surfaces or mechanically generated sparks (see Clause** Error! Reference source not found.**) shall have an auto-ignition temperature (see ~~IEC~~ UL 60079-20-1) at least 50 K above the maximum surface temperature of the equipment where the liquid is being used.**

**~~NOTE IEC 60079-20-1 is under revision and is expected to be published as ISO/IEC 80079-20-1.~~**

**Any fluid which can be released shall not result in an effective ignition source, e.g. due to high temperature or electrostatic charging.**

**7.3.3 Measures to ensure effectiveness of liquid**

**7.3.3DV.1 DE Modification of Clause 7.3.3, first paragraph to replace with the following:**

**Where contamination, deterioration, or degradation, of the protective liquid by external means can reduce the level of the ignition protection below that commensurate with the EPL, constructional measures shall be incorporated and/or maintenance instructions ~~provided~~ prepared by the manufacturer, to ensure that the liquid continues to maintain the requisite level of ignition protection.**

This may be achieved, for example, by:

– in the case of equipment with continuously flowing protective liquids, providing filtration to limit solid contaminants from being carried into moving parts;
– in the case of open equipment, selecting a protective liquid that is not adversely affected by atmospheric contamination, such as atmospheric moisture and dust;
– in the case of equipment needing protection against high levels of atmospheric dust and water vapour, providing a degree of ingress protection for the enclosure of at least IP66 as described in IEC 60529;
– in the case of equipment with a sealed enclosure, providing an over pressure relief device having an IP rating of at least IP23 according to IEC 60529 and set by the manufacturer of the liquid filled equipment to operate at least at 1,1 times the absolute pressure above the liquid level and a minimum of 0,1 bar above the normal operating pressure;
– in the case of equipment having a vented enclosure, constructing it so that any gas or vapour which may evolve from the protective liquid in normal service can readily escape through a breathing device having an IP rating of at least IP23 according to IEC 60529 and incorporating a suitable drying agent if necessary;
– in the case where manufacturer's instructions are used, requiring the liquid to be subjected to routine condition monitoring and specifying the maximum allowable periods between checks for contaminants such as deposits in the liquid and degradation, for example, by chemical changes to the liquid's composition such as abnormal change in acidity, or water content.





## 10. Marking

**10.1 General**

**10.1DV.1 DR Modification of Clause 10.1, first paragraph to replace with the following:**

**Non-electrical equipment meeting the requirements of this standard supplemental to those of ~~IEC~~ UL 80079-36 shall be marked in accordance with ~~IEC~~ UL 80079-36, there is no additional marking with regard to the Type of Protection applied. For example, equipment intended for use in a Group IIB flammable gas or vapour which has a temperature class of T4 and Equipment Protection Level Gb and protected by constructional safety, liquid immersion and/or control of ignition sources shall be marked with Zone 1 AEx h IIB T4 Gb or Zone 1 AEx h IIB T4 Gb.**

**10.1DV.2 DE Modification of Clause 10.1, NOTE to replace with the following:**

**NOTE 1 The Type of Protection based on ~~IEC~~ UL 80079-37 applied to the equipment cannot be recognised from the Ex-marking code "h". Description of the Type of Protection applied is given in the instructions (see ~~IEC~~ UL 80079-36 and Clause** Error! Reference source not found. **of this standard).**

**NOTE 2 In accordance with the National Electrical Code (NEC), while "Class I" is no longer required as a prefix to "Zone 0", "Zone 1" and "Zone 2" markings, it is permitted as an optional marking.**

## Bibliography

***BIBDV DR Modification of Bibliography to replace with the following:***

***IEC 60079-6, Explosive atmospheres – Part 6: Equipment protection by liquid immersion "o"***

~~**IEC 60079-20-1,** ***Explosive atmospheres – Part 20-1: Material characteristics for gas and vapour classification – Test methods and data***~~

**IEC 61508-1:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 1: General requirements***

**IEC 61508-2:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 2: Requirements for electrical/electronic/programmable electronic safety-related systems***

**IEC 61508-3:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 3: Software requirements***

**IEC 61508-4:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 4: Definitions and abbreviations***

**IEC 61508-5:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 5: Examples of methods for the determination of safety integrity levels***

**IEC 61508-6:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 6: Guidelines on the application of IEC 61508-2 and IEC 61508-3***

**IEC 61508-7:2010,** ***Functional safety of electrical/electronic/programmable electronic safety-related systems – Part 7: Overview of techniques and measures***

**IEC 61511,** ***Functional safety – Safety instrumented systems for the process industry sector – Part 1: Framework, definitions, system, hardware and software requirements***

**IEC 62061:2005,** ***Safety of machinery – Functional safety of safety-related electrical, electronic and programmable electronic control systems***

**IEC 80079-38,** ***Explosive atmospheres – Part 38: Equipment and components in explosive atmospheres in underground mines***

**ISO 13849-1:2006,** ***Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design***

**ISO/IEC 80079-20-1,** ***Explosive atmospheres – Part 20-1: Material characteristics for gas and vapour classification – Test methods and data***

**EN 13478,** ***Safety of machinery – Fire prevention and protection***

**EN 14986,** ***Design of fans working in potentially explosive atmospheres***

**EN 50303:2000,** ***Group I, Category M1 equipment intended to remain functional in atmospheres endangered by firedamp and/or coal dust***

**DIN 740-2,** ***Power transmission engineering; flexible shaft couplings; parameters and design principles***

***Requirements and tests applicable to fire-resistant hydraulic fluids used for power transmission and control (hydrostatic and hydrokinetic),*** **seventh edition, doc. N° 4746/10/91 EN, Luxembourg, April 1994**

***NFPA 70, National Electrical Code (NEC)***

***NFPA 77, Recommended practice on static electricity***

***API RP 2003, Protection Against Ignitions Arising Out of. Static, Lightning, and Stray Currents***

***UL 80079-20-1, Explosive atmospheres – Part 20-1: Material Characteristics for Gas and Vapour Classification – Test Methods and Data***

**Standard:** UL 62841-2-3
**Standard Title:** Standard for 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

**Date of Proposal: March 19, 2021**
**Comments Due: April 19, 2021**

**The following topics are being recirculated for your review:**

**1. Proposed Adoption Of The First Edition Of IEC 62841-2-3, Standard for 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, As The First Edition Of UL 62841-2-3**

**PROPOSAL**

**K.8.14.1.101.2 Safety instructions for all operations**

*Replacement of item j):*

j) **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring.** *Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.*

NOTE 101 The above warning is omitted, if polishing or sanding are the only intended operations.

Item k) is not applicable.

**K.8.14.1.101.2DV D2 Modification: Replace Clause K.8.14.1.101.2 of the Part 2 with the following:**

**K.8.14.1.101.2 Safety instructions for all operations**

*Replacement of item k):*

k) **Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory~~tool~~ may contact hidden wiring.** *Contact with a "live" wire will also make exposed metal parts of the power tool~~accessory~~ "live" and could give the operator an electric shock.*

NOTE 101 The above warning is omitted, if polishing or sanding are the only intended operations.

Item l) is not applicable.

**BSR/UL 444, Standard for Safety for Communications Cables**

For your convenience in review, proposed additions to the previously proposed requirements dated 2020-10-16 are shown underlined and proposed deletions are shown ~~lined-out~~.

***1. Introduction of Optional Suffixes HF, LSHF and ST1***

## PROPOSAL

8.3.3 **Flame test classification**

8.3.3.1 Cables shall be marked as follows:

a) CMP – for cables meeting CSA FT6 or NFPA 262;

b) CMR – for cables meeting the requirements for flame propagation and maximum exposure temperature described in UL 1666;

c) CMG – for cables meeting CSA FT4 or FT4/IEEE 1202 type of flame exposure (without smoke measurements) in UL 1685 or the Vertical flame test (Method 2-FT4) in CSA C22.2 No. 2556 or UL 2556;

d) CM or cross-connect – for cables meeting UL flame exposure (without smoke measurements) in UL 1685 or the Vertical flame test (Method 1 – Vertical tray) in CSA C22.2 No. 2556 or UL 2556;

e) CMX or CMUC – for cables meeting the VW-1 test specified in CSA C22.2 No. 2556 or UL 2556

f) CMH – for cables meeting vertical flame/FT1 test of CSA C22.2 No. 2556 or UL 2556.

**8.4 Optional marking**

8.4.7 **Limited Smoke**

8.4.7.1 In the United States, the optional designation “ST1” (signifying limited smoke) may be added as a suffix or immediately following the letters for types CM or CMR or cross-connect that comply with the fire and smoke requirements in the ST1 limited smoke (Method 1 – Vertical Tray) requirements in CSA C22.2 No. 2556 or UL 2556.

In Canada, this requirement does not apply.

8.4.7.2 The optional designation “FT4-ST1” (signifying limited smoke) may be added following the letters for type CMG that complies with the fire and smoke requirements in the ST1 limited smoke (Method 2 – FT4) in CSA C22.2 No. 2556 or UL 2556.

8.4.8 In the United States, the “HF” suffix may be added to designate cable where all of the combustible materials used in the construction (e.g., insulation, fillers, jackets) are halogen-free in accordance with UL 2885, “Outline of Investigation for Acid Gas, Acidity and Conductivity of Combusted Materials and Assessment of Halogens”.

In Canada, the marking “HALOGEN-FREE” or “HAL-FREE” may be added to designate cable where all of the combustible materials used in the construction (e.g., insulation, fillers, jackets) are halogen-free as determined by:

a) X-ray fluorescence or by analysis of the chemical composition of all combustible materials used. Each component shall have less than 0.2 percent (by weight) of halogen elements (Chlorine, Bromine); and

b) The acid gas generation of the combustible materials used shall not exceed 2.0 percent when tested in accordance with the Acid gas emission test (Method 2) in CSA C22.2 No. 2556.

8.4.9 In the United States, the “LSHF” suffix may be added to designate cable that meets the “-HF” requirements and also complies with the requirements for low smoke when tested in accordance with IEC 61034-2, "Measurement of Smoke Density of Cables Burning Under Defined Conditions - Part 2: Test Procedure and Requirements”.

In Canada, this requirement does not apply.



***2. Use of an Additional 14 AWG Conductor in a Multi-conductor Communications Cable***

## PROPOSAL

5.2.1 Each conductor shall be insulated with one or more continuous layers of solid and/or expanded material. The insulation shall be uniform and shall not have any defects (bubbles, open spots, rips, tears, cuts, or foreign material) that are visible without magnification to normal or corrected-to-normal vision. The average thickness of the insulation and the minimum thickness at any point of the insulation are not specified. The average thickness of insulation used, including the average thickness of the tube portion of an air-gap coaxial member, shall be determined by means of an optical device. The method for measuring the thickness of insulation and for rounding off the results shall be as described in Clause 7.15.

**Note – A single 14 – 6 AWG bare grounding/bonding conductor used in a cable other than a coaxial cable does not need to be insulated.**

8.3.9 Cables with Grounding/Bonding Conductor

8.3.9.1 For a cable, ~~O~~other than a coaxial cable, a cable employing a single 14 – 6 AWG grounding/bonding conductor in addition to the conductors used for the communications circuit, the following wording shall be provided:

"XX AWG green insulated conductor for equipment grounding/bonding only", or;
"XX AWG green/ yellow insulated conductor for equipment grounding/bonding only", or;
"XX AWG bare conductor for equipment grounding/bonding only".

The XX shall be filled in with the AWG size of the grounding/ bonding conductor.

9 **Marking on Tag, Reel, or Carton**

9.1 **General requirements**

9.1.8 For a cable, other than a coaxial cable, employing 15 – 6 AWG copper conductors, the following wording shall be provided: "For use in audio applications only."

9.1.9 For a cable other than a coaxial cable employing a single 14 – 6 AWG grounding/bonding conductor in addition to the conductors used for the communications circuit, the following wording shall be provided:

"XX AWG green insulated conductor for equipment grounding/bonding only", or;
"XX AWG green/yellow insulated conductor for equipment grounding/bonding only", or;
"XX AWG bare conductor for equipment grounding/bonding only".

The XX shall be filled in with the AWG size of the grounding/bonding conductor~~and only the type of grounding conductor used such as green, needs to be identified~~.

**Table 4**
**Conductor metal and application**
**(See Clause 5.1.6.)**

| Conductor metal | Conductor size (AWG) | Application |
|---|---|---|
| Copper | 30-16* | Multiple-conductor or Coaxial Cable |
| Copper | 30-16 | Cross-connect Wire (Cable) |
| Copper | 15-6 | Coaxial or Audio Cable |
| Copper-clad steel or Copper-clad aluminum | 30-6 | Coaxial Cable only |
| * Conductors 14 – 6 AWG are permitted to be used as an additional single conductor in a cable provided the cable is marked as described in 8.3.9.1 and 9.1.9. | | |

***3. Criteria for FT6 flame test classification***

## PROPOSAL

7.14 Flame and smoke requirements

7.14.1 Type CMP shall be tested in accordance with the flame and smoke test specified in ULC S102.4 or NFPA 262. The maximum flame spread distance shall not exceed 1.52 m (5 ft). The maximum peak optical density of smoke shall not exceed 0.50 and the average optical density shall not exceed 0.15. Cables meeting this criterion shall be deemed to meet the criteria for FT6 flame test classification.
~~7.14.1 Type CMP shall comply with the flame-propagation and smoke-density limits stated in Appendix A of NFPA 262~~ test for flame travel and smoke of wires and cables for use in air-handling spaces described in NFPA 262. The maximum flame spread distance shall not exceed 1.52 m (5 ft). The maximum peak optical density of smoke shall not exceed 0.50 and the average optical density shall not exceed 0.15. Cables meeting this criteria shall be deemed to meet the criteria for FT6 flame test classification.~~

***4. Annex C - Cable substitution***

## PROPOSAL

Delete ANNEX C

***5. Definition – Grounding Conductor***

## PROPOSAL

**3. Definitions**

3.9 **GROUND PLANE** – A partially encompassing shield provided to reduce stray electrical fields.

3.9A **GROUNDING/BONDING CONDUCTOR** - A conductor that is defined in the United States in the *National Electrical Code*, as “Grounding Conductor, Equipment”, and in Canada, in the *Canadian Electrical Code*, as “Bonding Conductor”.

3.10 **INTEGRAL COVERING** - A single extruded layer that serves as both insulation and jacket.

**BSR/UL 499, Standard for Safety for Electric Heating Appliances**

**1. Battery Operated Electric Heating Appliances**

**PROPOSAL**

14.4.2.1 Except as noted in 14.4.2.1.1, a ~~A~~ low-voltage circuit is one supplied by a primary battery, by a standard Class 2 transformer, or by an impedance which, as a unit, complies with all of the performance requirements for a Class 2 transformer with a voltage not exceeding:

a) 30 V rms,

b) 42.4 V peak, or

c) 60 V dc continuous. ~~for dry locations, or~~

~~d) 30 V dc continuous for wet locations.~~

14.4.2.1.1 For appliances where the skin of the operator is expected to be wet in normal use of the appliances, the corresponding voltage limits are:

a) 15 V rms,

b) 21.2 V peak,

c) 30 V dc continuous.

SB1.2 This Supplement is not applicable to ~~products~~ glue guns complying with Supplement SC as an alternative to this Supplement.

**SUPPLEMENT SC - ~~LITHIUM~~ BATTERY OPERATED ELECTRIC HEATING APPLIANCES**

SC1 Scope

SC1.1 These requirements cover ~~battery operated~~ portable heating appliances that are powered by rechargeable batteries either solely or as an alternative or in conjunction with other electrical sources ~~and shall comply with the applicable requirements of this Standard, except as modified or added to by the requirements in this supplement.~~

SC1.2 This Supplement is not applicable to ~~products~~ glue guns complying with Supplement SB.

SC1.3 These requirements do not cover appliances with user replaceable battery cells, see 3.9 of the Standard for General Requirements for Battery-Powered Appliances, UL 2595~~,~~.

SC1.4 These requirements do not cover appliances and equipment other than portable.

~~CONSTRUCTION~~

SC2 General

SC2.1 ~~The construction of the battery system shall comply with the requirements of the Standard for General Requirements for Battery-Powered Appliances, UL 2595 as indicated in Table SC2. Requirements noted as not applicable shall comply with the applicable requirements of UL 499.~~ Battery powered heating appliances, shall meet the requirements in UL 2595, with the conditions and specifications as required by Appendix D of UL 2595.

**Table SC2**
**UL 2595 Construction Requirements**

| REQUIREMENT | UL 2595 REFERENCE | DEVIATIONS |
|---|---|---|
| Classification | 4 | Appliances for use and marked "Use Indoors" are considered Low Temperature (LT = 0°C).<br><br>Appliances for use outdoors are considered Extra-Low Temperature (ELT = -35°C). |
| Protection from Electric Shock | 8 | Not applicable, UL 499 applies.<br><br>An appliance operating from a low-voltage battery is to be evaluated only for the risk of fire and personal injury in accordance with the applicable requirements of the Standard and the Standard for General Requirements for Battery-Powered Appliance, UL 2595. |
| Mechanical Hazards | 12 | Not applicable, UL 499 applies. |
| Construction | 16 | The battery compartment shall be so designed as to only permit insertion of the battery specified by the manufacturer.<br><br>*Exception: This does not apply to a device for which the batteries are an integral part of the device and are not intended to be user replaceable.*<br><br>The battery compartment shall be so designed as to prohibit direct replacement of individual cells. |
| Internal Wiring | 17 | Not applicable, UL 499 applies. |
| Components | 18 | 18.1 – 18.5 are not applicable.<br><br>A switch that initiates a heating function shall:<br><br>a) Have a switch actuator that requires two separate and dissimilar actions before the appliance operates; or<br><br>b) Be guarded to prevent unintentional activation. The heating element shall not operate when applying a cylindrical rod to the switch actuator. The cylindrical rod shall have a diameter of 40 mm and a hemispherical end. The hemispherical end of the test rod is applied at any direction with a force not exceeding 5 N. |
| Appliances Intended to be Charged by an Automotive Adapter | 23 | UL 2595 applies, except 23.1(e) is not applicable. |

| ~~REQUIREMENT~~ | ~~UL 2595 REFERENCE~~ | ~~DEVIATIONS~~ |
|---|---|---|
| ~~Charging System Powered by a Universal Serial Bus Power Source(s)~~ | ~~24~~ | ~~The test voltage of 24.1(e) shall be 1.05 times the voltage rating corresponding to its intended USB configuration.~~ |
| ~~USB~~ | ~~25~~ | ~~UL 2595 applies.~~ |

SC2.2 In reference to Indent A of Appendix D of UL 2595, except as indicated elsewhere in UL 2595, the following requirements in this end-product standard do not apply as indicated below:

a) The requirements of sections 11, 12, 16, 18, 19, 20, 21, 22, 24, 27, 28, 29, 31, 33, 34, 35, 37, 38, 44, 45, 50, 51 and 52.

b) The requirements of 6.2 except for 6.2.6, 6.2.7, 6.2.13 and 6.2.14.

c) Section 7, except 7.23 and 7.24

d) Section 14, except for 14.2.3 and 14.2.4.

e) Clause 15.4.

f) Clauses 25.6, 25.11 and 25.12.

g) Clauses 40.8, 42.1, 43.1 and 43.4.

SC2.3 With respect to Indent B, users are not considered to be wet during the use of these products.

SC2.4 With respect to Indent C, a LT or ELT specification is not required for batteries for appliances that are normally located within interior heated spaces, LT is required for products normally located in enclosed, but unheated spaces such as garages and ELT for batteries used in products used continuously in outdoor locations with a temperature rating equal to the temperature rating of the appliance it would be connected to.

SC2.5 With respect to Indent D, conditions for various appliances during the heating test are applied from the relevant product specific conditions as described in Clause 36 of UL 499 during the heating test. Battery cell temperatures shall not exceed the battery cell temperature operating range when tested in accordance with Section 36 of UL 499.

SC2.6 With respect to Indent E, the surface temperature limits specified in Table 36.2 of UL 499 are applicable. Other temperatures of parts in particular product tests of Section 36 would apply.

SC2.7 With respect to Indent F, all test conditions require the loading of the electrical system by the resistive heating load. Motors that operate fans are to be allowed to operate with whatever restrictions occur in normal use. Motors whose loading is a function of operator bias, are permitted to operate with no additional mechanical load applied to their output shaft. Abnormal Tests of Section 42 of UL 499 shall not result in the battery cell exceeding its battery cell temperature operating range.

SC2.8 With respect to Indent G, the additional or alternative Safety Critical Functions (SCFs) are specified in Tables SC2. If the safety of the electronic control circuit has been evaluated in accordance with the functional safety requirements in UL 2595, then the safety of the electronic circuit complies with the requirements in this Standard.

SC2.9 With respect to Indent H, impact tests for batteries will be on a wood surface or concrete unless a particular product category of UL 499 requires a harder surface, in which case the test is conducted on concrete.

SC2.10 With respect to Indent I, no products require this special switching arrangement.

SC2.11 With respect to Indent J, appliances that are capable of also being powered by AC utility sources, shall comply with all the relevant requirements related to the connection to utility AC as described in UL 499.

SC2.12 USB supplies shall comply with Section 24 of UL 2595, except appliances with a USB source rated above 5 Vdc shall be evaluated shall be tested per 24.1(e) of UL 2595 at 1.05 percent of the rated voltage.

**Table SC2.1**
**Additional safety-critical functions for battery-operated heating appliances**

| Type and Purpose of SCF | Minimum Performance Level (PL) |
|---|---|
| Prevents accidental ON of an external heated surface exceeding Tables 36.1 and 36.2 of UL 499 | a |
| Prevents exceeding thermal limits of Section 9 of UL 2595 | a |
| Prevents defeat of required interlocks | b |
| Prevents over-pressure conditions of heated liquid vessels | c |
| Prevents resetting of a manual reset temperature-limiting | c |

~~PERFORMANCE~~

~~SC3 General~~

~~SC3.1 The appliance shall comply with the tests of the Standard for General Requirements for Battery-Powered Appliances, UL 2595, as indicated in Table SC3. Requirements noted as not applicable shall comply with the applicable requirements of this Standard.~~

~~**Table SC3**~~
~~**UL 2595 Performance Requirements**~~

| ~~TEST~~ | ~~UL 2595 REFERENCE~~ | ~~DEVIATIONS~~ |
|---|---|---|
| ~~General Conditions for the Test~~ | ~~5~~ | ~~UL 2595 applies.~~ |
| ~~Heating~~ | ~~9~~ | ~~This test is performed on batteries without imbalance conditions. The test is performed by charging a fully discharged battery. Once fully charged, the test is immediately continued by operating the product until the product ceases to operate due to a discharged battery state.~~<br><br>~~Table 9.1 is superseded by Table 36.2 of UL 499.~~<br><br>~~The battery cell temperature shall not exceed the battery cell manufacturers maximum declared temperature rating.~~ |
| ~~Normal Charging of Lithium-ion Systems~~ | ~~10~~ | ~~The battery cell temperature shall not exceed the battery cell manufacturers maximum declared temperature rating.~~ |
| ~~Abnormal Operation~~ | ~~11~~ | ~~Compliance to the Standard for Automatic Electrical Controls - Part 1: General Requirements, UL 60730-1, fulfills 11.2 – 11.6.~~ |

| TEST | UL 2595 REFERENCE | DEVIATIONS |
|---|---|---|
| | | The battery cell temperature shall not exceed the battery cell manufacturers maximum declared temperature rating. |
| Vibration for Lithium-Ion Batteries | 13 | Applicable only to appliances with motors. |
| Lithium-Ion Enclosure Pressure | 14 | UL 2595 applies. |
| Mechanical Strength | 15 | The drop height of 15.2(a) shall be 3 ft (914 mm). |
| Supply Connection and External Flexible Cord | 19 | Not applicable, UL 499 applies. |
| Creepage and Clearance and Distances Through Insulation | 20 | Not applicable, UL 499 applies. |
| Resistance to Heat and Fire | 21 | Not applicable, UL 499 applies. |
| Additional Requirements for Battery Operated Appliances with a Connection to Mains or Non-Isolated Source | 22 | Not applicable, UL 499 applies. |
| Appliances Intended to be Charged by an Automotive Adapter | 23 | UL 2595 applies, except 23.1(e) is not applicable. |
| Charging System Powered by a Universal Serial Bus Power Source(s) | 24 | The test voltage of 24.1(e) shall be 1.05 times the voltage rating corresponding to its intended USB configuration. |
| USB | 25 | UL 2595 applies. |

**MARKINGS**

SC4 General

SC4.1 Markings shall comply with the requirements of the Standard for General Requirements for Battery-Powered Appliances, UL 2595, as indicated in Table SC4.

**Table SC4**
**UL 2595 Markings Requirements**

| REQUIREMENT | UL 2595 REFERENCE | DEVIATIONS |
|---|---|---|
| Markings | 6 | For handheld products, the minimum letter height of 6.4 shall be less than 0.8 in (2.0 mm). |

**INSTRUCTIONS**

SC5 General

SC5.1 Instructions of the battery system shall comply with the requirements of the Standard for General Requirements for Battery-Powered Appliances, UL 2595, as indicated in Table SC5.

**Table SC5**
**UL 2595 Instructions Requirements**

| REQUIREMENT | UL 2595 REFERENCE | DEVIATIONS |
|---|---|---|
| Instructions | 7 | UL 2595 applies. |

**BSR/UL 705, Standard for Safety for Power Ventilators**

**1. Updating the Standard to Include Additional Requirements for Ventilator for Heat and Smoke Control**

**PROPOSAL**

**Supplement SD - POWER VENTILATORS FOR SMOKE CONTROL SYSTEMS**

SD1 ~~Power Ventilators for Smoke Control Systems~~ Scope

SD1.1 These requirements cover power ventilators for smoke control systems.

SD1.~~1~~2 Power ventilators complying with this standard may be additionally tested for heat and smoke control systems. Ventilators shall be tested to a temperature and time rating specified by the ventilator manufacturer. ~~The sample shall be placed on a fixture representing the intended use and operation of the ventilator. The ventilator shall be started and operated per the manufacturer's instructions, and the inlet air temperature increased to the manufacturer provide temperature.~~

SD1.3 Power ventilators for smoke control systems for installation in building in accordance with Smoke-Control Systems Utilizing Barriers and Pressure Differences, ANSI/NFPA 92A, and Smoke Management Systems in Malls, Atria, and Large Space ANSI/NFPA 92B.

SD1.4 The requirements in this Supplement are in addition to the requirements in Sections 1 – 36.

**SD2 General**

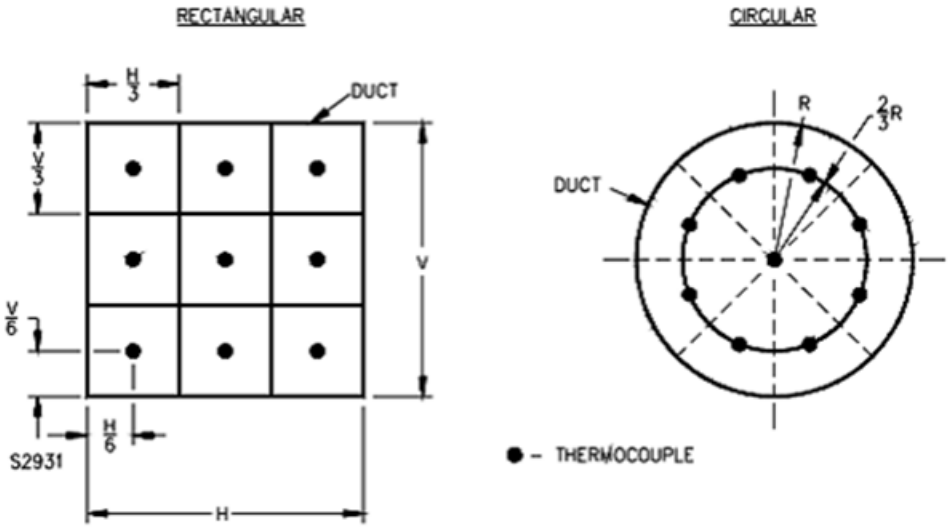
SD2.1 A component of a power ventilator shall comply with the requirements for that Component.

**SD3 Heat and Smoke Exhaust Test**

SD3.1 Temperature measurement

SD3.1.1 The inlet airstream temperature is to be determined by a thermocouple grid located 6 inches (0.15 meters) from the ventilator collar in a plane perpendicular to the air flow. The grid is made up of nine thermocouples of identical length wired in parallel. The duct is to be divided into nine equal areas with a thermocouple located in the center of each of the areas. The thermocouples are to be Type K as shown in Figure SD3.1.

**Figure SD3.1**
**Thermocouple grid**




SD3.1.2 The ambient temperature shall be measured at a distance 2 feet (0.61 m) from the nearest part of the ventilator.

SD3.1.3 ~~SD.1.2~~ The temperatures obtained on any portion of the ventilator are for reference purposes only. ~~Parts of the ventilator shall not warp, deteriorate or become damaged to any extent that would cause unsafe operation or prevent the unit from operating. The unit under test must continue to run throughout the entire time specified by the manufacturer.~~

SD3.3.1 ~~SD1.3~~ A separate ventilator may be used for each temperature and time rating specified by the manufacturer.

Table SD3.1

Examples of temperature and time ratings

| Temperature °F (°C) | Min Time |
|---|---|
| | |
| 350 (177) | 1 hour |
| 500 (260) | 2 hours |
| 752 (400) | 2 hours |
| 1000 (538) | 15 min |
| 1112 (600) | 1 hour |

SD3.3.2 The ventilator must operate at a range between 60 °F to 90 °F (16 °C to 33 °C) airstream temperature until thermal stabilization of motor, once thermal stabilization of motor occurs heat source turns on. Thermal stabilization of the motor windings is defined as three consecutive temperature readings taken at a minimum of 5-minute intervals that indicate no change.

SD3.3.3 The temperature rise must increase to the manufacturer's provided temperature within a minimum of 10-minute of the heat source being turned on.

SD3.4 Requirements

SD3.4.1 Parts of the ventilator shall not warp, deteriorate or become damaged to any extent that would cause unsafe operation or prevent the unit from operating. The unit under test must continue to run throughout the entire time specified by the manufacturer.

**SD4 Heat and Smoke Exhaust Damper Test**

SD4.1 Dampers that comply with the Standard for Automatically Operated Roof Vents for Smoke and Heat, UL 793 may be employed to be used on a power smoke and control ventilator.

SD4.2 Dampers that do not comply with Standard for Automatically Operated Roof Vents for Smoke and Heat, UL 793 that are utilized on the ventilator, will need to be tested per UL 793 Sections 1 to 18.

**2. Deletion of Reference to Withdrawn Standard, UL 508C**

**PROPOSAL**

14.3.6 Electronically protected motor circuits shall comply with the Standard for Tests for Safety-Related Controls Employing Solid State Devices, UL 991. When the electronic circuit is relying on software as a protective component, it shall comply with all of the requirements in the Standard for Software in Programmable Components, UL 1998. If software is relied upon to perform a safety function, it shall be considered software class 1.

*Exception: Compliance with UL 991 and UL 1998 is not required for an electronically protected motor circuit if:*

*a) There is no risk of fire, electric shock or casualty hazard noted during Abnormal testing with the motor electronic circuit rendered ineffective (open or short circuited), or*

*b) It complies with the Standard for Automatic Electrical Controls - Part 1: General Requirements, UL 60730-1 and the Standard for Automatic Electrical Controls - Part 2-9: Particular Requirements for Temperature Sensing Controls, UL 60730-2-9. When the electronic circuit is relying on software as a protective component, it shall comply with all of the requirements in clause H 11.12 of UL 60730-1, if software is relied upon to perform a safety function, it shall be considered software class B, or*

*c) It is a power conversion controller incorporating overcurrent protection complying with the Standard for Adjustable Speed Electrical Power Drive Systems UL 61800-5-1 and is rated or set to trip at not more than the 115 percent of the motor nameplate full-load current rating, or*

*d) Electronic protection complies with the test requirements and the circuits requirements of Supplement SB, UL 60335-1 Based Requirements for the Evaluation of Electronic Circuits.*

16.1.1 A motor control device shall comply one of the following:

a) The Standard for Automatic Electrical Controls - Part 1: General Requirements, UL 60730-1, in conjunction with the applicable Part 2 from the UL 60730 series,

b) *Deleted*

c) The Standard for Industrial Control Equipment, UL 508, or

d) The Standard for Adjustable Speed Electrical Power Drive Systems, UL 61800-5-1, or

e) Electronic protection that complies with the test requirements and the circuits requirements of Supplement SB, UL 60335-1 Based Requirements for the Evaluation of Electronic Circuits.

**BSR/UL 1479-202x, Standard for Fire Tests of Penetration Firestops**

**1. Water Leakage Testing**

**PROPOSAL**

5.1.1.2 Penetrating items are to be installed in the test sample so that they extend a minimum of 11 in (279 mm) from the exposed side, and a maximum of 37 in (940 mm) from the unexposed side unless either or both of these extensions are not characteristic of actual field installations. For conditions where a penetrant is required to be longer for the Water Leakage Test, Section 8, the unexposed side penetrant is permitted to extend a maximum of ~~2~~ 4 in (~~50~~100 mm) beyond the water level utilized per Section 8 to accommodate the additional length needed for water leakage testing and securement of the penetrant. For partially insulated penetrations, a minimum of 11 in (279 mm) of the bare penetration shall extend beyond the termination of the insulation on the exposed side of the assembly. The extended portions of the penetrating items on the unexposed side are to be mechanically supported by a metal rack and secured at no more than two points. The individual ends of the penetrating items are to be covered on the exposed side to prevent excessive transfer of gases through the test sample. When the penetrating item is intended to be representative of a closed system that is not normally vented or open to the atmosphere, the penetrating item can also be capped or sealed on the unexposed side. Otherwise, penetrating items shall not be capped or sealed on the unexposed side.