# ANSI STANDARDS ACTION

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# **American National Standards**

Call for comment on proposals listed

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. Fax: 212-840-2298; e-mail: psa@ansi.org

Standard for consumer products

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

1791 Tullie Circle NE, Atlanta, GA 30329 ph: (678) 539-2114 www.ashrae.org

# Addenda

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

This addendum revises the scope of the standard to clarify that it does not apply to residential refrigeration systems covered by ASHRAE Standard 15.2.

#### 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/technicalresources/standards-and-guidelines/public-review-drafts

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

1791 Tullie Circle NE, Atlanta, GA 30329 ph: (678) 539-2114 www.ashrae.org

# Addenda

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

This addendum proposes to insert a new appendix that will be used to add clarifying, non-mandatory reference information for the purpose of improving ease of use for the user, as well as moving mandatory normative reference information into the body of the standard. References are also updated, as appropriate to the most current version.

#### 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/technicalresources/standards-and-guidelines/public-review-drafts

# **UL (Underwriters Laboratories)**

333 Pfingsten Road, Northbrook, IL 60062-2096 ph: (847) 664-2850 https://ul.org/

# New National Adoption

BSR/UL 61800-5-1-202x, Standard for Safety for Adjustable Speed Electrical Power Drive Systems - Part 5-1: Safety Requirements - Electrical, Thermal and Energy (national adoption of IEC 61800-5-1 with modifications and revision of ANSI/UL 61800-5-1-2018)

Recirculation of the following topics: (1) BDM/CDM/PDS Supplied by Photovoltaic (PV) Modules; (2) Update to Lithium Battery Requirements; (4) Clarification of Clause DVD.2.1.3.6 and DVD.2.1.3.7; and (6) Heat Cycling Test for spring-loaded bus bar joints.

#### 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 ph: (919) 549-0956 https://ul.org/

# New Standard

BSR/UL 2525-202x, Standard for Two-Way Emergency Communications Systems for Rescue Assistance (new standard)

UL proposes a recirculation of the UL 2525 proposal dated 02-28-20: These requirements cover: (a) Discrete electrical products for rescue assistance two-way emergency communication systems, e.g., remote communications stations, master control units, and accessories; (b) Electrically and electronically operated amplifiers that provide speech communication and distinctive sounds in conjunction with rescue assistance two-way emergency communication systems; and (c) Commercial stationary and fixed power supplies for rescue assistance two-way emergency communication systems, having input and output ratings of not more than 600 V, direct- and alternating-current, (DC and AC). These requirements cover products to be employed in accordance with the following Codes and Standards: (a) National Electrical Code, NFPA 70; (b) National Fire Alarm and Signaling Code, NFPA 72; (c) Life Safety Code, NFPA 101; (d) International Building Code (IBC)/International Fire Code (IFC); (e) Building Construction and Safety Code, NFPA 5000; and (f) Fire Code, NFPA 1. The products covered by this standard are intended to be used in combination with other devices to form a rescue assistance two-way emergency communication system. These products provide all monitoring, control, and indicating functions of the system.

#### Click here to view these changes in full

# **UL (Underwriters Laboratories)**

333 Pfingsten Road, Northbrook, IL 60062-2096 ph: (847) 664-2850 https://ul.org/

#### Revision

BSR/UL 50-202x, Standard for Safety for Enclosures for Electrical Equipment, Non-Environmental Considerations (revision of ANSI/UL 50-2015)

Recirculation of the following: (8) New Annex E for Adhesives, enclosures, non-mechanical means of securement.

#### 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 ph: (847) 664-2850 https://ul.org/

# Revision

BSR/UL 50E-202x, Standard for Safety for Enclosures for Electrical Equipment, Environmental Considerations (revision of ANSI/UL 50E-2015)

Recirculation of the following topic: (13) New Annex E for Adhesives, Enclosures, Non-Mechanical Means of Securement.

#### 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 ph: (919) 316-5147 https://ul.org/

#### Revision

BSR/UL 197-202x, Standard for Safety for Commercial Electric Cooking Appliances (revision of ANSI/UL 197-2018)

(1) Proposed revision to replace the reference to the Standard for Power Conversion Equipment, UL 508C, with a reference to the Standard for Adjustable Speed Electric Power Drive Systems, UL 61800-5-1.

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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 ph: (919) 316-5147 https://ul.org/

# Revision

BSR/UL 563-202x, Standard for Safety for Ice Makers (revision of ANSI/UL 563-2018)

(1) Proposed revision to replace the references to the Standard for Power Conversion Equipment, UL 508C, with reference to the Standard for Adjustable Speed Electric Power Drive Systems, UL 61800-5-1.

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)**

47173 Benicia Street, Fremont, CA 94538 ph: (510) 319-4259 https://ul.org/

# Revision

BSR/UL 778-202x, Standard for Safety for Motor-Operated Water Pumps (revision of ANSI/UL 778-2019)

The following topic is being recirculated: (1) Expansion to allow electronic media for instructions manual.

#### Click here to view these changes in full

# **UL (Underwriters Laboratories)**

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

# Revision

BSR/UL 1203-202x, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations (revision of ANSI/UL 1203-2020)

This proposal for UL 1203 covers: Revisions to permit the use of electronic medium for required documentation.

#### 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 ph: (847) 664-1725 https://ul.org/

# Revision

BSR/UL 6703-202x, Standard for Safety for Connectors for Use in Photovoltaic Systems (revision of ANSI/UL 6703-2017)

This proposal for UL 6703 covers: (1) Additional requirements to address the field assembly of PV connectors onto cables.

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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: June 22, 2020

# AAFS (American Academy of Forensic Sciences)

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

# New Standard

#### BSR/ASB Std 092-202x, Canine Detection of Explosives (new standard)

This standard provides the training requirements for a canine team (canine handler and canine), and details follow-on assessments for trained canine teams, in the field of explosives detection including traditional explosives detection canines (EDC), person screening canines (PSC), and explosives detection canines with person screening capabilities (EDC w/PSC). This standard is intended to be used as the basis for all phases of the training process and includes certification procedures, training and assessments, record keeping, and document management.

Single copy price: Free

Obtain an electronic copy from: Document and comments template can be viewed on the AAFS Standards Board website at: http: //www.asbstandardsboard.org/notice-of-standard-development-and-coordination//

Order from: Document will be provided electronically on AAFS Standards Board website http://www.asbstandardsboard.org/ free of charge.

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

# ABMA (ASC B3) (American Bearing Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 ph: (703) 838-0053 www.americanbearings.org

# Reaffirmation

BSR/ABMA 11-2014 (R202x), Load Ratings and Fatigue Life for Roller Bearings (reaffirmation of ANSI/ABMA 11-2014)

This standard specifies the method of calculating the basic dynamic load rating of rolling bearings within the size ranges shown in the relevant ANSI/ABMA standards, manufactured from contemporary, commonly used, good-quality hardened bearing steel in accordance with good manufacturing practice and basically of conventional design as regards the shape of rolling contact surfaces.

Single copy price: \$38.00

Obtain an electronic copy from: aboutaleb@americanbearings.org Order from: Amir Aboutaleb, (703) 838-0053, aboutaleb@americanbearings.org Send comments (with optional copy to psa@ansi.org) to: Same

# ABMA (ASC B3) (American Bearing Manufacturers Association)

1001 N. Fairfax Street, Suite 500, Alexandria, VA 22314 ph: (703) 838-0053 www.americanbearings.org

# Reaffirmation

BSR/ABMA 20-2011 (R202x), Radial Bearings of Ball, Cylindrical Roller and Spherical Roller Types - Metric Design (reaffirmation of ANSI/ABMA 20-2011)

Specifies boundary dimensions, tolerances, and radial internal clearances for metric radial ball, cylindrical roller, and spherical roller bearings in common usage in the United States.

Single copy price: \$70.00 Obtain an electronic copy from: aboutaleb@americanbearings.org Order from: Amir Aboutaleb, (703) 838-0053, aboutaleb@americanbearings.org Send comments (with optional copy to psa@ansi.org) to: Same

# ABYC (American Boat and Yacht Council)

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

# New Standard

BSR/ABYC H-23-202x, Water Systems on Boats (new standard)

This standard applies to the design, construction, and installation of water systems on 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 ph: (410) 990-4460 www.abycinc.org

# New Standard

BSR/ABYC H-41-202x, Reboarding Means, Ladders, Handholds, Rails, and Lifelines (new standard)

This standard applies to the design, construction, and installation of reboarding means, ladders, handhold devices, grab rails, rails, lifelines, and slip-resistant surfaces on 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 ph: (410) 990-4460 www.abycinc.org

# Revision

BSR/ABYC A-24-202x, Installation of Carbon Monoxide Detectors and Alarms (revision of ANSI/ABYC A-24-2015)

This standard addresses the installation of carbon monoxide detectors and alarms on 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

# **API (American Petroleum Institute)**

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# New National Adoption

BSR/API RP 2MET, Second Edition-202x, Derivation of Metocean Design and Operating Conditions (national adoption of ISO 19901 -1:2015 with modifications and revision of ANSI/API RP 2MET-2014)

This standard contains general requirements for the determination and use of meteorological and oceanographic (metocean) conditions for the design, construction and operation of offshore structures of all types.

Single copy price: \$50.00 Obtain an electronic copy from: cocob@api.org Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# **API (American Petroleum Institute)**

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API RP 2EQ/ISO 19901-2:2004 (R202x), Seismic Design Procedures and Criteria for Offshore Structures (reaffirm a national adoption ANSI/API RP 2EQ-2018)

This standard contains requirements for defining the seismic design procedures and criteria for offshore structures and is a modified adoption of ISO 19901-2. The intent of the modification is to map the requirements of ISO 19901-2 to the United States' offshore continental shelf (U.S. OCS). The requirements are applicable to fixed steel structures and fixed concrete structures. The effects of seismic events on floating structures and partially buoyant structures are also briefly discussed. The site-specific assessment of jack-ups in elevated condition is only covered to the extent that the requirements are applicable.

Single copy price: \$50.00

Obtain an electronic copy from: cocob@api.org Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# **API (American Petroleum Institute)**

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API RP 2MOP/ISO 19901-6:2009 (R202x), Marine Operations (reaffirm a national adoption ANSI/API Recommended Practice 2MOP-2010 (R2015))

This part of ISO 19901 provides requirements and guidance for the planning and engineering of marine operations, encompassing the design and analysis of the components, systems, equipment, and procedures required to perform marine operations, as well as the methods or procedures developed to carry them out safely.

Single copy price: \$50.00 Obtain an electronic copy from: cocob@api.org Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# API (American Petroleum Institute)

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API RP 5A5/ISO 15463-2010 (R202x), Field Inspection of New Casing, Tubing, and Plain-End Drill Pipe (reaffirm a national adoption ANSI/API RP 5A5/ISO 15463-2010 (R2015))

This International Standard specifies requirements and gives recommendations for field inspection and testing of oil country tubular goods (OCTG). This International Standard covers the practices and technology commonly used in field inspection; however, certain practices may also be suitable for mill inspections. This International Standard covers the qualification of inspection personnel, a description of inspection methods and apparatus calibration and standardization procedures for various inspection methods. The evaluation of imperfections and marking of inspected OCTG are included. This International Standard is applicable to field inspection of OCTG and is not applicable for use as a basis for acceptance or rejection.

Single copy price: \$50.00

Obtain an electronic copy from: cocob@api.org

Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# **API (American Petroleum Institute)**

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API RP 2GEO/ISO 19901:2003 (R202x), Geotechnical and Foundation Design Considerations (reaffirm a national adoption ANSI/API Recommended Practice 2GEO-2014)

This document contains requirements and recommendations for those aspects of geoscience and foundation engineering that are applicable to a broad range of offshore structures, rather than to a particular structure type. Such aspects are: site characterization, soil and rock characterization, design and installation of foundations supported by the seabed (shallow foundations), identification of hazards, and design of pile foundations.

Single copy price: \$50.00 Obtain an electronic copy from: cocob@api.org Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# API (American Petroleum Institute)

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API RP 2N/ISO 19906:2010 (R202x), Planning, Designing, and Constructing Structures and Pipelines for Arctic Conditions (reaffirm a national adoption ANSI/API Recommended Practice 2N-2015)

This standard specifies requirements and provides recommendations and guidance for the design, construction, transportation, installation, and removal of offshore structures, related to the activities of the petroleum and natural gas industries in arctic and cold regions. Reference to arctic and cold regions in this standard is deemed to include both the arctic and other cold regions that are subject to similar sea ice, iceberg, and icing conditions. The objective of this standard is to ensure that offshore structures in arctic and cold regions provide an appropriate level of reliability with respect to personnel safety, environmental protection, and asset value to the owner, to the industry, and to society in general. This standard does not contain requirements for the operation, maintenance, service-life inspection, or repair of arctic and cold region offshore structures, except where the design strategy imposes specific requirements.

Single copy price: \$50.00 Obtain an electronic copy from: cocob@api.org Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# API (American Petroleum Institute)

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API RP 5A3/ISO 13678, 3rd Edition-2009 (R202x), Recommended Practice on Thread Compounds for Casing, Tubing, Line Pipe, and Drill Stem Elements (reaffirm a national adoption ANSI/API RP 5A3/ISO 13678, 3rd Edition-2009 (R2015))

This International Standard provides requirements, recommendations, and methods for the testing of thread compounds intended for use on ISO/API thread forms, as well as proprietary casing, tubing, line pipe, and drill stem elements with rotary shouldered connections. The tests outlined are used to evaluate the critical performance properties and physical and chemical characteristics of thread compounds under laboratory conditions.

Single copy price: \$50.00 Obtain an electronic copy from: cocob@api.org Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# **API (American Petroleum Institute)**

200 Massachusetts Avenue NW, Washington, DC 20001 ph: (202) 682-8056 www.api.org

# Reaffirmation

BSR/API Spec 5CRA/ISO 13680, 1st Edition-2009 (R202x), Specification for Corrosion-Resistant Alloy Seamless Tubes for Use as Casing, Tubing, and Coupling Stock (reaffirm a national adoption ANSI/API Spec 5CRA/ISO 13680, 1st Edition-2009 (R2015))

This International Standard specifies the technical delivery conditions for corrosion-resistant alloy seamless tubulars for casing, tubing, and coupling stock for two product specification levels:

- PSL-1, which is the basis of this International Standard;

- PSL-2, which provides additional requirements for a product that is intended to be both corrosion resistant and cracking resistant for the environments and qualification method specified in ISO 15156-3 and Annex G of this International Standard. At the option of the manufacturer, PSL-2 products can be provided in lieu of PSL-1.

Single copy price: \$50.00

Obtain an electronic copy from: cocob@api.org

Send comments (with optional copy to psa@ansi.org) to: Benjamin Coco, cocob@api.org

# ASABE (American Society of Agricultural and Biological Engineers)

2950 Niles Road, Saint Joseph, MI 49085 ph: (269) 932-7015 https://www.asabe.org/

#### Revision

BSR/ASAE S331.7 MONYEAR-202x, Implement Power Take-Off Drive Shaft Specifications (revision and redesignation of ANSI/ASAE S331.6-2015)

The purpose of this Standard is to establish multiple categories of power take-off (PTO) drive shafts each with a regular-duty subset and a heavy-duty subset. The intended use of a PTO drive shaft is between a tractor PTO and a power input connection (PIC) on an implement. A PTO drive shaft is considered a part of the an implement. This Standard does not provide for dimensional interchangeability from one implement to another.

Single copy price: Members: \$48.00; Non-members: \$68.00 Obtain an electronic copy from: vangilder@asabe.org Order from: vangilder@asabe.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# New Standard

BSR/ASTM WK51057-202x, Specification for Selection and Application of Field-Installed Cryogenic Pipe and Equipment Insulation Systems on Liquefied Natural Gas (LNG)-Fueled Ships (new standard)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# New Standard

BSR/ASTM WK63167-202x, Practice for Butt Fusion Joining of PA12 Pipe and Fittings (new standard)

https://www.astm.org/ANSI\_SA

# **ASTM (ASTM International)**

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

# New Standard

BSR/ASTM WK63309-202x, Specification for Polyethylene (PE) Electrofusion Fittings for Outside Diameter Controlled Crosslinked Polyethylene (PEX) Pipe (new standard)

https://www.astm.org/ANSI SA

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# ASTM (ASTM International)

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

# New Standard

BSR/ASTM WK67401-202x, Guide for Inclusion of Cyber Risks into Maritime Safety Management Systems in Accordance with IMO Resolution MSC.428(98) - Cyber Risks and Challenges (new standard)

https://www.astm.org/ANSI\_SA

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# ASTM (ASTM International)

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

# New Standard

BSR/ASTM WK67854-202x, Test Methods for Dry-cleaning robots for household or similar use - Methods of measuring performance (new standard)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# New Standard

BSR/ASTM WK71656-202x, Standard Guide for Evaluation of Nuclear Graphite Surface Area and Porosity by Gas Adsorption Measurements (new standard)

https://www.astm.org/ANSI\_SA

# **ASTM (ASTM International)**

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

# Reaffirmation

BSR/ASTM E0948-2018 (R202x), Test Method for Electrical Performance of Photovoltaic Cells Using Reference Cells under Simulated Sunlight (reaffirmation of ANSI/ASTM E0948-2018)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Reaffirmation

BSR/ASTM E0973-2018 (R202x), Test Method for Determination of the Spectral Mismatch Parameter between a Photovoltaic Device and a Photovoltaic Reference Cell (reaffirmation of ANSI/ASTM E0973-2018)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Reaffirmation

BSR/ASTM E1040-2018 (R202x), Specification for Physical Characteristics of Nonconcentrator Terrestrial Photovoltaic Reference Cells (reaffirmation of ANSI/ASTM E1040-2018)

https://www.astm.org/ANSI\_SA

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# **ASTM (ASTM International)**

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

# Reaffirmation

BSR/ASTM E1125-2018 (R202x), Test Method for Calibration of Primary Non-Concentrator Terrestrial Photovoltaic Reference Cells Using a Tabular Spectrum (reaffirmation of ANSI/ASTM E1125-2018)

https://www.astm.org/ANSI\_SA

# **ASTM (ASTM International)**

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

# Reaffirmation

BSR/ASTM F1237-2015 (R202x), Specification for Commercial Dishwashing Machines, Multiple-Tank, Continuous Oval-Conveyor Type, Heat Sanitizing (reaffirmation of ANSI/ASTM F1237-2015)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# Reaffirmation

BSR/ASTM F1804-2016 (R202x), Practice for Determining Allowable Tensile Load for Polyethylene (PE) Gas Pipe during Pull-In Installation (reaffirmation of ANSI/ASTM F1804-2016)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Revision

BSR/ASTM C781-202x, Practice for Testing Graphite Materials for Gas-Cooled Nuclear Reactor Components (revision of ANSI/ASTM C781-2019)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# Revision

BSR/ASTM D6300-202x, Practice for Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products and Lubricants (revision of ANSI/ASTM D6300-2015)

https://www.astm.org/ANSI\_SA

# **ASTM (ASTM International)**

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

# Revision

BSR/ASTM D6792-202x, Practice for Quality Management Systems in Petroleum Products, Liquid Fuels, and Lubricants Testing Laboratories (revision of ANSI/ASTM D6792-2017)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Revision

BSR/ASTM F859-202x, Specification for Heat-Sanitizing Commercial Dishwashing Machines, Multiple Tank, Conveyor Rack Type (revision of ANSI/ASTM F859-2015)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Revision

BSR/ASTM F919-202x, Specification for Slicing Machines, Food, Electric (revision of ANSI/ASTM F919-2015)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# Revision

BSR/ASTM F1014-202x, Specification for Flashlights on Vessels (revision of ANSI/ASTM F1014-2002 (R2012))

https://www.astm.org/ANSI\_SA

# **ASTM (ASTM International)**

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

# Revision

BSR/ASTM F1510-202x, Specification for Rotary Positive Displacement Pumps, Ships Use (revision of ANSI/ASTM F1510-2007 (R2020))

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Revision

BSR/ASTM F1883-202x, Practice for Selection of Wire and Cable Size in AWG or Metric Units (revision of ANSI/ASTM F1883-2003 (R2013))

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# ASTM (ASTM International)

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

# Revision

BSR/ASTM F1948-202x, Specification for Metallic Mechanical Fittings for Use on Outside Diameter Controlled Thermoplastic Gas Distribution Pipe and Tubing (revision of ANSI/ASTM F1948-2020)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.org Send comments (with optional copy to psa@ansi.org) to: Same

# **ASTM (ASTM International)**

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

# Revision

BSR/ASTM F2620-202x, Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings (revision of ANSI/ASTM F2620-2019)

https://www.astm.org/ANSI\_SA

# **ASTM (ASTM International)**

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

# Revision

BSR/ASTM F2643-202x, Specification for Powered Pot, Pan and Utensil Washing Sinks (revision of ANSI/ASTM F2643-2015)

https://www.astm.org/ANSI\_SA

Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: Corice Leonard, (610) 832-9744, accreditation@astm.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 ph: (800) 443-9353 www.aws.org

# New National Adoption

BSR/AWS B2.5/B2.5M-202x (ISO/TR 18491-202x MOD), Specification for Measurement and Calculation of Arc Energy (national adoption with modifications of ISO/TR 18491:2015)

This document provides a method to accurately determine welding energy and heat input, both in the case of traditional welding systems and those that employ complex waveforms. It is intended that this specification be referenced by other welding codes that require the control of heat input or welding energy to control properties of the weldment, such as strength, toughness, corrosion or dimensional properties.

Single copy price: \$25.00 Obtain an electronic copy from: jrosario@aws.org Order from: Jennifer Rosario, (800) 443-9353, jrosario@aws.org Send comments (with optional copy to psa@ansi.org) to: Andrew Davis, (305) 443-9353, adavis@aws.org

# ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 ph: (571) 323-0294 www.ecianow.org

# Revision

BSR/EIA 622-C-202x, Glossary of Electrical Connector Related Terms (revision and redesignation of ANSI/EIA 622-B-2015)

This standard contains terminology definition used with electronic/electrical connectors.

Single copy price: \$182.00

Obtain an electronic copy from: www.global.ihs.com

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

Send comments (with optional copy to psa@ansi.org) to: Edward F. Mikoski, Jr., emikoski@ecianow.org

# HL7 (Health Level Seven)

3300 Washtenaw Avenue, Suite 227, Ann Arbor, MI 48104 ph: (734) 677-7777 www.hl7.org

# Revision

BSR/HL7 EHR, R2.1-202x, HL7 Electronic Health Record System Functional Model, Release 2.1 (revision and redesignation of ANSI/HL7 EHR, R2-2014)

This will be an incremental update to existing Electronic Health Record System Functional Model (EHR-S FM) Release 2. This update will incorporate: (1) Changes to the Record Infrastructure Section to accommodate three additional record life-cycle events (verify, encrypt, decrypt) and ensure compatibility with FHIR STU-3 Record Life-Cycle Event Implementation Guide (2017) and recent updates to ISO 21089, Trusted End-to-End Information Flow (2017); (2) Changes to the Glossary Section to support the full set of record life-cycle events (now 27 in total); (3) Previously identified updates included in the EHR-S FM R2.01 errata version; (4) Changes to the Conformance Chapter to align with characteristics and requirements of recent EHR-S FM-R2-based Functional Profiles; (5) Domain analysis (models and artifacts) companion to EHR system development and implementation; (6) Adding a header in the TI section on clinical model services (DCM, CIMI model, FHIR, HL7 template) comparable to TI.4 Standard Terminology and Terminology Services.

Single copy price: Free Obtain an electronic copy from: Karenvan@HL7.org Order from: Karen Van Hentenryck, (734) 677-7777, Karenvan@HL7.org Send comments (with optional copy to psa@ansi.org) to: Same

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 ph: (708) 995-3015 www.asse-plumbing.org

# Reaffirmation

BSR/ASSE Series 8000-2011 (R202x), Professional Qualifications Standard for Self Contained Breathing Apparatus Replenishment Systems Installers, Inspectors and Verifiers (reaffirmation of ANSI/ASSE Series 8000-2011)

This standard provides general knowledge of Self-Contained Breathing Apparatus (SCBA) Replenishment systems for the purpose of providing continuing education. Eligible individuals include any person with an interest in Self-Contained Breathing Apparatus (SCBA) Replenishment systems and equipment. The purpose of this standard is to provide minimum criteria, identified by an industry consensus, for installers, inspectors, and verifiers of Self-Contained Breathing Apparatus (SCBA) Replenishment systems, to assure compliance with the referenced standards.

Single copy price: \$60.00

Obtain an electronic copy from: marianne.waickman@asse-plumbing.org Order from: Marianne Waickman, (708) 995-3015, marianne.waickman@asse-plumbing.org Send comments (with optional copy to psa@ansi.org) to: Same

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 ph: (708) 995-3015 www.asse-plumbing.org

# Reaffirmation

BSR/ASSE Series 9000-2015 (R202x), Firestop Systems and Smoke-Limiting Materials Professional Qualifications Standard (reaffirmation of ANSI/ASSE Series 9000-2015)

This standard establishes minimum requirements for the training and qualification of installers of firestop systems and smokelimiting materials for mechanical piping systems. The purpose of this standard is to provide minimum performance criteria for ASSE Standard 9010 qualified Installers of Firestop Systems and Smoke-Limiting Materials for Mechanical Piping Systems.

Single copy price: \$60.00 Obtain an electronic copy from: marianne.waickman@asse-plumbing.org Order from: Marianne Waickman, (708) 995-3015, marianne.waickman@asse-plumbing.org Send comments (with optional copy to psa@ansi.org) to: Same

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 ph: (708) 995-3015 www.asse-plumbing.org

# Reaffirmation

BSR/ASSE Series 10000-2011 (R202x), Professional Qualifications Standard for Installers of Green Plumbing Systems (reaffirmation of ANSI/ASSE Series 10000-2011 (R2015))

This standard applies to an individual who installs green plumbing systems and provides layout, detail, and calculations for such systems. The purpose of this standard is to provide minimum performance criteria, identified by industry consensus, for green plumbing system installers to assure compliance with the referenced standards.

Single copy price: \$60.00 Obtain an electronic copy from: marianne.waickman@asse-plumbing.org Order from: Marianne Waickman, (708) 995-3015, marianne.waickman@asse-plumbing.org Send comments (with optional copy to psa@ansi.org) to: Same

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 ph: (708) 995-3015 www.asse-plumbing.org

# Reaffirmation

BSR/ASSE Series 13000-2015 (R202x), Service Plumber and Residential Mechanical Service Technician Professional Qualifications Standard (reaffirmation of ANSI/ASSE Series 13000-2015)

This standard applies to an individual who services, maintains, and repairs plumbing systems or residential mechanical systems.

Single copy price: \$60.00

Obtain an electronic copy from: marianne.waickman@asse-plumbing.org Order from: Marianne Waickman, (708) 995-3015, marianne.waickman@asse-plumbing.org Send comments (with optional copy to psa@ansi.org) to: Same

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

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 ph: (708) 995-3015 www.asse-plumbing.org

# Reaffirmation

BSR/IAPMO Series 19000-2015 (R202x), Professional Qualifications Standard for Hydronic Designers and Installers (reaffirmation of ANSI/IAPMO Series 19000-2015)

This standard applies to the individual who installs and maintains solar water-heating systems in accordance with the designer's layout, specified component details and calculations, and manufacturer's recommendations and requirements. It also applies to the individual who installs and/or designs hydronic-based heating and cooling systems in accordance with manufacturer's recommendations and requirements. The purpose of this standard is to provide minimum performance criteria, identified by industry consensus, to ensure compliance with the referenced standards.

Single copy price: \$60.00

Obtain an electronic copy from: marianne.waickman@asse-plumbing.org Order from: Marianne Waickman, (708) 995-3015, marianne.waickman@asse-plumbing.org Send comments (with optional copy to psa@ansi.org) to: Same

# **IKECA (International Kitchen Exhaust Cleaning Association)**

2331 Rock Spring Road, Forest Hill, MD 21050 ph: (410) 417-5234 www.ikeca.org

# Revision

BSR/IKECA I10-202x, Standard for the Methodology for Inspection of Commercial Kitchen Exhaust Systems (revision of ANSI/IKECA I10-2015)

IKECA I10-2015, Standard for the Methodology for Inspection of Commercial Kitchen Exhaust Systems, is an inspection standard that addresses areas and methodologies of inspection of commercial kitchen exhaust systems that are unaddressed by NFPA 96.

Single copy price: \$30.00 for non-members; \$20.00 for members

Obtain an electronic copy from: sara@ikeca.org

Order from: Sara Duginske, sara@ikeca.org

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

# **UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1054 https://ul.org/

# New National Adoption

BSR/UL 60947-1-202x, Standard for Safety for Low-Voltage Switchgear and Controlgear - Part 1: General Rules (national adoption with modifications of IEC 60947-1)

This proposal provides revisions to Low-Voltage Switchgear and Controlgear - Part 1: General Rules, UL 60947-1, to harmonize with IEC 60947-1. These revisions include: (1) Update to the existing IEC 60947-1 text; (2) Removal of existing U.S. National Differences to promote further harmonization with IEC 60947-1; and (3) Inclusion of additional requirements from existing UL standards as new National Differences to ensure consistent application of requirements across related UL standards.

Single copy price: Contact Comm 2000 for pricing and delivery options Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx

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

# **UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1054 https://ul.org/

# New National Adoption

BSR/UL 60947-4-1-202x, Standard for Safety for Low-Voltage Switchgear and Controlgear - Part 4-1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters (national adoption with modifications of IEC 60947-4-1)

This proposal provides revisions to UL 60947-4-1 to harmonize with IEC 60947-4-1 including Amendment 1. These revisions include: (1) Update to the existing IEC 60947-4-1 text; (2) Removal of existing U.S. National Differences to promote further harmonization with IEC 60947-4-1; and (3) Inclusion of additional requirements from existing UL standards as new National Differences to ensure consistent application of requirements across related UL standards.

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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 ph: (919) 549-1054 https://ul.org/

# New National Adoption

BSR/UL 60947-4-2-202x, Standard for Safety for Low-Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters (national adoption with modifications of IEC 60947-4-2)

This proposal provides revisions to UL 60947-4-2 to harmonize with IEC 60947-4-2. These revisions include: (1) Update to the existing IEC 60947-4-2 text; (2) Removal of existing U.S. National Differences to promote further harmonization with IEC 60947-4-2; and (3) Inclusion of additional requirements from existing UL standards as new National Differences to ensure consistent application of requirements across related UL standards.

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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 ph: (919) 549-1636 https://ul.org/

# Reaffirmation

BSR/UL 218-2015 (R202x), UL Standard for Safety for Fire Pump Controllers (reaffirmation of ANSI/UL 218-2015)

These requirements cover controllers intended for starting and stopping centrifugal and positive displacement fire pumps, including automatic and non-automatic types for electric motor with or without transfer switch or engine driven pumps in accordance with national installation codes. Types of controllers covered include diesel engine, electric motor, limited service, medium voltage, and residential. Controllers may be suitable for use as service equipment. This equipment is for installation in non-hazardous locations in accordance with national installation codes.

Single copy price: Free

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

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

# **UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1392 https://ul.org/

# Reaffirmation

BSR/UL 1022-2012 (R202x), Standard for Safety for Line Isolation Monitors (reaffirmation of ANSI/UL 1022-2012 (R2016))

This proposal for UL 1022 covers: Reaffirmation and continuance of the fifth edition of the Standard for Line Isolation Monitors, UL 1022, as an American National Standard.

Single copy price: Free

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

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# **UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 ph: (919) 549-1392 https://ul.org/

# Reaffirmation

BSR/UL 1047-2010 (R202x), Standard for Safety for Isolated Power Systems Equipment (reaffirmation of ANSI/UL 1047-2010 (R2015))

This proposal for UL 1047 covers: Reaffirmation and continuance of the sixth edition of the Standard for Isolated Power Systems Equipment, UL 1047, as an American National 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: 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 ph: (919) 549-1392 https://ul.org/

# Reaffirmation

BSR/UL 1567-2012 (R202x), Standard for Safety for Receptacles and Switches Intended for Use with Aluminum Wire (reaffirmation of ANSI/UL 1567-2012 (R2016))

This proposal for UL 1567 covers: Reaffirmation and continuance of the fifth edition of the Standard for Receptacles and Switches Intended for Use with Aluminum Wire, UL 1567, as an American National Standard.

Single copy price: Free

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

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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 ph: (919) 549-1392 https://ul.org/

# Reaffirmation

BSR/UL 1681-2012 (R202x), Standard for Safety for Wiring Device Configurations (reaffirmation of ANSI/UL 1681-2012 (R2016))

This proposal for UL 1681 covers: Reaffirmation and continuance of the fourth edition of the Standard for Wiring Device Configurations, UL 1681, as an American National Standard.

Single copy price: Free

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

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

# **UL (Underwriters Laboratories)**

47173 Benicia Street, Fremont, CA 94538 ph: (510) 319-4259 https://ul.org/

# Revision

BSR/UL 174-202x, Standard for Safety for Household Electric Storage Tank Water Heaters (revision of ANSI/UL 174-2019)

The following topic is being proposed: (1) Revisions to the temperature-regulating control and temperature-limiting control requirements

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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: July 7, 2020

# ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Park, IL 60526 ph: (708) 579-8268 www.ans.org

# Revision

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

BSR/ANS 56.8-202x, Containment System Leakage Test Requirements (revision of ANSI/ANS 56.8-2002 (R2016))

This standard specifies acceptable primary containment leakage rate test requirements to assure valid testing. The scope includes (1) Leakage test requirements; (2) Test instrumentation; (3) Test procedures; (4) Test methods; (5) Acceptance criteria; (6) Data analysis; (7) Inspection and recording of test results; and (8) Definition and determination of Appendix J, Pathways.

Single copy price: \$149.00 Obtain an electronic copy from: orders@ans.org Order from: orders@ans.org Send comments (with optional copy to psa@ansi.org) to: pschroeder@ans.org

# ASME (American Society of Mechanical Engineers)

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

# Reaffirmation

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

BSR/ASME EA-4-2010 (R202x), Energy Assessment for Compressed Air Systems (reaffirmation of ANSI/ASME EA-4-2010 (R2015))

This Standard covers compressed air systems, which are defined as a group of subsystems comprised of integrated sets of components, including air compressors, treatment equipment, controls, piping, pneumatic tools, pneumatically powered machinery, and process applications utilizing compressed air. The objective is consistent, reliable, and efficient delivery of energy to manufacturing equipment and processes.

Single copy price: \$43.00

Obtain an electronic copy from: http://cstools.asme.org/publicreview Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm Send comments (with optional copy to psa@ansi.org) to: Luis Pulgarin, (212) 591-8184, pulgarinl@asme.org

# Comment Deadline: July 7, 2020

# **UL (Underwriters Laboratories)**

333 Pfingsten Road, Northbrook, IL 60062-2096 ph: (847) 664-3038 https://ul.org/

# New Standard

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

BSR/UL 2557-202X, Standard for Membrane Switches (new standard)

This standard covers membrane switches actuated by human activity, via a membrane or sensing substrate, to operate or control appliances and electrical equipment. The membrane switch electrical rating not to exceed 30 Vrm and power not greater than 100 VA.

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: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

# 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.

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

INCITS/ISO/TS 19135-2:2012 [2017], Geographic information - Procedures for item registration - Part 2: XML schema implementation, a Technical Specification prepared by INCITS and registered with ANSI

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

INCITS/ISO/TS 19139-2:2012 [2017], Geographic information - Metadata - XML schema implementation - Part 2: Extensions for imagery and gridded data, a Technical Specification prepared by INCITS and registered with ANSI

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

INCITS/ISO/TS 19127:2005 [2016], Geographic information - Geodetic codes and parameters, Technical Specification Registered with ANSI

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

700 K Street NW, Suite 600, Washington, DC 20001 ph: (202) 737-8888 www.incits.org

INCITS/ISO/TS 19130:2010 [2015], Geographic information - Imagery sensor models for geopositioning, a Technical Specification prepared by INCITS and registered with ANSI

# Notice of Withdrawal: ANS at least 10 years past approval date

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

# **ADA (American Dental Association)**

211 East Chicago Avenue, Chicago, IL 60611-2678 ph: (312) 587-4129 www.ada.org

ANSI/ADA Standard No. 85-Part 1-2004 (R2009), Disposable Prophy Angles

# Notice of Withdrawn ANS by an ANSI-Accredited Standards Developer

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

# ADA (American Dental Association)

211 East Chicago Avenue, Chicago, IL 60611-2678 ph: (312) 440-2509 www.ada.org

ANSI/ADA Standard No. 1047-2009, Standard Content of an Electronic Periodontal Attachment

Questions may be directed to: Sharon Stanford, (312) 440-2509, stanfords@ada.org

# **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.

# ABMA (ASC B3) (American Bearing Manufacturers Association)

- Contact: Amir Aboutaleb
- Phone (703) 838-0053
- E-mail: aboutaleb@americanbearings.org
- Office: 1001 N. Fairfax Street Suite 500 Alexandria, VA 22314
- BSR/ABMA 11-2014 (R202x), Load Ratings and Fatigue Life for Roller Bearings (reaffirmation of ANSI/ABMA 11-2014)
- BSR/ABMA 20-2011 (R202x), Radial Bearings of Ball, Cylindrical Roller and Spherical Roller Types - Metric Design (reaffirmation of ANSI/ABMA 20-2011)

# ASABE (American Society of Agricultural and Biological Engineers)

Contact: Carla VanGilder

- Phone (269) 932-7015
- E-mail: vangilder@asabe.org

Office: 2950 Niles Road Saint Joseph, MI 49085

- BSR/ASABE S604.3 MONYEAR-202x, Safety for Power Take-off (PTO), PTO Drive Shafts, and Power Input Connection (PIC) for Agricultural Field Equipment (revision and redesignation of ANSI/ASABE S604.2-OCT2018)
- BSR/ASAE S331.7 MONYEAR-202x, Implement Power Take-Off Drive Shaft Specifications (revision and redesignation of ANSI/ASAE S331.6-2015)

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

- Contact: Tim Fisher
- Phone (847) 768-3411
- E-mail: TFisher@ASSP.org
- Office: 520 N. Northwest Highway Park Ridge, IL 60068

BSR/ASSP/ISO/IEC TS 17021-10-202x, Conformity assessment -Requirements for bodies providing audit and certification of management systems - Part 10: Competence requirements for auditing and certification of occupational health and safety management systems (national adoption with modifications of ISO/IEC TS 17021-10:2018)

# **CEMA (Conveyor Equipment Manufacturers Association)**

- Contact: Naylu Garces
- Phone (239) 260-8009
- E-mail: naylu@cemanet.org
- Office: 5672 Strand Court Suite 2 Naples, FL 34110
- BSR/CEMA Standard 501.1-202x, Specifications for Welded Steel Wing Pulleys (revision and redesignation of ANSI/CEMA 501.1-2015)
- BSR/CEMA Standard B105.1-202x, Specifications for Welded Steel Conveyor Pulleys with Compression Type Hubs (revision and redesignation of ANSI/CEMA B105.1-2015)
- BSR/CEMA Standard No. 300-202x, Screw Conveyor Dimensional Standards (revision and redesignation of ANSI/CEMA 300-2015)
- BSR/CEMA Standard No. 350-202x, Screw Conveyor for Bulk Materials (revision and redesignation of ANSI/CEMA 350 -2015)

# ECIA (Electronic Components Industry Association)

Contact:	Laura Donohoe
Phone	(571) 323-0294

- E-mail: Idonohoe@ecianow.org
- Office: 13873 Park Center Road Suite 315 Herndon, VA 20171
- BSR/EIA 622-C-202x, Glossary of Electrical Connector Related Terms (revision and redesignation of ANSI/EIA 622-B-2015)

# TIA (Telecommunications Industry Association)

Contact:	Teesha Jenkins
Phone	(703) 907-7706

- E-mail: standards@tiaonline.org
- Office: 1320 North Courthouse Road Suite 200 Arlington, VA 22201
- BSR/TIA 568.7-202x, Balanced single twisted-pair communications cabling and components Standard for MICE 2 and MICE 3 Environments (new standard)

# **Call for Members (ANS Consensus Bodies)**

# **Call for Committee Members**

# ASC O1 – Safety Requirements for Woodworking Machinery

Are you interested in contributing to the development and maintenance of valuable industry safety standards? The ASC O1 is currently looking for members in the following categories:

- o General Interest
- o Government
- o Producer
- o User

If you are interested in joining the ASC O1, contact WMMA Associate Director Jennifer Miller at jennifer@wmma.org.

# **Final Actions on American National Standards**

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

# ANS (American Nuclear Society)

#### Reaffirmation

\* ANSI/ANS 2.30-2015 (R2020), Criteria for Assessing Tectonic Surface Fault Rupture and Deformation at Nuclear Facilities (reaffirmation of ANSI/ANS 2.30-2015): 5/4/2020

# **ASPE (American Society of Plumbing Engineers)**

#### Revision

ANSI/ARCSA/ASPE 63-2020, Rainwater Catchment Systems (revision of ANSI/ARCSA/ASPE 63-2013): 5/4/2020

# **ASTM (ASTM International)**

#### New Standard

ANSI/ASTM F3339-2020, Guide for Construction or Renovation of Native-Soil Athletic Fields (new standard): 4/21/2020

#### Reaffirmation

- ANSI/ASTM F918-2015 (R2020), Specification for Noncarbonated Mechanically Refrigerated Beverage Dispenser (Visible Product) (reaffirmation of ANSI/ASTM F918-2015): 4/21/2020
- ANSI/ASTM F1604-2015 (R2020), Specification for Freezers, Ice Cream, Soft Serve, Shake (reaffirmation of ANSI/ASTM F1604-2015): 4/21/2020
- ANSI/ASTM F1750-2011 (R2020), Specification for Paintball Marker Threaded-Propellant Source Interface (reaffirmation of ANSI/ASTM F1750 -2016): 4/21/2020
- ANSI/ASTM F1760-2017 (R2020), Specification for Coextruded Poly(Vinyl Chloride) (PVC) Non-Pressure Plastic Pipe Having Reprocessed-Recycled Content (reaffirmation of ANSI/ASTM F1760-2017): 4/21/2020
- ANSI/ASTM F1974-2017 (R2020), Specification for Metal Insert Fittings for Polyethylene/Aluminum/Polyethylene and Crosslinked Polyethylene/Aluminum/Crosslinked Polyethylene Composite Pressure Pipe (reaffirmation of ANSI/ASTM F1974-2017): 4/21/2020
- ANSI/ASTM F2030-2011 (R2020), Specification for Paintball Cylinder Burst Disk Assemblies (reaffirmation of ANSI/ASTM F2030-2011 (R2016)): 4/21/2020
- ANSI/ASTM F2107-2008 (R2020), Guide for Construction and Maintenance of Skinned Areas on Baseball and Softball Fields (reaffirmation of ANSI/ASTM F2107-2008 (R2015)): 4/21/2020
- ANSI/ASTM F2225-2015 (R2020), Safety Specification for Consumer Trampoline Enclosures (reaffirmation of ANSI/ASTM F2225-2015): 4/21/2020

- ANSI/ASTM F2530-2013 (R2020), Specification for Protective Headgear with Faceguard Used in Bull Riding (reaffirmation of ANSI/ASTM F2530-2013): 4/21/2020
- ANSI/ASTM F2553-2016 (R2020), Specification for Warnings on Refillable CO2 Cylinders Used In the Sport of Paintball (reaffirmation of ANSI/ASTM F2553-2016): 4/21/2020
- ANSI/ASTM F2653-2011 (R2020), Specification for Paintball Valve Male Threaded Connection for Use with Approved Cylinders (reaffirmation of ANSI/ASTM F2653-2011 (R2015)): 4/21/2020
- ANSI/ASTM F2654-2016 (R2020), Specification for Airsoft Gun Warnings (reaffirmation of ANSI/ASTM F2654-2016): 4/21/2020
- ANSI/ASTM F2727-2009 (R2020), Guide for Manufacturers for Labeling Headgear Products (reaffirmation of ANSI/ASTM F2727-2009 (R2014)): 4/21/2020
- ANSI/ASTM F2774-2009 (R2020), Practice for Manufacturing Quality Control of Consumer Trampoline Bed Material (reaffirmation of ANSI/ASTM F2774 -2009 (R2014)): 4/21/2020
- ANSI/ASTM F2856-2012 (R2020), Practice for Transfilling and Safe Handling of Small CO2 Cylinders for Use in Paintball (reaffirmation of ANSI/ASTM F2856-2012 (R2016)): 4/21/2020
- ANSI/ASTM F2891-2015 (R2020), Specification for Commercial Bulk Milk Dispensers, Mechanically Refrigerated (reaffirmation of ANSI/ASTM F2891 -2015): 4/21/2020

#### Revision

- ANSI/ASTM E1169-2020, Practice for Conducting Ruggedness Tests (revision of ANSI/ASTM E1169-2018): 4/21/2020
- ANSI/ASTM E1591-2020, Guide for Obtaining Data for Fire Growth Models (revision of ANSI/ASTM E1591-2013): 4/21/2020
- ANSI/ASTM E2067-2020, Practice for Full-Scale Oxygen Consumption Calorimetry Fire Tests (revision of ANSI/ASTM E2067-2015): 5/1/2020
- ANSI/ASTM E2187-2020, Test Method for Measuring the Ignition Strength of Cigarettes (revision of ANSI/ASTM E2187-2020): 5/1/2020
- ANSI/ASTM E2307-2020, Test Method for Determining Fire Resistance of Perimeter Fire Barriers Using Intermediate-Scale, Multi-Story Test Apparatus (revision of ANSI/ASTM E2307-2019): 4/21/2020
- ANSI/ASTM F2842-2020, Specification for Reins Used in Thoroughbred and Quarter Horse Racing (revision of ANSI/ASTM F2842-2011 (R2017)): 4/21/2020
- ANSI/ASTM F2968/F2968M-2020, Specification for Black Crosslinked Polyethylene (PEX) Pipe, Fittings and Joints For Gas Distribution Applications (revision and redesignation of ANSI/ASTM F2968/F2968M -2014): 4/21/2020
- ANSI/ASTM F3249-2020, Specification for Treestands, Climbing Sticks, and Tripod or Tower Stands (revision of ANSI/ASTM F3249-2017): 4/21/2020

# BICSI (Building Industry Consulting Service International)

#### Revision

ANSI/BICSI 007-2020, Information Communication Technology Design and Implementation Practices for Intelligent Buildings and Premises (revision of ANSI/BICSI 007-2017): 5/4/2020

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

#### New Standard

ANSI/ASSE 1086-2020, Reverse Osmosis Water Efficiency - Drinking Water (new standard): 4/30/2020

# NEMA (ASC C82) (National Electrical Manufacturers Association)

#### New National Adoption

ANSI C82.77-9-2020, Standard for Lighting Equipment - Injected Currents (national adoption with modifications of IEC 61000-4-6 Edition 4 2013-10): 5/4/2020

#### New Standard

ANSI C82.77-1-2020, Standard for Lighting Equipment - Electromagnetic Compatibility (EMC) - General Requirements and Criteria (new standard): 5/1/2020

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

#### Revision

- ANSI/NSF 42-2020 (i102r1), Drinking Water Treatment Units Aesthetic Effects (revision of ANSI/NSF 42-2019): 4/29/2020
- ANSI/NSF 58-2020 (i89r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2018): 4/30/2020
- ANSI/NSF 62-2020 (i38r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2018): 4/30/2020
- ANSI/NSF 350-2020 (i48r3), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2019): 4/28/2020
- ANSI/NSF/CAN 60-2020 (i85r1), Drinking Water Treatment Chemicals -Health Effects (revision of ANSI/NSF/CAN 60-2019): 4/27/2020

# **UL (Underwriters Laboratories)**

#### New National Adoption

ANSI/UL 60335-2-52-2020, Standard for Safety for Household and Similar Electrical Appliances - Safety - Part 2-52: Particular Requirements for Oral Hygiene Appliances (national adoption with modifications of IEC 60335-2 -52): 4/24/2020

#### Reaffirmation

ANSI/UL 33-2010 (R2020), Standard for Heat Responsive Links for Fire-Protection Service (reaffirmation of ANSI/UL 33-2010 (R2015)): 4/28/2020

#### Revision

- ANSI/UL 199-2020, Standard for Automatic Sprinklers for Fire-Protection Service (revision of ANSI/UL 199-2013 (R2017)): 4/28/2020
- ANSI/UL 428B-2020, Electrically Operated Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations Up to 20 Percent (B20), Kerosene, and Fuel Oil (revision of ANSI/UL 428B-2015 (R2019)): 4/28/2020
- ANSI/UL 987-2020, Standard for Safety for Stationary and Fixed Electric Tools (revision of ANSI/UL 987-2019): 5/1/2020
- ANSI/UL 1090-2020, Standard for Safety for Electric Snow Movers (revision of ANSI/UL 1090-2019): 5/1/2020
- ANSI/UL 1332-2020, Standard for Safety for Organic Coatings for Steel Enclosures for Outdoor Use Electrical Equipment (revision of ANSI/UL 1332-2016): 4/29/2020
- ANSI/UL 1447-2020, Standard for Safety for Electric Lawn Mowers (revision of ANSI/UL 1447-2017): 5/1/2020
- ANSI/UL 2743-2020, Standard for Safety for Portable Power Packs (Proposal dated 10-4-19) (revision of ANSI/UL 2743-2018): 4/30/2020
- ANSI/UL 8750-2020, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2019): 4/28/2020

# **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.

# **ADA (American Dental Association)**

Contact: Paul Bralower, (312) 587-4129, bralowerp@ada.org 211 East Chicago Avenue, Chicago, IL 60611-2678

#### New National Adoption

BSR/ADA Standard No. 100, ISO 27020-202x, Orthodontic Brackets and Tubes (identical national adoption of ISO 27020:2019 and revision of ANSI/ADA 100, ISO 27020-2012 (R2018))

Stakeholders: Manufacturers, dentists, researchers.

Project Need: ADA Standard No. 100 will be an identical adoption of ISO 27020:2019. The ISO standard was revised to include a new corrosion test. The U.S. TAG to ISO/TC 106-Dentistry participated in the development of the revised ISO standard and voted to approve it. The national adoption should be revised to be in harmony with the most current international standard.

This standard specifies requirements and test methods to compare the functional dimensions of orthodontic brackets and tubes and their chemical ion release, with packaging and labeling information. This document is applicable to brackets and tubes for use in fixed orthodontic appliances.

BSR/ADA Standard No. 191, ISO 9873-202x, Intra-oral mirrors (identical national adoption of ISO 9873:2017)

Stakeholders: Manufacturers, dentists, researchers.

Project Need: The proposed standard is an identical adoption of the international standard for which the U.S. TAG to ISO/TC 106 - Dentistry voted to approve.

This standard specifies requirements and test methods for reusable intra-oral mirrors with a coated glass reflecting surface used for dental purposes in the oral cavity.

BSR/ADA Standard No. 192-202x, Dental Explorer (identical national adoption of ISO 7492:2019)

Stakeholders: Manufacturers, dentists, researchers.

Project Need: The proposed standard is an identical adoption of the international standard for which the U.S. TAG to ISO/TC 106 - Dentistry voted to approve.

This standard specifies the dimensions and performance requirements for dental explorers.

BSR/ADA Standard No. 38-202x, Compatibility Testing for Metal-Ceramic and Ceramic-Ceramic Dental Restorative Systems (identical national adoption of ISO 9693:2019 and revision of ANSI/ADA Standard No. 38-2000 (R2015))

Stakeholders: Manufacturers, dentists, researchers.

Project Need: Extensive revisions have been made to the international standard, reflected in the 2019 version to be adopted. The U.S. TAG to ISO/TC 106 - Dentistry participated in the revision work. Alignment of the national standard to the international standard is preferable when possible.

This standard specifies requirements and test methods for to assess the thermomechanical compatibility between a veneering ceramic and a metallic or ceramic substructure material used for dental restorations, when used in combination.

#### Revision

BSR/ADA Standard No. 2000.4-202x, SNODENT (Systemized Nomenclature of Dentistry (revision and redesignation of ANSI/ADA Standard No. 2000.3-2019)

Stakeholders: Dental care providers, healthcare and research organizations, government agencies, dental schools and clinics, and dental benefit providers and organizations.

Project Need: SNODENT provides a needed standardized code set for the representation of clinical oral health descriptions captured by dentists that is interoperable across healthcare systems and with electronic health record systems. It is revised annually to maintain currency with dental terminology.

SNODENT is a clinical terminology designed for use with electronic health records that enables the capture and analysis of detailed oral health data, including oral anatomical sites, oral health conditions, findings, and other clinical concepts unique to dentistry.

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

Contact: Carla VanGilder, (269) 932-7015, vangilder@asabe.org 2950 Niles Road, Saint Joseph, MI 49085

#### Revision

BSR/ASABE S604.3 MONYEAR-202x, Safety for Power Take-off (PTO), PTO Drive Shafts, and Power Input Connection (PIC) for Agricultural Field Equipment (revision and redesignation of ANSI/ASABE S604.2-OCT2018)

Stakeholders: PTO driven implement manufacturers.

Project Need: Update references. Move sections within standard.

This standard is a guide to provide a reasonable degree of personal safety for operators and other persons during normal operation and servicing of the power take-off (PTO) drive shafts of a tractor or self-propelled machine used in agriculture and the power input connection (PIC) of its implement, in addition to what is given in ANSI/ASABE AD5673-1. It is applicable only to those PTO drive shafts and guards mechanically linked to the shaft by at least two bearings. It is not applicable to PTO drive shafts guarded by location or to the mechanical characteristics of overrun devices and torque limiters, nor are environmental aspects considered; neither is it applicable to PTO drive shafts and their guards manufactured before the date of its publication, neither is it applicable to service parts for agricultural equipment for field or stationary operation manufactured before the date of this publication.

#### ASB (ASC Z50) (American Society of Baking)

Contact: Toby Steward, (570) 494-0624, toby.steward@tnasolutions.com

243 Reade Drive, Cogan Station, PA 17728

#### Reaffirmation

BSR/ASB Z50.2-2015 (R202x), Bakery Equipment Sanitation Standard (reaffirmation of ANSI/ASB Z50.2-2015)

Stakeholders: Bakery equipment manufacturers, equipment users, and equipment general interest companies.

Project Need: Reaffirm this standard on the five-year cycle.

This standard establishes the sanitation standards for the manufacturing equipment supplied to the wholesale baking industry.

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

Contact: Tim Fisher, (847) 768-3411, TFisher@ASSP.org

520 N. Northwest Highway, Park Ridge, IL 60068

#### New National Adoption

BSR/ASSP/ISO/IEC TS 17021-10-202x, Conformity assessment - Requirements for bodies providing audit and certification of management systems - Part 10: Competence requirements for auditing and certification of occupational health and safety management systems (national adoption with modifications of ISO/IEC TS 17021-10:2018)

Stakeholders: Occupational safety and health professionals with global responsibilities.

Project Need: Based upon the consensus of ASSP Leadership, U.S. TAG to ANSI for the ISO TC-283 Committee, and feedback from occupational safety and health professionals.

This document specifies additional competence requirements for personnel involved in the audit and certification process for an occupational health and safety (OH&S) management system and complements.

#### **ASTM (ASTM International)**

Contact: Laura Klineburger, (610) 832-9744, accreditation@astm.org

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

#### New Standard

BSR/ASTM WK72690-202x, New Specification for Protective Headgear Standard for Baseball Pitchers (new standard)

Stakeholders: Headgear and Helmets industry.

Project Need: Professional pitchers in Major League Baseball (MLB) have increasingly become susceptible to serious head injuries from line-drive batted baseballs. As batted balls are hit harder, pitchers have become more vulnerable, challenged, and unable to react quickly enough to avoid being struck, often in the head.

This specification will address the incidental head strikes to the head by the baseball that may occur while engaging in the sport of baseball, specifically by the pitcher. Headgear that comply with the proposed standard will be able to achieve the safety features of this standard and also address the wearability features sought out by the players, specifically the pitchers.

BSR/ASTM WK72727-202x, New Test Method for Microscopy to Determine Equine Surface Sand and Fiber Shape (new standard)

Stakeholders: Equestrian Surfaces industry.

Project Need: Use of microscopy to characterize sand shape, angularity, sphericity, and roundness is critical to accurately determining the performative ability of the equine surface under analysis.

Sand shape can be quantified relatively accurately using a stereo microscope with particles characterized according to angularity, roundness, and sphericity. The shape of the sand grains will influence the pore sizes between grains and therefore the performance of the material as an equine surface.

#### CEMA (Conveyor Equipment Manufacturers Association)

Contact: Naylu Garces, (239) 260-8009, naylu@cemanet.org

5672 Strand Court, Suite 2, Naples, FL 34110

#### Revision

BSR/CEMA Standard 501.1-202x, Specifications for Welded Steel Wing Pulleys (revision and redesignation of ANSI/CEMA 501.1 -2015)

Stakeholders: Manufacturers, specifiers, and users of welded steel wing pulleys.

Project Need: This standard establishes load ratings, allowable variations from nominal dimensions, permissible crown dimensions, and overall dimensions normally necessary to establish clearances for the location of adjacent parts.

Provides recommended load ratings, dimensional information, and criteria for selection of welded steel wing pulleys

BSR/CEMA Standard B105.1-202x, Specifications for Welded Steel Conveyor Pulleys with Compression Type Hubs (revision and redesignation of ANSI/CEMA B105.1-2015)

Stakeholders: Manufacturers, specifiers, and users of welded steel conveyor pulleys.

Project Need: It establishes the recommended pulley dimensions and tolerances, pulley size selection method and a statement regarding pulley balancing and figures.

Provides recommended load ratings, dimensional information, and criteria for selection of welded steel conveyor pulleys with metric conversions.

BSR/CEMA Standard No. 300-202x, Screw Conveyor Dimensional Standards (revision and redesignation of ANSI/CEMA 300-2015)

Stakeholders: Manufacturers, specifiers, and users of screw conveyors.

Project Need: Includes a series of recommended dimensional standards for major screw conveyor components. Included are tables for troughs, trough ends and covers, screws (helicoid, sectional flight, cut-flight, cut-and-folded flight, ribbon flight), plain discharge spouts.

Provides recommended dimensional sub-standards for major screw conveyor components. All dimensions and tolerances are based on Carbon Steel Fabrication.

BSR/CEMA Standard No. 350-202x, Screw Conveyor for Bulk Materials (revision and redesignation of ANSI/CEMA 350-2015)

Stakeholders: Manufacturers, specifiers, and users of screw conveyors.

Project Need: It describes all the information related to screw conveyors, bulk materials (code, size, conveyor speed, component groups), horsepower requirements, screw feeders, incline, and vertical screw conveyors, and general applications of screw conveyors.

A book of accepted engineering and application practice as compiled by engineers of leading screw conveyor manufacturing companies based on the experience of many years.

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

Contact: Marianne Waickman, (708) 995-3015, marianne.waickman@asse-plumbing.org 18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448

New Standard

BSR/ASSE Series 23000-202x, Professional Qualifications Standard for Cannabis Extractor Personnel (new standard)

Stakeholders: Marijuana growers and extractors; plumbing, mechanical, and fire inspectors; fire protection professionals; communities impacted by explosions and fires.

Project Need: There have been a number of fires and explosions with these systems, mostly due to lack of training and operator error. This is a health and safety concern on a closed loop system that operates at high pressures. It involves both piping and mechanical systems. There is a need for operators to be trained and certified to protect themselves and other occupants of the building. There is also a need for inspectors to be trained and certified on these systems.

This standard applies to the individuals who operate or inspect cannabis extractor equipment. The purpose of this standard is to provide minimum performance criteria, identified by industry consensus, for operators to safely operate the equipment and inspectors to ensure compliance with the referenced standards and codes.

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

Contact: Paul Orr, (703) 841-3227, pau\_orr@nema.org

1300 North 17th Street, Suite 900, Rosslyn, VA 22209

#### Revision

BSR/NEMA SC 1-202x, Supplier Credentialing in Healthcare (revision of ANSI/NEMA SC 1-2019)

Stakeholders: Hospital associations, medical facilities, supplier credentialing companies.

Project Need: Urgent. Looking to address best practices for Personnel Protection Equipment requirements in the standard due to COVID-19.

This Standard identifies the credentials of supplier employees (identified as supplier representatives) entering a healthcare provider facility. Requirements are intended for supplier representatives but could be applied to other non-employees if a healthcare provider chooses to do so (e.g., independent consultants, construction contractors, and temporary personnel.)

# SAIA (ASC A92) (Scaffold & Access Industry Association)

Contact: DeAnna Martin, (816) 595-4860, deanna@saiaonline.org

400 Admiral Boulevard, Kansas City, MO 64106

#### Revision

BSR/SAIA A92.2-202x, Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices (revision of ANSI/SAIA A92.2-2015)

Stakeholders: Manufacturers, dealers, installers, maintenance personnel, operators, owners, and users of vehicle-mounted elevating and rotating aerial devices.

Project Need: To revise a previous approved standard, A92.2-2015.

This standard relates to the following types of vehicle-mounted aerial devices: (1) Extensible boom aerial devices; (2) Aerial Ladders; (3) Articulating boom aerial devices; (4) Vertical towers; and (5) A combination of any of the above. The vehicle may be a truck, a trailer, or an all-terrain vehicle.

#### SPRI (Single Ply Roofing Industry)

Contact: Linda King, (781) 647-7026, info@spri.org 465 Waverley Oaks Road, Suite 421, Waltham, MA 02452

#### Revision

BSR/SPRI IA-1-202x, Standard Field Test Procedure for Determining the Uplift Resistance of Insulation and Insulation Adhesives over Various Substrates (revision of ANSI/SPRI IA-1-2015)

Stakeholders: Building owners, architects, engineers, roofing consultants, roofing contractors, roofing material manufacturers.

Project Need: 5-year review and update to comply with current industry information.

SPRI IA-1 is a standard that specifies a field-testing procedure to determine the compatibility of a specific roof substrate, insulation or coverboard, and adhesive combination. This testing procedure encompasses various types of insulation adhesives, substrates, and insulations.

# **TIA (Telecommunications Industry Association)**

Contact: Teesha Jenkins, (703) 907-7706, standards@tiaonline.org 1320 North Courthouse Road, Suite 200, Arlington, VA 22201

#### New Standard

BSR/TIA 568.7-202x, Balanced single twisted-pair communications cabling and components Standard for MICE 2 and MICE 3 Environments (new standard)

Stakeholders: Designers; installers; industrial premise owners; system integrators.

Project Need: Create new standard.

Create a standard for defining the transmission requirements for industrial cabling and components supporting single balanced twisted-pair cabling for MICE2 and MICE3 environments. Specify components that meet the transmission requirements for cabling for Industrial Premises. This Standard establishes performance and technical criteria in support of single-pair applications such as Ethernet.

# American National Standards Maintained Under Continuous Maintenance

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

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

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

- AAMI (Association for the Advancement of Medical Instrumentation)
- AARST (American Association of Radon Scientists and Technologists)
- AGA (American Gas Association)
- AGSC (Auto Glass Safety Council)
- ASC X9 (Accredited Standards Committee X9, Incorporated)
- ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
- ASME (American Society of Mechanical Engineers)
- ASTM (ASTM International)
- GBI (Green Building Initiative)
- HL7 (Health Level Seven)
- 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, Inc.)

# **ANSI-Accredited Standards Developers Contact Information**

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.

# AAFS

American Academy of Forensic Sciences

410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 453-1036

Web: www.aafs.org

# ABMA (ASC B3)

American Bearing Manufacturers Association

1001 N. Fairfax Street Suite 500 Alexandria, VA 22314 Phone: (703) 838-0053

Web: www.americanbearings.org

# ABYC

American Boat and Yacht Council

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

ADA (Organization) American Dental Association

211 East Chicago Avenue Chicago, IL 60611-2678 Phone: (312) 587-4129

Web: www.ada.org

# ANS

American Nuclear Society 555 North Kensington Avenue La Grange Park, IL 60526 Phone: (708) 579-8268

Web: www.ans.org

#### API

American Petroleum Institute

200 Massachusetts Avenue NW Washington, DC 20001 Phone: (202) 682-8056

Web: www.api.org

# ASABE

American Society of Agricultural and Biological Engineers 2950 Niles Road Saint Joseph, MI 49085 Phone: (269) 932-7015 Web: https://www.asabe.org

ASB (ASC Z50)

American Society of Baking

243 Reade Drive Cogan Station, PA 17728 Phone: (570) 494-0624

# Web: www.asbe.org

#### ASHRAE

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

1791 Tullie Circle NE Atlanta, GA 30329 Phone: (678) 539-2114

Web: www.ashrae.org

# ASME

American Society of Mechanical Engineers Two Park Avenue M/S 6-2B New York, NY 10016-5990 Phone: (212) 591-8489 Web: www.asme.org

#### ASPE

American Society of Plumbing Engineers 6400 Shafer Court Suite 350 Rosemont, IL 60018 Phone: (847) 296-0002 Web: www.aspe.org

ASSP (Safety) American Society of Safety Professionals 520 N. Northwest Highway Park Ridge, IL 60068 Phone: (847) 768-3411

Web: www.assp.org

# ASTM

ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9744 Web: www.astm.org

# AWS

American Welding Society 8669 NW 36th Street Suite #130 Miami, FL 33166-6672 Phone: (800) 443-9353 Web: www.aws.org

BICSI

Building Industry Consulting Service International 8610 Hidden River Parkway Tampa, FL 33637 Phone: (813) 903-4712 Web: www.bicsi.org

# CEMA

Conveyor Equipment Manufacturers Association 5672 Strand Court Suite 2 Naples, FL 34110 Phone: (239) 260-8009 Web: www.cemanet.org

# ECIA

Electronic Components Industry Association 13873 Park Center Road Suite 315 Herndon, VA 20171 Phone: (571) 323-0294 Web: www.ecianow.org

# HL7

Health Level Seven 3300 Washtenaw Avenue Suite 227 Ann Arbor, MI 48104 Phone: (734) 677-7777 Web: www.hl7.org

#### IAPMO (ASSE Chapter)

ASSE International Chapter of IAPMO

18927 Hickory Creek Drive Suite 220 Mokena, IL 60448 Phone: (708) 995-3015

Web: www.asse-plumbing.org

# IKECA

International Kitchen Exhaust Cleaning Association 2331 Rock Spring Road Forest Hill, MD 21050 Phone: (410) 417-5234 Web: www.ikeca.org

web. www.ikeca.org

#### NEMA (ASC C82)

National Electrical Manufacturers Association 1300 N 17th St Rosslyn, VA 22209 Phone: (703) 841-3262 Web: www.nema.org

#### **NEMA (Canvass)**

National Electrical Manufacturers Association 1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3227

Web: www.nema.org

# NSF

**NSF** International

789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 418-6660

Web: www.nsf.org

# SAIA (ASC A92)

Scaffold & Access Industry Association 400 Admiral Boulevard Kansas City, MO 64106 Phone: (816) 595-4860 Web: www.saiaonline.org

#### SPRI

Single Ply Roofing Industry 465 Waverley Oaks Road Suite 421 Waltham, MA 02452 Phone: (781) 647-7026 Web: www.spri.org

#### ΤΙΑ

Telecommunications Industry Association 1320 North Courthouse Road Suite 200 Arlington, VA 22201 Phone: (703) 907-7706 Web: www.tiaonline.org

#### UL

Underwriters Laboratories

12 Laboratory Drive Research Triangle Park, NC 27709-3995 Phone: (919) 549-1054

Web: https://ul.org

# **ISO & IEC Draft International Standards**

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

#### Comments

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); 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**

# FASTENERS (TC 2)

- ISO/DIS 8676, Hexagon head screws with metric fine pitch thread -Product grades A and B - 7/19/2020, \$46.00
- ISO/DIS 8765, Hexagon head bolts with metric fine pitch thread -Product grades A and B - 7/19/2020, \$53.00

# SMALL CRAFT (TC 188)

ISO/DIS 9094, Small craft - Fire protection - 7/19/2020, \$93.00

# ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 15408-3, Information security, cybersecurity and privacy protection - Evaluation criteria for IT security - Part 3: Security assurance components - 7/19/2020, \$194.00

# **IEC Standards**

- 2/1995/DTS, IEC TS 60034-34 ED1: Rotating electrical machines -Part 34: Specific requirements for AC adjustable speed rolling mill main motors, 2020/7/24
- 14/1050/FDIS, IEC 60076-24 ED1: Power transformers Part 24: Specification of voltage regulating distribution transformers (VRDT), 2020/6/12
- 17C/755/CD, IEC 62271-209/AMD1 ED2: Amendment 1 High-voltage switchgear and controlgear - Part 209: Cable connections for gasinsulated metal-enclosed switchgear for rated voltages above 52 kV - Fluid-filled and extruded insulation cables - Fluid-filled and dry-type cable-terminations, 2020/7/24
- 23B/1319(F)/FDIS, IEC 63180 ED1: Methods of measurement and declaration of the detection range of detectors Passive infrared detectors for major and minor motion detection, 2020/5/22
- 34A/2186/CD, IEC 62868-2-3 ED1: Organic Light Emitting Diode (OLED) for general lighting - Safety - Part 2-3: Particular requirements - Flexible OLED tiles and panels, 2020/7/24
- 34A/2187/CD, IEC 63286 ED1: Flexible Organic Light Emitting Diode (OLED) panels for general lighting - Performance requirements, 2020/7/24

36/485(F)/FDIS, IEC 60372 ED4: Locking devices for ball and socket couplings of string insulator units - Dimensions and tests, 2020/5/15

- 40/2751/FDIS, IEC 60384-13 ED5: Fixed capacitors for use in electronic equipment Part 13: Sectional specification Fixed polypropylene film dielectric metal foil d.c. capacitors, 2020/6/12
- 45A/1328/FDIS, IEC 61031 ED2: Nuclear facilities Instrumentation and control systems - Design, location and application criteria for installed area gamma radiation dose rate monitoring equipment for use during normal operation and anticipated operational occurrences, 2020/6/12
- 47/2628/FDIS, IEC 63068-3 ED1: Semiconductor devices Nondestructive recognition criteria of defects in silicon carbide homoepitaxial wafer for power devices - Part 3: Test method for defects using photoluminescence, 2020/6/12
- 47/2621/CDV, IEC 63229 ED1: Semiconductor devices The classification of defects in gallium nitride epitaxial film on silicon carbide substrate, 2020/7/24
- 47/2627/FDIS, IEC 62373-1 ED1: Semiconductor devices Biastemperature stability test for metal-oxide, semiconductor, field-effect transistors (MOSFET) - Part 1: Fast BTI test for MOSFET, 2020/6/12
- 47E/706/FDIS, IEC 60747-5-5 ED2: Semiconductor devices Part 5-5: Optoelectronic devices - Photocouplers, 2020/6/12
- 49/1344/CD, IEC 60444-6 ED3: Measurement of quartz crystal unit parameters - Part 6: Measurement of drive level dependence (DLD), 2020/7/24
- 57/2196/CDV, IEC 62325-451-7 ED1: Framework for energy market communications Part 451-7: Balancing processes, contextual and assembly models for European style market, 2020/7/24
- 59/730/FDIS, IEC 63252 ED1: Energy consumption of vending machines, 2020/6/12
- 59F/397/FDIS, IEC 62885-4 ED1: Surface cleaning appliances Part 4: Cordless dry vacuum cleaners for household or similar use -Methods for measuring the performance, 2020/6/12
- 59F/395(F)/FDIS, IEC 60704-2-17 ED1: Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-17: Particular requirements for dry-cleaning robots, 2020/5/22
- 61/6012/FDIS, IEC 60335-1 ED6: Household and similar electrical appliances Safety Part 1: General requirements, 2020/6/12

- 62D/1759A/CD, IEC 80601-2-52 ED1: Medical electrical equipment -Part 2-52: Particular requirements for the basic safety and essential performance of medical beds, 2020/7/17
- 62D/1757/CDV, IEC 60601-2-41 ED3: Medical electrical equipment -Part 2-41: Particular requirements for the basic safety and essential performance of surgical luminaires and luminaires for diagnosis, 2020/7/24
- 62D/1758A/CD, IEC 80601-2-89 ED1: Medical electrical equipment -Part 2-89: Particular requirements for the basic safety and essential performance of medical beds for children, 2020/7/17
- 65B/1175/DPAS, IEC PAS 63312 ED1: Technical specification for flame detector system of boiler, 2020/6/26
- 65E/718/FDIS, IEC 62541-6 ED3: OPC Unified Architecture Part 6: Mappings, 2020/6/12
- 65E/719/FDIS, IEC 62541-10 ED3: OPC Unified Architecture Part 10: Programs, 2020/6/12
- 65E/720/FDIS, IEC 62541-14 ED1: OPC Unified Architecture Part 14: PubSub, 2020/6/12
- 65E/715/FDIS, IEC 62541-3 ED3: OPC Unified Architecture Part 3: Address Space Model, 2020/6/12
- 65E/716/FDIS, IEC 62541-4 ED3: OPC Unified Architecture Part 4: Services, 2020/6/12
- 65E/717/FDIS, IEC 62541-5 ED3: OPC Unified Architecture Part 5: Information Model, 2020/6/12
- 76/652/CD, IEC 62471-6 ED1: Photobiological Safety of Ultraviolet Lamp Products, 2020/6/26
- 77A/1077/FDIS, IEC 61000-3-2/AMD1 ED5: Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase), 2020/6/12
- 82/1731/DTS, IEC TS 63106-1 ED1: Basic requirements for simulator used for testing of photovoltaic power conversion equipment - Part 1: a.c. power simulator, 2020/7/24
- 82/1732/DTS, IEC TS 63106-2 ED1: Basic requirements for simulator used for testing of photovoltaic power conversion equipment - Part 2: d.c. power simulator, 2020/7/24
- 85/720(F)/FDIS, IEC 61557-11 ED2: Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC Equipment for testing, measuring or monitoring of protective measures Part 11: Effectiveness of residual current monitors (RCM) in TT, TN and IT systems, 2020/5/15
- 86A/2008/FDIS, IEC 60794-1-215 ED1: Optical Fibre Cables Part 1 -215: Generic specification - Basic optical cable test procedures -Environmental test methods - Cable external freezing test, Method F15, 2020/6/12
- 86B/4291/NP, PNW TS 86B-4291: Conditions for testing the protection against dust and water ingress of passive optical protective housings and hardened fibre optic connectors (IP5X, IPX4, IPX5, IPX6), 2020/7/24
- 86C/1666/FDIS, IEC 62149-3 ED3: Fibre optic active components and devices - Performance standards - Part 3: Modulator-integrated laser diode transmitters for 40-Gbit/s fibre optic transmission systems, 2020/6/12
- 97/216(F)/FDIS, IEC 63067 ED1: Electrical installations for lighting and beaconing of aerodromes Connecting devices General requirements and tests, 2020/5/22
- 104/866(F)/FDIS, IEC 60068-2-70 ED2: Environmental Testing Part 2 -70: Tests - Test Xb: Abrasion of markings, lettering, surfaces and materials caused by rubbing of fingertips and hands, 2020/5/15

- 104/868/FDIS, IEC 60068-3-7 ED2: Environmental testing Part 3-7: Supporting documentation and guidance - Measurements in temperature chambers for tests A (Cold) and B (Dry heat) (with load), 2020/6/12
- 115/238/NP, PNW TS 115-238: Testing and commissioning of VSC HVDC schemes, 2020/7/24
- 121A/358/FDIS, IEC 60947-5-8 ED2: Low-voltage switchgear and controlgear Part 5-8: Control circuit devices and switching elements Three-position enabling switches, 2020/6/12
- JTC1-SC25/2954/CD, ISO/IEC 11801-1/AMD1 ED1: Amendment 1 -Information technology - Generic cabling for customer premises -Part 1: General requirements, 2020/7/24

# **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)

<u>ISO 6887-5:2020</u>, Microbiology of the food chain - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 5: Specific rules for the preparation of milk and milk products, \$68.00

#### **DENTISTRY (TC 106)**

<u>ISO 21850-1:2020</u>, Dentistry - Materials for dental instruments - Part 1: Stainless steel, \$103.00

#### FINE CERAMICS (TC 206)

<u>ISO 18754:2020</u>, Fine ceramics (advanced ceramics, advanced technical ceramics) - Determination of density and apparent porosity, \$68.00

#### **IMPLANTS FOR SURGERY (TC 150)**

<u>ISO 12891-2:2020</u>, Retrieval and analysis of surgical implants - Part 2: Analysis of retrieved surgical implants, \$138.00

#### **INFORMATION AND DOCUMENTATION (TC 46)**

ISO 30300:2020, Information and documentation - Records management - Core concepts and vocabulary, \$45.00

#### PAINTS AND VARNISHES (TC 35)

<u>ISO 8502-6:2020</u>, Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 6: Extraction of water soluble contaminants for analysis (Bresle method), \$68.00

#### PLAIN BEARINGS (TC 123)

ISO 12128:2020, Plain bearings - Lubrication holes, grooves and pockets - Dimensions, types, designation and their application to bearing bushes, \$68.00

#### **POWDER METALLURGY (TC 119)**

- <u>ISO 4497:2020.</u> Metallic powders Determination of particle size by dry sieving, \$68.00
- ISO 13517:2020, Metallic powders Determination of flow rate by means of a calibrated funnel (Gustavsson flowmeter), \$45.00

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

ISO 17278:2020, Rubber, raw natural - Determination of the gel content of technically specified rubber (TSR), \$68.00

#### SERVICE ACTIVITIES RELATING TO DRINKING WATER SUPPLY SYSTEMS AND WASTEWATER SYSTEMS - QUALITY CRITERIA OF THE SERVICE AND PERFORMANCE INDICATORS (TC 224)

<u>ISO 24527:2020</u>, Service activities relating to drinking water supply, wastewater and stormwater systems - Guidelines on alternative drinking water service provision during a crisis, \$162.00

#### SOIL QUALITY (TC 190)

ISO 11277:2020, Soil quality - Determination of particle size distribution in mineral soil material - Method by sieving and sedimentation, \$185.00

#### **TEXTILES (TC 38)**

- ISO 21915-1:2020, Textiles Qualitative and quantitative analysis of some cellulose fibres (lyocell, cupro) and their blends - Part 1: Fibre identification using scanning electron microscopy and spectral analysis methods, \$138.00
- ISO 21915-2:2020, Textiles Qualitative and quantitative analysis of some cellulose fibres (lyocell, cupro) and their blends - Part 2: Blend quantification using light microscopy method, \$138.00
- ISO 21915-3:2020, Textiles Qualitative and quantitative analysis of some cellulose fibres (lyocell, cupro) and their blends Part 3: Blend quantification using spectral analysis method, \$68.00
- ISO 22195-2:2020, Textiles Determination of index ingredient from coloured textiles Part 2: Turmeric, \$68.00

# **ISO Technical Reports**

#### NANOTECHNOLOGIES (TC 229)

<u>ISO/TR 21624:2020</u>, Nanotechnologies - Considerations for in vitro studies of airborne nano-objects and their aggregates and agglomerates (NOAA), \$162.00

#### PHOTOGRAPHY (TC 42)

<u>ISO/TR 18942:2020</u>, Imaging materials - Evaluation of image permanence of photographic colour prints in consumer home applications, \$209.00

# **ISO Technical Specifications**

#### NANOTECHNOLOGIES (TC 229)

<u>ISO/TS 21412:2020</u>, Nanotechnologies - Nano-object-assembled layers for electrochemical bio-sensing applications - Specification of characteristics and measurement methods, \$138.00

# **ISO/IEC Guides**

#### OTHER

ISO/IEC Guide 76:2020, Development of service standards -Recommendations for addressing consumer issues, \$138.00

# **IEC Standards**

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

<u>S+ IEC 61439-1 Ed. 3.0 en:2020 (Redline version)</u>, Low-voltage switchgear and controlgear assemblies - Part 1: General rules, \$534.00

## **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 <u>http://www.nist.gov/notifyus/</u>.

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-regulatoryprograms/usa-wto-tbt-inquiry-point

Contact the USA TBT Inquiry Point at:(301) 975-2918; Fax: (301) 926-1559; E-mail: <u>usatbtep@nist.gov</u> or <u>notifyus@nist.gov</u>.

## **American National Standards**

#### **Call for Members**

#### 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

#### Society of Cable Telecommunications

#### ANSI Accredited Standards Developer

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 consensus bodies and is interested in new members in all membership categories to participate in new work in fiberoptic 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 a materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at www.scte.org or by e-mail from standards@scte.org.

## ANSI Accredited Standards Developers

Approval of Reaccreditation

#### Parenteral Drug Association (PDA)

The reaccreditation of the Parenteral Drug Association (PDA), an ANSI member and Accredited Standards Developer (ASD), has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on PDA-sponsored American National Standards, effective May 6, 2020. For additional information, please contact: Ms. Christine Alston-Roberts, Standards Manager, Senior, Parenteral Drug Association® - Connecting People, Science and Regulation®, Bethesda Towers, Suite 600, 4350 East-West Highway, Bethesda , MD 20814; phone: 301.656.5900, ext. 106; e-mail: roberts@pda.org.

# International Organization for Standardization (ISO)

#### Call for International (ISO) Secretariat

#### ISO/TC 71 – Concrete, reinforced concrete and pre-stressed concrete

#### Comment Deadline: June 5, 2020

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 71 – Concrete, reinforced concrete and prestressed concrete. ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 71 to the American Concrete Institute (ACI). ACI International has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

ISO/TC 71 operates under the following scope:

Standardization of the technology of concrete, of the design and construction of concrete, reinforced concrete and pre-stressed concrete structures, so as to ensure progressive development both in quality and in price reduction; and of definitions and terms, as well as testing procedures, to facilitate international exchange of research work.

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 71. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

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

(4) ANSI is able to fulfill the requirements of a Secretariat.

If no U.S. organization steps forward to assume the ISO/TC 71 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity by June 5, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

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

#### ISO/TC 71/SC 4 – Performance requirements for structural concrete

#### Comment Deadline: June 5, 2020

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 71/SC 4 – Performance requirements for structural concrete. ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 71/SC 4 to the American Concrete Institute (ACI). ACI International has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

ISO/TC 71/SC 4 operates in the area of "Performance requirements for structural concrete" under the scope of ISO/TC 71:

Standardization of the technology of concrete, of the design and construction of concrete, reinforced concrete and pre-stressed concrete structures, so as to ensure progressive development both in quality and in price reduction; and of definitions and terms, as well as testing procedures, to facilitate international exchange of research work.

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 71/SC 4. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

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

If no U.S. organization steps forward to assume the ISO/TC 71/SC 4 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity by June 5, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

Information concerning the United States retaining the role of international Secretariat may be obtained by contacting ANSI's ISO Team (<u>isot@ansi.org</u>).

#### **ISO New Work Item Proposal**

#### Managing Risk for Youth and School Trips

#### Comment Deadline: June 5, 2020

COPOLCO, the ISO Policy Advisory Committee on Consumer Issues, and SCC, has submitted to ISO a proposal for new work item proposal for the development of an ISO standard on Managing risk for youth and school trips, with the following scope statement:

We envision a new ISO standard which will provide guidance for managing risk for youth (in particular. minors due to their particular vulnerabilities) and school trips for both domestic and international travel. The standard will gather best practices to address typical risks for this sector such as behavioral breaches and carelessness of students, weather-related problems, requirements for those with special needs (such as travelers with disabilities), technical elements such as mechanical failures of equipment, etc. The standard will benefit both the travelers themselves and the organizations that serve them by covering:

 Safety and security of groups of young people travelling (specifically but not limited to school groups);

- Risk management for organizations such as school boards, tourist attractions, tour operators, service providers, and recreational activities, etc.

NOTE: This proposed standard will not include how to organize such trips and it will not be limited to adventure travel.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish

(scornish@ansi.org) by close of business on Friday, June 5, 2020.

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

#### Child Care Articles

#### Comment Deadline: June 5, 2020

AFNOR, the ISO member body for France, has submitted to ISO a proposal for a new field of ISO technical activity on Child care articles, with the following scope statement:

Standardization of horizontal requirements of any product designed or obviously intended to safely ensure and facilitate seating, bathing, changing and general body care, feeding, sleeping, transportation and protection for young children. Standardization of all products related to child care for which no other Technical Committee exists. The main focus is for products intended for children up to 4 years old.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, June 5, 2020.

#### Social Responsibility

#### Comment Deadline: June 5, 2020

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

Standardization in the field of Social Responsibility to provide guidance and framework to all types of organizations, regardless of their size, activity or location. It allows organizations to challenge their own practices, define their corporate social responsibility and thus devise strategies to enhance their contribution to sustainable development.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, June 5, 2020.

## **Information Concerning**

### **American National Standards**

### **Call for Members**

### **AAMI/ISO Standards**

## Comment Deadline: June 1, 2020

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

**AAMI/ISO 8637-1**, *Extracorporeal systems for blood purification series, Part 1: Haemodialysers, haemodiafilters, haemofilters and haemoconcentrators.* Specifies requirements for haemodialysers, haemodiafilters, haemofilters and haemoconcentrators, for use in humans. Seeking industry/general interest/regulator members. To apply or obtain additional information, please contact Cliff Bernier at <u>cbernier@aami.org</u> by June 1, 2020.

**AAMI/ISO 8637-2**, *Extracorporeal systems for blood purification, Part 2: Extracorporeal blood circuit for haemodialysers, haemodiafilters an haemofilters*. Specifies requirements for the blood circuit for devices used in extracorporeal blood filtration therapies such as, but not limited to, haemodialysis, haemodiafiltration, haemofiltration and transducer protectors (integral and non-integral) intended for use in such circuits. Seeking industry/general interest/regulator members. To apply or obtain additional information please contact Cliff Bernier at cbernier@aami.org by June 1, 2020.

**AAMI/ISO 8637-3**, *Extracorporeal systems for blood purification, Part 3: Plasmafilters.* Specifies requirements and acceptance criteria (including test methods) for safety related parameters for plasmafilters. Specifies requirements for sterile, single-use plasmafilters, intended for use on humans. Seeking industry/general interest/regulator members. To apply or obtain additional information please contact Cliff Bernier at <u>cbernier@aami.org</u> by June 1, 2020.



## American National Standards (ANS) – Where to find Procedures, Guidance, Interpretations and More...

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

- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): <u>www.ansi.org/essentialrequirements</u>
- 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): <u>www.ansi.org/standardsaction</u>
- Accreditation information for potential developers of American National Standards (ANS): <u>www.ansi.org/sdoaccreditation</u>
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): <u>www.ansi.org/asd</u>
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: <u>www.ansi.org/asd</u>
- American National Standards Key Steps: <u>www.ansi.org/anskeysteps</u>
- American National Standards Value: <u>www.ansi.org/ansvalue</u>
- ANS Web Forms for ANSI-Accredited Standards Developers PINS, BSR8|108, BSR11, Technical Report: <u>www.ansi.org/PSAWebForms</u>
- Information about standards Incorporated by Reference (IBR): www.ansi.org/ibr
- ANSI Education and Training: <u>www.standardslearn.org</u>

If you have a question about the ANS process and cannot find the answer quickly, please send an email to psa@ansi.org.

Please also visit Standards Boost Business at <u>www.standardsboostbusiness.org</u> for resources about why standards matter, testimonials, case studies, FAQs and more.

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



BSR/ASHRAE Addendum d to ANSI/ASHRAE Standard 15-2019

## Public Review Draft Proposed Addendum d to Standard 15-2019, Safety Standard for Refrigeration Systems

#### First Public Review (May 2020) (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.

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

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

BSR/ASHRAE Addendum d to ANSI/ASHRAE Standard 15-2019, *Safety Standard for Refrigeration Systems* First Public Review Draft

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

#### FOREWORD

This addendum revises the scope of the standard to clarify that it does not apply to residential refrigeration systems covered by ASHRAE Standard 15.2P. This change in scope will not be effective until the publication of ASHRAE Standard 15.2P.

*Note:* This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 d to Standard 15-2019

Modify Section 2 as follows. The remainder of Section 2 remains unchanged.

#### 2. SCOPE

- 2.1 This standard establishes safeguards for life, limb, health, and property and prescribes safety requirements.
- 2.2 This standard applies to:
  - a. the design, construction, test, installation, operation and inspection of mechanical and absorption refrigeration systems, including heat pump systems used in stationary applications;
  - b. modifications including replacement of parts or components if they are not identical in function and capacity; and
  - c. substitutions of refrigerant having a different designation.
- 2.3 This standard does not apply to refrigeration systems using ammonia (R-717) as the refrigerant.
- 2.4 This standard does not apply to residential refrigeration systems serving only a single dwelling unit or sleeping unit complying with ASHRAE Standard 15.2.

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BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 15-2019

## **First Public Review Draft**

## Proposed Addendum f to Standard 15-2019, Safety Standard for Refrigeration Systems

First Public Review (May 2020) (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.

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

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

BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 15-2019, *Safety Standard for Refrigeration Systems* First Public Review Draft

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

#### FOREWORD

This addendum proposes to insert a new appendix that will be used to add clarifying, non-mandatory reference information for the purpose of improving ease of use for the user, as well as moving mandatory normative reference information into the body of the standard.

References are also updated, as appropriate to the most current version.

*Note:* This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 f to Standard 15-2019

Insert new Informative Appendix A as follows.

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

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

This informative appendix is not a part of the standard. It provides explanatory information related to provisions in the standard. Sections of the standard with associated explanatory information in this appendix are marked with an asterisk "\*" after the section number, and the associated appendix information is located in a corresponding section number preceded by "A".

#### Redesignate existing Informative Appendix A as new Informative Appendix B.

#### **INFORMATIVE APPENDIX A—INFORMATIVE REFERENCES**

This appendix contains a full list of informative references only. A full list of normative references is included in <u>Chapter 14</u>*Normative Appendix B*. References in this standard are numbered in the order in which they appear in the document, so the numbers for normative references are shown for the convenience of the user.

- IIAR. <u>2019</u>2014. ANSI/IIAR 2-2014 with addendum A, American National Standard for Safe Design of Closed-Circuit Ammonia Refrigeration Systems. <u>AlexandriaArlington</u>, VA: International Institute of Ammonia Refrigeration.
- 2. Not an informative reference.
- 3. Not an informative reference.
- 4. Not an informative reference.
- 5. Not an informative reference.
- 6. Not an informative reference.
- 7. ASHRAE. 2017. ASHRAE Handbook—Fundamentals. Atlanta: ASHRAE.
- 8. Not an informative reference.
- 9. Not an informative reference.

BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 15-2019, Safety Standard for Refrigeration Systems First Public Review Draft

- 10. Not an informative reference.
- 11. Not an informative reference.
- 12. Not an informative reference.
- 13. Not an informative reference.
- 14. NIST. 2013. NIST REFPROP, <u>Standard Reference Database 23</u>, Version 9.1. National Institute of Standards and Technology, Gaithersburg, MD.
- 15. IUPAC. 2013. Atomic Weights of the Elements 2013 (IUPAC Technical Report). International Union of Purse and Applied Chemistry, Research Triangle Park, NC.

#### Redesignate existing Informative Appendix B as new Chapter 14.

#### **CHAPTER 14INFORMATIVE APPENDIX A—NORMATIVE REFERENCES**

This <u>chapter</u>appendix contains a full list of informative references only. A complete list of references that are solely informative are included in Informative <u>Appendix B</u>Appendix A. References in this standard are numbered in the order in which they appear in the document, so the numbers for informative references are shown for the convenience of the user.

- 1. Not a normative reference.
- ASHRAE. <u>2019</u>2013. ANSI/ASHRAE Standard 34, Designation and Safety Classification of Refrigerants. Atlanta: ASHRAE.
- 3. NFPA. 20202014. NFPA 70, National Electric Code®. Quincy, MA: National Fire Protection Association.
- AHRI. <u>2016</u><del>2015</del>. AHRI 700-<u>2016</u><del>2015</del>, Specifications for Refrigerants and AHRI Standard 700c-2014, Appendix C to <u>AHRIARI</u> Standard 700—Analytical Procedures for <u>AHRIARI</u> Standard 700-2014. Arlington, VA: Air-Conditioning<u>. Heating</u> and Refrigeration Institute.
- 5. UL. 2015. UL 1995, Heating and Cooling Equipment, 5<sup>th</sup> Edition. Northbrook, IL: Underwriters Laboratories UL <u>LLCInc</u>.
- 6. ASME. <u>2019</u><del>2015</del>. Boiler and Pressure Vessel Code, Section VIII, "Rules for Construction of Pressure Vessels," Division 1. New York: American Society of Mechanical Engineers.
- 7. Not a normative reference.
- 8. ASME. <u>2016</u>2013. ANSI/ASME B31.5, Refrigeration Piping and Heat Transfer Components. New York: American Society of Mechanical Engineers.
- 9. ASME. 2015. ANSI/ASME A13.1, Scheme for the Identification of Piping Systems. New York: American Society of Mechanical Engineers.
- 10. ASTM. <u>2016</u>2014. ANSI/ASTM B88, Standard Specification for Seamless Copper Water Tube. West Conshohocken, PA: American Society for Testing and Materials.
- 11. ASTM. <u>2018</u><del>2013</del>. ANSI/ASTM B280, Standard Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service. West Conshohocken, PA: American Society for Testing and Materials.
- 12. ASTM. <u>2019</u><del>2011</del>. ANSI/ASTM B86/<u>B68M</u>, Standard Specification for Seamless Copper Tube, Bright Annealed. West Conshohocken, PA: American Society for Testing and Materials.
- 13. ASTM. <u>2019</u><del>2011</del>. ANSI/ASTM B75/<u>B75M</u>, Standard Specification for Seamless Copper Tube. West Conshohocken, PA: American Society for Testing and Materials.
- 14. Not a normative reference.
- 15. Not a normative reference.

#### UL 61800-5-1, Standard for Safety for Adjustable Speed Electrical Power Drive Systems - Part 5-1: Safety Requirements - Electrical, Thermal and Energy

#### 1. BDM/CDM/PDS Supplied by Photovoltaic (PV) Modules

#### 4.3.6.2 Insulation to the surroundings

#### 4.3.6.2.1 General

.ding Insulation for BASIC, SUPPLEMENTARY, and REINFORCED INSULATION between a circuit and its surroundings shall be designed according to:

the impulse voltage

or

the TEMPORARY OVERVOLTAGE,

or

the **WORKING VOLTAGE** of the circuit.

For creepage distances, the r.m.s. value of the working VOLTAGE is used. For clearance distances and solid insulation, the recurring peak value of the WORKING VOLTAGE is used, as described in 4.3.6.2.2 to 4.3.6.2.4.

Examples of WORKING VOLTAGE with the combination of a.c., d.c. and recurring peaks are on the d.c. link of an indirect voltage source converter, or the damped oscillation of a thyristor snubber, or internal voltages of a switch-mode power supply.

The impulse voltage and TEMPORARY OVERVOLTAGE depend on the SYSTEM VOLTAGE of the circuit, and the impulse voltage also depends on the overvoltage category, as shown in Table 7 (for LOW-VOLTAGE PDS) and Table 8 (for HIGH-VOLTAGE PDS).

The SYSTEM VOLTAGE in column 1 of these tables is:

For Table 7

in TN and TT systems: the r.m.s. value of the rated voltage between a phase and earth

NOTE A corner-earthed system is a TN system with one phase earthed, in which the system VOLTAGE is the r.m.s. value of the rated voltage between a non-earthed phase and earth (i.e. the phase-phase voltage).

in three-phase IT systems:

for determination of impulse voltage, the r.m.s. value of the rated voltage between a phase and an artificial neutral point (an imaginary junction of equal impedances from each phase);

NOTE For most systems, this is equivalent to dividing the phase-to-phase voltage by  $\sqrt{3}$ .

for determination of TEMPORARY OVERVOLTAGE, the r.m.s. value of the rated voltage between phases;

- in single-phase IT systems: the r.m.s. value of the rated voltage between phases.
- For Table 8: the r.m.s. value of the rated voltage between phases.

NOTE 3 For both tables, when the supply voltage is rectified a.c., the SYSTEM VOLTAGE is the r.m.s. value of the source a.c. before rectification, taking into account the supply earthing system.

NOTE 4 Voltages generated within the PDS by the secondaries of transformers providing galvanic isolation from the supply mains are also considered to be SYSTEM VOLTAGE for the determination of impulse voltages.

NOTE 5 For PDS having series-connected diode bridges (12-pulse, 18-pulse, etc.), the SYSTEM VOLTAGE is the sum of the a.c. voltages at the diode bridges.

4.3.6.2.1DV D2 Modification:

4.3.6.2.1DV.1 For evaluating the clearances and creepage distances between uninsulated LIVE PARTS and the surface on which the equipment is mounted, the mounting surface is evaluated as part of an enclosure, unless any deformation of the enclosure will not reduce the clearances and creepage distances between the mounting surface and any uninsulated LIVE PART.

4.3.6.2.1DV.2 The system voltage for Table 7 and Table 8 shall be according to the higher value given by the following:

- a) The largest rated voltage for equipment rated in accordance with 6.2DV.2.1.5(a); and
- b) The largest lower rated voltage for equipment rated in accordance with 6.2DV.2.1.5(b).

4.3.6.2.1DV.3 For BDM/CDM/PDS intended to receive power partially or fully from photovoltaic (PV) modules and panels, the system voltage of Table 7 shall be the larger of the mains voltage or the PV open-circuit line to ground voltage at the PV power input of the BCM/CDM/PDS.

#### 2. Update to Lithium Battery Requirements

#### **DVC.3.1 Lithium Cells and Batteries**

DVC.3.1.2 Equipment provided with a replaceable lithium battery shall have a caution marking close to the battery. that consists of the word "WARNING" and the following or equivalent, "Risk of explosion if battery is replaced by an incorrect type. Replace battery only with the same type of battery. Dispose of used batteries according to the instructions." The marking shall comply with one of the following options:

a) The word "WARNING" and the following or equivalent, "Risk of explosion if battery is replaced by an incorrect type. Replace battery only with the same type of battery. Dispose of used batteries according to the instructions."

b) The word "Warning" and the following or equivalent, "Risk of explosion. See manual for battery replacement." The maintenance manual shall provide the types of battery that are suitable for replacement and instructions for disposal.

#### 4. Clarification of Clause DVD.2.1.3.6 and DVD.2.1.3.7

DVD.2.1.3.6 LIVE PARTS or portions of LIVE PARTS which extend through a primary Type 12 enclosure must be protected from dripping non-corrosive liquids and circulating dust. Protection from dripping non-corrosive liquids shall comply with by either method in a) or b) of the following methods: protection from and circulating dust shall comply with by either method in c) or d) of the following methods. Protection from from dripping non-corrosive liquids shall be verified by the Drip Test or Atomized Water Test of UL 50E, protection from circulating dust shall be verified by the Dust test or Atomized Water Test of UL 50E. With respect to a) and c) below, a material is considered to be integral to the LIVE PART if a clearance equal to or greater than the required clearance for basic insulation of the LIVE PART is not maintained between any portion part of the LIVE PART and that the material.

a) If protection from dripping non-corrosive liquids is provided by electrical insulation integral to the insulated LIVE PART, the insulation material must meet <u>either</u> the requirements for Flame Rating, RTI, HWI, HAI, and CTI as described in 4.4.2.2.DV, or be on of the generic materials of <u>Table 14</u> as described in Insulating Materials,4.4.2, and additionally the material must meet the requirements for Volume Resistivity and Dielectric Strength, both of the Standard for Polymeric Materials - Use in Electrical Equipment Evaluations, UL 746C, following exposure to water per Water Exposure and Immersion of UL 746C.

b) If protection from dripping liquids is provided by mechanical means such as a cavity, channel, hood, or guard, the construction must inhibit contact with dripping liquids when the assembly including primary enclosure is subjected to the Drip Test of the Standard for Enclosures for Electrical Equipment, Environmental Considerations, UL 50E with the enclosure mounted in all orientations allowed.

c) If protection from circulating dust is provided by electrical insulation integral to the LIVE PART, the insulation material must meet the requirements for Flame Rating, RTI, HWI, HAI and CTI or generic materials as described in Insulating Material, Section 4.4.2.

d) If protection from circulating dust is provided by mechanical means such as a cavity, channel, hood, or guard, the construction must inhibit contact with circulating dust or atomized water when the assembly including primary enclosure is subjected to either the Dust Test or the Atomized Water Test of the Standard for Enclosures for Electrical Equipment, Environmental Considerations, UL 50E with the enclosure mounted in all orientations allowed. Verification of contaminant ingress is to be accomplished by disassembly and visual inspection immediately following the conclusion of the test.

Note: Compliance with a) for protection from dripping non-corrosive liquids also achieves compliance with c) for protection from circulating dust.

DVD.2.1.3.7 LIVE PARTS or portions of LIVE PARTS which extend through a primary Type 4 or 4X enclosure must be protected from rain, splashing water, and hose-directed water by either of the following methods:

a) If protection from rain, splashing water, and hose-directed water is provided by electrical insulation integral to the insulated <u>LIVE PART live part</u>, the insulation material must meet the requirements for Flame Rating, RTI, HWI, HAI, and CTI as described in 4.4.2.2.DV, or be on of the generic materials of Table 14 as described in Insulating Materials, 4.4.2, and additionally the material must meet the requirements for Volume Resistivity and Dielectric Strength, both of the Standard for Polymeric Materials - Use in Electrical Equipment Evaluations, UL 746C, following exposure to water per Water Exposure and Immersion of UL 746C.

b) If protection from rain, splashing water, and hose-directed water is provided by mechanical means such as a cavity, channel, hood, or guard, the construction must inhibit contact with rain, splashing water, and hose-directed water when the assembly including primary enclosure is subjected to the Hosedown Test of <u>clause DVD.2.1.3.7.1</u> the Standard for Enclosures for Electrical Equipment, Environmental Considerations, UL 50E with the enclosure mounted in all orientations allowed.

DVD.2.1.3.7.1 e)-Regardless of the protection means selected in DVD.2.1.3.7 a) or b), protection from water must be verified by the Hosedown Test of UL 50E, the Standard for Enclosures for Electrical Equipment, Environmental Considerations. At the conclusion of either the Hosedown Test, no water is allowed to be in contact with uninsulated live parts other than uninsulated live parts in limited voltage/current circuits, as described in Annex DVC, that might be exposed in places such as the windings of a cooling fan supplied by a limited voltage/current source. Water is allowed to contact insulating material. Verification of water ingress is to be accomplished by disassembly and visual inspection immediately following the conclusion of the test. FromUt

#### 6. Heat Cycling Test for Spring-loaded Bus Bar Joints

#### 4.3.8.4DV.32 D2 Modification to add the following:

Bus bars using spring-loaded joints for connection shall be subjected to the heat cyclind test of 5.2.3.8DV.3. A spring-loaded joint shall be considered to be one in which the clamping force is c. d. or. .rpose o .could not be .could not developed by the deflection of a spring member in the assembly of the joint or developed by the elasticity of a metal clamp or clip in the assembly of the joint. For the purpose of this requirement, a dished washer shall not be considered to exert spring loading and would not be required to be

BSR/UL 2525-202x, Standard for Two-Way Emergency Communications Systems for Rescue Assistance

#### 1. Proposed First Edition of UL 2525, Standard for Two-Way Emergency Communications Systems for Rescue Assistance, and approval as an American National Standard

34.4.1 Primary batteries are not prohibited from being used when all of the following conditions are met:

a) The capacity of the primary batteries shall be monitored for integrity. The batteries shall be monitored while loaded by:

1) Transmission of the transmitter <u>with the product in the emergency</u> <u>communication mode of operation;</u> or

2) A load equivalent to the load imposed by transmission in the emergency communication mode of operation.

b) A required battery trouble status signal shall be transmitted to the master control unit for a minimum of 7 days before the battery capacity of the transmitter/transceiver/product has depleted to a level insufficient to maintain <u>four hours of proper non-emergency operation of the transmitter/transceiver/product</u>.

61.1.1 When a primary battery is used, it shall provide power to the unit under intended ambient conditions for a minimum of one year in the supervisory condition and then operate the product for a minimum of  $\frac{5}{5}$  min  $\frac{4}{1000}$  hours of the emergency condition, followed by 7 days of trouble signal. If the installation instructions of the product indicate a battery replacement period exceeding one year, the tests specified in 61.2.1 - 61.4.3 shall be conducted for that specified extended time period.

35.1.1 All means of interconnecting equipment, devices, and appliances shall be monitored for integrity of the interconnecting conductor(s) and/or equivalent path(s) so that the occurrence of a single ground, single open, or adverse condition shall automatically result in a trouble signal.

Exception: Pathways required to operate with a specific Class designation in accordance with 35.1.8 - 35.1.10 35.1.11.

35.1.10 Pathways designated as Class X shall operate as follows:

A redundant path is included.

a)

b) Operational capability continues past a single open, and the single open fault shall result in the annunciation of a trouble signal.

c) Operational capability in a radio frequency and/or wireless pathway/channel continues during a single fault consisting of each of the following applied separately:

Application of an adverse condition at a transceiver/repeater other 1) than the device under test:

Blocking one transmission path/channel while in use at the device 2) under test for sending and/or receiving signals; and

Blocking one path/channel at the control unit receiver/transceiver 3) sionfromul while that channel is in use for receiving signals from and/or sending signals to the device under test.

The fault shall result in the annunciation of a trouble signal.

Each transceiver and/or repeater in a radio frequency and/or wireless d) pathway/channel utilizes frequency hopping spread spectrum technology or equivalent means to ensure the reliability of pathways.

Each transceiver and/or repeater in a radio frequency and/or wireless e) pathway/channel is powered by one of the following means:

Both a primary source meeting 34.2 and a secondary source 1) meeting 34.3;

Multiple primary batteries meeting 34.4 (k). 2)

Operational capability continues past a single short circuit, and the single <del>d)</del>f) short-circuit fault shall result in the annunciation of a trouble signal.

Operational capability continues past a combination open fault and <del>e)</del>g) ground fault.

Conditions that affect the intended operation of the path are annunciated <del>f)</del>h) as a trouble signal.

Operational capability is maintained during the application of a single <del>g)</del>i) ground fault.

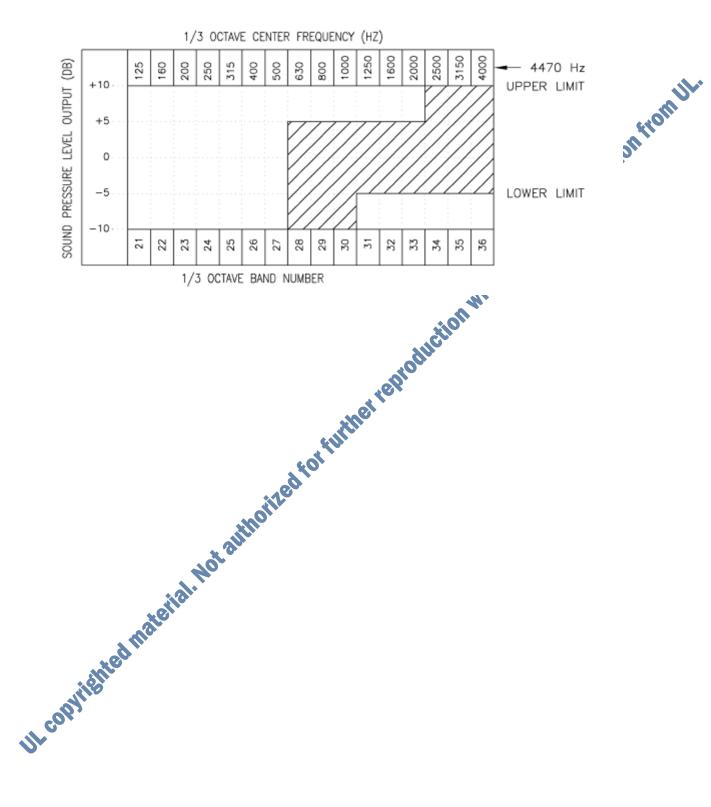
A single ground condition shall result in the annunciation of a trouble

i)k) Where operational capability is to be maintained during a fault, the operational capability shall be restored within 200 s of the application of the fault.

Exception No. 1: Requirements (f), (g), (i), and (j) shall not apply to nonconductive pathways (e.g. wireless or fiber).

Exception No. 2: Requirement (b) shall not apply to radio frequency/wireless pathways.

#### FREQUENCY RESPONSE AND OUTPUT SOUND PRESSURE LEVEL



(Reference: Clause 7.3.1)

#### UL 50, Standard for Safety for Enclosures for Electrical Equipment, Non-Environmental Considerations

#### 8. New Annex E for Adhesives, Enclosures, Non-mechanical Means of Securement

E1.1 This Annex is alternatively applicable (see Clause 7.1.4) to enclosures relying on adhesives to maintain enclosure integrity or as sole means of assembly securement of associated components, such as covers, plugs, windows, hinges, locks, clasps, mounting panels, and conduit hubs.

#### **Annex B - Reference Standards**

		(Table trunca	ated for clarit	y)
Ref. No.	Clause No.	Canada	Mexico	Is, and conduit hubs. lards y) United States
<del>19</del>	<del>E2.3.3.1</del>	CSA C22.2 No. 60065, Audio, Video and Similar Electronic Apparatus, Clause 12.1.3	<del>No</del> <del>Equivalent</del>	Audio, Video, and Similar Electronic Apparatus-Safety Requirements, UL 60065, Clause 12,1,3
<del>20</del> - <u>19</u>	E2.2.6.3	ASTM Standard G 155, Standard Practice for Operating Xenon Arc Light	No Equivalent	ASTM Standard G 155, Standard Practice for Operating Xenon Arc Ligh
	entedm	ASTM Standard G 155, Standard Practice for Operating Xenon Arc Light		

## UL 50E, Standard for Safety for Enclosures for Electrical Equipment, Environmental Considerations

#### 13. New Annex E for Adhesives, Enclosures, Non-mechanical Means of Securement

#### Annex E - Adhesives, Enclosures, Non-mechanical Means of Securement

#### E1 General

E1.1 This Annex is alternatively applicable (see Clause 7.1.4) to enclosures relying on adhesives to maintain enclosure integrity or as sole means of assembly securement of associated components, such as covers, plugs, windows, hinges, locks, clasps, mounting panels, and conduit hubs.

E1.2 This Annex does not apply to the use of adhesives as the sole mechanical means of securing any conductive parts.

E1.3 Associated components necessary for compliance with enclosure requirements shall not be secured solely by adhesives, unless the adhesive complies with the tests of Clause E2.

#### E2 Tests

#### E2.1 General

E2.1.1 The adhesive aging tests listed in Clause E2.2 shall be performed, as applicable, for each combination of adhesives and materials bonded by the adhesive.

E2.1.2 The test samples shall be actual production enclosures or, where necessary to perform the tests described below, consist of test specimens that approximate the adhesive bond with respect to materials, length, shape and application.

E2.1.3 Immediately after the adhesive aging tests, the samples shall be tested for mechanical and <u>applicable</u> environmental tests of 8.2, 8.3, 8.4, 8.6, 8.10, 8.11, or 8.12.

#### E2.2 Adhesive aging test sequence

#### E2.2.1 General

E2.2.1.1 Each sample shall be subjected to the accelerated aging test sequence of Clauses E2.2.2 to E2.2.6 as applicable.

#### E2.2.2 Pre-conditioning

E2.2.2.1 All test specimens shall be preconditioned at 23°C  $\pm$ 2°C and a relative humidity of 50  $\pm$ 5% for at least 24 h

#### E2.2.3 Aging by increased temperature

E2.2.3.1 All test specimens shall be placed in an air circulating oven at:

a) 100°C ±1°C for 168 hours, or

b) 82°C ±1°C for 1,344 hours 8 weeks.

#### E2.2.4 Aging by low temperature cycling

E2.2.4.1 Adhesives that bond metal surfaces shall be tested in accordance with Clause E2.2.4.2.

E2.2.4.2 The test specimen shall be placed in a freezer at a temperature of -40°C ±5°C for a period of 4  $\pm 0.25$  h. The test specimen shall then be removed from the freezer and placed at 23°C  $\pm 2$ °C temperature for 16 ±0.5 h. The test specimen shall then be returned to the freezer at a temperature of -40°C ±5°C for a further period of 4 ±0.25 h and then removed from the freezer and placed at normal room temperature FromUt  $(23 \pm 5^{\circ}C)$  for at least 24 h.

#### E2.2.5 Heat-cold-humidity cycling

E2.2.5.1 Adhesives that join polymeric surfaces or a combination of polymeric and metal surfaces shall be tested in accordance with Clause E2.2.5.2.

E2.2.5.2 The test specimen shall be subjected to heat-cold-humidity cycling, as follows:

a) The test specimen shall be placed vertically in a forced-air oven at an elevated temperature of the material RTI rating 100°C for a plastic application surface, and 80°C for other applications, for a period of 168 ±1 h, and then allowed to return to normal room temperature (23 ±5°C) for at least 24 h.

b) The test specimen shall then be placed in a freezer at -40  $\pm$ 5 °C for 2 h and then be removed from the freezer and allowed to return to normal room temperature (23 ±5°C) for at least 1 h.

c) The test specimen shall be placed in a humidity cabinet at 40 ±2°C and 95 ±5% relative humidity for 3 h and then allowed to return to normal room temperature (23 ±5°C) for at least 1 h. Testing shall be repeated in accordance with Items (a) to (c) for a total of three cycles, except that the time duration of Item (a) shall be reduced to 3 h in the second and third cycles.

At the end of the third cycle, the test specimen shall be placed at normal room temperature (23 ±5°C) for at least 24 h before further evaluation.

#### E2.2.6 Aging by exposure to environmental conditions

#### E2.2.6.1 General

E2.2.6.1.1 The test specimen shall be subjected to the humidity cycling test of Clauses E2.2.6.2 and one of the applicable tests of Clauses E2.2.6.3, E2.2.6.4, or E2.2.6.5. In addition, Type 4, 4X, 6 and 6P metal enclosures and enclosures with painted metal surfaces, joined with adhesive, shall also be subjected to the aging immersion in fluids test of Clause E2.2.6.5.

Note: Tests nClause E2.2.6.3, E2.2.6.4, and E2.2.6.5 are not required where the adhesive is not exposed to sunlight or other sources of ultra-violet radiation.

#### E2.2.6.2 Aging by humidity (all enclosures)

E2.2.6.2.1 The test specimen shall be placed vertically in a humidity cabinet at a temperature of 40 ±2°C and a relative humidity of 95 ±5% for a period of 72 ±0.5 h. The test specimen shall then be removed from the cabinet and placed at normal room temperature (23 ±5°C) for at least 24 h before further testing.

#### E2.2.6.3 Aging by exposure to sunlight and water (indoor enclosures)

E2.2.6.3.1 All the test specimens shall be subjected to xenon arc light for 250 ±2 h in accordance with ASTM Standard G 155, Cycle 1. The apparatus shall be operated without water spray, but with humidity control at 30%, at 0.35W/m<sup>2</sup> at 340 nm. The black panel temperature shall be 63°C + 2.5°C. The inner and outer filters shall be borosilicate glass, simulating natural daylight throughout the actinic region. The test specimen shall then be removed from the cabinet and placed at normal room temperature (23°C ±5°C) for at least 24 h before further testing.

E2.2.6.3.1 Type 2, 5, 12 and 13 enclosure specimens shall be subjected to alternate cycles of 18 minutes water spray and light, and 102 minutes of xenon arc light, for a total period of 250 ± 2 h in accordance. with ASTM Standard G 155, Cycle 1. The apparatus shall be operated with water spray at 0.35 W/m2 at 340 nm. The black panel temperature shall be  $63 \pm 2.5$  °C.

E2.2.6.3.2 The inner and outer filters shall be borosilicate glass, simulating natural daylight throughout the actinic region. The test specimen shall then be removed from the cabinet and placed at normal room temperature  $(23 \pm 5^{\circ}C)$  for at least 24 h before further testing.

#### E2.2.6.4 Aging by exposure to sunlight and water (outdoor enclosures)

E2.2.6.4.1 Type 3R, 3S, 3, 3RX, 3SX, 3X, 4, 4X, 6, and 6P enclosure specimens shall be subjected to alternate cycles of 18 of water spray and light and 102 min of xenon arc light, for a total period of 750 ± 2 h in accordance with ASTM Standard G 155, Cycle 1. The apparatus shall be operated with water spray at 0.35 W/m2 at 340 nm. The black panel temperature shall be 63 ± 2.5 °C.

E2.2.6.4.2 The inner and outer filters shall be borosilicate glass, simulating natural daylight throughout the actinic ultraviolet spectral region (200-315 nm). The test specimen shall then be removed from the cabinet and placed at normal room temperature (23 ± 5°C) for at least 24 h before visual evaluation and adhesion testing.

#### E2.2.6.5 Aging by immersion in fluids

E2.2.6.5.1 Type 4, 4X, 6, 6P enclosure specimens shall be immersed for 4 ± 0.25 h in a 20% by volume solution of isopropanol in distilled water A authori

#### E2.3 Mechanical tests

#### E2.3.1 General

E2.3.1.1 After the adhesive aging tests of Clauses E2.2.2 to E2.2.6, the effectiveness of the adhesive shall be verified by subjecting the specimen to the mechanical tests required by the end-product standard, or, where no equivalent mechanical test is required in the end-product standard, the tests of Clauses E2.3.2 E2.3.4 shall be applied.

#### E2.3.2 Resistance to external forces

E2.3.2.1 Except as provided by Clause E2.3.3, a test force in accordance with Clause E2.3.2.2 or E2.3.2.3 or E2.3.2.4 shall be applied to the specimen in a direction that will have the greatest tendency to separate the adhesive joint.

E2.3.2.2 For a cover or door or the like, the test force shall be in accordance with the Crushing Resistance Test in NMX-J-235/1-ANCE/CSA C22.2 No. 94.1/UL 50 Clause 8.10.

E2.3.2.3 For a hinge, lock, clasp, or support of a hanging part, the test force shall be four times the weight of the door or cover supported by such a hinge, lock or cover or four times the weight of the supported part.

#### E2.3.3 Vibration test

E2.3.3.1 Parts not capable of being subjected to the Resistance to External Forces Test, Clause E2.3.2, due to size, shape or application, shall be subjected to a Vibration Test as specified in NMX-J-235/1-ANCE/CSA C22.2 No. 94.1/UL 50 Annex B, Ref. No. 19.

E2.3.3.2 The apparatus is fastened in its intended positions of use to the vibration-generator by means of L prior permission straps around the enclosure. The direction of vibration is vertical, and the severity is:

- a) Duration 30 min.
- b) Amplitude 0.35 mm.
- c) Frequency range 10 Hz to 55 Hz to 10 Hz.
- d) Sweep rate approximately 1 octave/min.

E2.3.3.3 The test shall be considered successful if, at the conclusion, none of the following occur:

a) Connection or part, the loosening of which might impair safety, have loosened;

b) Breakage, cracking, rupture and the like, produce an adverse effect on the adhesive;

c) Creation of an opening that would prevent the enclosure from complying with the environment tests applicable for its Type rating; and

d) Any other condition that would increase the likelihood of electric shock or fire, or both, during use of the equipment.

#### E2.3.4 Resistance to impact tes

#### E2.3.4.1 General

E2.3.4.1.1 The overall enclosure and all observation windows shall comply with the Resistance to Impact Test specified NMX-J-235/1-ANCE/CSA C22.2 No. 94.1/UL 50 in Annex B, Ref. No. 3.

To apply the required impact energy, the correct height is calculated by h=E/(gxm), where:

h is the vertical distance in meters;

E is the impact energy in Joules;

g is the gravitational acceleration of 9.91 m/s<sup>2</sup>; and

m is the mass of the steel ball in kilograms.

#### Annex B - Reference Standards

(Table truncated for clarity)

Ref. No.	Clause No.	Canada	Mexico	United States
<del>19</del>	<del>E2.3.3.1</del>	CSA C22.2 No. 60065, Audio, Video and Similar Electronic Apparatus, Clause 12.1.3	<del>No</del> <del>Equivalent</del>	Audio, Video, and Similar Electronic Apparatus-Safety Requirements, UL 60065, Clause 12.1.3
<del>20</del> - <u>19</u>	E2.2.6.3	ASTM Standard G 155, Standard Practice for Operating Xenon Arc Light	No Equivalent	ASTM Standard G 155, Standard Practice for Operating Xenon Arc Light
.00 <sup>44</sup>	entedm	aterial. Not authorized for furth	let reprotiv	60065, Clause 12.1.3 ASTM Standard G 155, Standard Practice for Operating Xenon Arc Light

BSR/UL 197, Standard for Safety for Commercial Electric Cooking Appliances

1. Proposed Revision to Replace the Reference to the Standard For Power Conversion Equipment, UL 508C, With a Reference to the Standard For Adjustable Speed Electric Power Drive Systems, UL 61800-5-1

26.2.1.4 Except as indicated in 26.2.1.3, electronically protected motor circuits shall comply with one of the following:

The Standard for Tests for Safety-Related Controls Employing Solid-State ces, UL 991. When the protective electronic circuit is relying upon to for protective component, it shall control a) Devices, UL 991. When the protective electronic circuit is relying upon software as a protective component, it shall comply with 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

The Standard for Automatic Electrical Controls - Part 1: General b) Requirements, UL 60730-1. If software is relied upon to perform a safety function, it shall be considered software Class B; or

The Standard for Power Conversion Equipment, UL 508C. Standard for c) Adjustable Speed Electric Power Drive Systems UL 61800-5-1.

Exception: Compliance with the above standards are not required for an electronically protected motor circuit is there is no risk of fire, electric shock, or injury to persons during abnormal testing with the motor electronic circuit rendered ineffective; compliance with the applicable requirements of this end product Standard is then required.

JL convitenced material. Not authorited

#### BSR/UL 563, Standard for Safety for Ice Makers

#### 1. Proposed Revision to Replace the References to the Standard For Power Conversion Equipment, UL 508C, With Reference to the Standard For Adjustable Speed Electric Power Drive Systems, UL 61800-5-1

19A.2.2 Except as indicated in clause 19A.2.1 (c) and (f), electronically protected motor in the circuits shall comply with one of the following:
a) Deleted
b) The Standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Automatic Electrical Controls - Part 1: General integration of the standard for Au

Requirements, UL 60730-1 as well as the Standard for Automatic Electrical Controls - Part 2-9: Particular Requirements for Temperature Sensing Controls, UL 60730-2-9. If software is relied upon to perform a safety tonction, it shall be considered software Class B; or

c) The Standard for Power Conversion Equipment, UK 508C Standard for Adjustable Speed Electric Power Drive Systems US 61800-5-1 for a power conversion controller incorporating overcurrent protection with the percentage protection set as indicated in Table <u>19A.1</u>.

Exception: Compliance with the above standards is not required for an electronically protected motor circuit if there is no risk of fire, electric shock, or casualty hazard during abnormal testing with the motor electronic circuit rendered ineffective.

19A.4.1 Hermetic refrigerant motor compressors shall be protected in accordance with one or more of the following:

a) The applicable requirements in UL 60335-2-34; or

The Standard for Power Conversion Equipment, UL 508C Standard for b) Adjustable Speed Electric Power Drive Systems UL 61800-5-1 for a power conversion controller incorporating overcurrent protection with the percentage protection set as indicated in Table 19A.1.

20.19 Operating controls shall comply with one of the following standards:

Deleted

b)

Standard for Solid State Controls for Appliances, UL 244A;

c) Standard for Automatic Electrical Controls - Part 1: General Requirements, UL 60730-1, and the specific applicable Part 2 Standard;

d) Standard for Industrial Control Equipment, UL 508;

e) The Standard for Power Conversion Equipment, UL 508C. Standard for Adjustable Speed Electric Power Drive Systems UL 61800-5-1.

Exception: An electronic control that is simple in design need only be subjected to the applicable requirements of this end-product standard. A control that does not include an integrated circuit or microprocessor, but does consist of a discrete Wearning and the and t switching device, capacitors, relays, transistors, and resistors, is considered

#### BSR/UL 778, Standard for Safety for Motor-Operated Water Pumps

#### 1. Expansion to Allow Electronic Media for Instructions Manual

60.3 The installation, operating, and warning instructions required by Sections 61 - 62 shall be provided with the product in a printed format (e.g. instruction sheet, manual, booklet or similar printed material).

60.4 All other instructions may be provided in an electronic manual with read only format (e.g. PDF with protection, webpage, file on CO-ROM or DVD). If an electronic manual is offered it shall repeat all instructions required in Sections 61 – 62.

60.5 If an electronic manual is provided, the printed instruction material required in 60.3 Leaning and the antishall contain instructions on how to access the electronic manual (e.g. QR Code, website link, CO-ROM, DVD, flash drive) and shall contain detailed instructions on how

BSR/UL 1203, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

#### 1. Revisions to permit the use of electronic medium for required documentation.

#### PROPOSAL

13.4 Drain and breather fittings intended to be installed in a supply connection opening in accordance with installation instructions accompanying for installation of the fitting shall comply with the requirements in Section 85, Explosion Test and Section 86, Hydrostatic Pressure Test

14.2.3.5 When a packing gland must be disassembled to replace the power-supply cord, instructions shall be provided with for each device covering the intended assembly of the packing gland to the equipment. See 60.13.

#### PART IV – MARKINGS AND INSTRUCTIONS

rior D 60.15 Cord-connected equipment that is shipped without the flexible power-supply cord or the attachment fitting attached shall be provided with instructions regarding the installation of these components. These instructions shall be:

- Provided as a permanent part of the equipment; or a)
- Contained on a removable tag secured to the equipment .; b)
- Provided in accordance with 60A. c)

60.21 In accordance with 14.1.1.13, an enclosure shall be provided with instructions packed with each box for drilling and tapping conduit openings. The instructions shall include the following information:

#### **60A Installation Instructions**

#### 60A.1 General

60A.1.1 Explosion-proof and dust-ignition-proof electrical equipment shall be provided with documentation that includes all the instructional material required by this standard.

#### 60A.2 Electronic medium for required instructions

60A.2.1 The required instructional material of this standard may be provided by electronic media under the following conditions:

a) Where all required instructional material is provided by electronic media, there shall be marking on the equipment that contains the international symbol  $\triangle$  (Reference No. 0434B) of ISO 7000), along with the document number, revision level and location of the electronic documentation (e.g. URL, QRcode).

b) Where only some of the required instructional material is provided by electronic media and some is printed:

1) there shall be marking on the equipment that contains the international symbol ⚠ (Reference No. 0434B of ISO 7000), along with the document number,

revision level and location of the electronic documentation (e.g. URL, QRcode); and

2) the printed instructions provided with the equipment shall clearly identify that additional information is available electronically, along with the document number, revision level and location of this electronic documentation (e.g. URL, QRcode).

Exception: For small electrical equipment where some or all of the instructional material is to be provided by electronic media, and where there is limited space for both the international symbol (Reference No. 0434B of ISO 7000) and the document number, revision level and location of the electronic documentation (e.g. URL, QRcode):

a) <u>the international symbol</u> (<u>Reference No. 0434B of SO 7000</u>) <u>shall</u> <u>be marked on the equipment; and</u>

b) printed instructions shall be provided with the equipment that, as a minimum, indicate the document number, revision level and location of the electronic documentation (e. g. URL, QRcode).

NOTE When electronic documentation is referenced either on the device or on the printed instructions, the location given can be the specific location for the required instructions (e. g. direct link to the specific instructions), or can be a more general location. (e.g. the URL for the overall manufacturer's website). It is the manufacturer's responsibility to assure that the location of the required instructions is accessible by the user.

60A.2.2 Alternatively, the reference to the document number and revision level on the marking can be excluded if the location of the electronic documentation marked on the equipment (e.g. URL, QRcode) involves an electronic search feature that makes the required documentation available by entering specific information that is required to be marked on the equipment, such as any combination of model number, part number, serial number, date code, or other unique identifier.

60A.2.3 Where a QRcode is used to provide the required instructional material, and the QRcode contains all required instructional material (as opposed to merely referencing a URL that contains required instructional material), a document number and revision level need not be indicated.

60A.2.4 Where some or all of the required instructional material is provided by electronic media, the required instructional material shall be available in printed format upon request of the user.

NOTE 1 Where required instructional material, especially drawings, is provided in an electronic documentation format, consideration should be given by the manufacturer to its viewability and print capability by the user.

NOTE 2 While electronic medium is permitted for required instructions as part of standards supported by the NEC, CE Code and IECEx System, other constraints may apply in certain market places (e.g. the European Commission's Standing Committee for the ATEX Directive has taken the view that at least the safety related parts of the instructions in respect of ATEX should be supplied in paper form).

64.6 An open-type auxiliary device as described in 62.1, 62.2 and in the exceptions to 62.2 shall be marked provided with instructions indicating that the device is to be installed in a threaded opening in an enclosure, the minimum number of threads to be engaged, and the type of threads required in the enclosure. These instructions may are permitted to be in the form of a pressure-sensitive label.

86.4 The hydrostatic pressure test on the lead wire seal in a fitting is to be conducted on a seal prepared at room temperature, and on a seal prepared at the minimum temperature specified by the manufacturer in the installation instructions supplied with for the fitting or with for the sealing compound.

88.2 The test is to be conducted on seals prepared at room temperature and on seals prepared at the minimum temperature specified by the manufacturer in the installation instructions supplied with for the fitting or with for the sealing compound.

88.3 The number and size of wires that are to be sealed in each sealing fitting shall be as specified in Table 88.1.

Exception: Other numbers and sizes of wires may be used if:

a) A cross section of the wires would fill more than 25 percent but not more than 40 percent of a cross section of the conduit for the fitting, and

b) They represent the range of wires specified in the instructions provided with for the fitting.

#### 102 Markings

102.1 Each outlet box or fitting shall be marked indicating the following in addition to the marking requirements in Section 60, Details.

a) Volume in cubic inches for a box having an internal volume of 100 cubic inches (1.64 L) or less.

b) The electrical rating in volts and amperes, for a cord connector.

c) Each cord connector shall be provided with marking instructions regarding the type of power supply cord to be used. The instructions shall include the following or equivalent information: "Use \_\_\_\_\_ AWG, Type \_\_\_\_\_ power supply cord only." The instructions shall be legible and permanent in nature. The instructions may shall be permitted to be a paper label if located within the terminal compartment and free from mechanical damage.

d) Each cord connector employing a packing gland requiring dismantling during installation and replacement of the cord shall be provided with suitable marking instructions regarding its installation and replacement.

102.8 A conduit fitting for sealing or a box with integral sealing hubs shall be provided with the necessary installation instructions such as proper mounting position and type of sealing compound to be used. This information may be marked on the box or fitting or it may be part of the installation instructions packed with <u>for</u> each box or fitting.

102.11 The instructions <del>provided with each fitting</del> shall include the number, size, and type of wires that can be sealed in the fitting, as determined by the Leakage of Sealing Fittings Test, Section 86. For example, for instructions for a fitting intended for 25 percent maximum fill, see Table 102.1.

102.13 An outlet box not provided with provision for connection to threaded rigid metal conduit shall be provided with instructions packed with each outlet box for drilling and tapping conduit openings. The instructions shall include the following information:

- Maximum number of conduit openings. a)
- b) Maximum and minimum trade size of conduit openings.
- C) Location of conduit openings.
- Type of conduit threads. d)

sionfromul Any other instructions necessary to provide acceptable provision for connection to e) threaded rigid metal conduit in accordance with the requirements of this standard.

131.5 If a plug is to be shipped unassembled with the intention of having the body and the blades assembled subsequently by someone other than the plug manufacturer, instructions shall be furnished with the device giving complete information regarding intended method of assembly.

137.3 Each valve shall be marked to indicate the fluid and fluid temperature with which the valve is intended to be used. This marking may be:

- As specified 60.3; a)
- On a nonmetallic pressure-sensitive label: b)
- On a tag attached to the valve: C)
- On the smallest carton in which the valve is packaged; or d)
- In the installation instructions provided with for each valve. e)

#### 138 Installation Instructions

138.1 If a valve is intended to be mounted in a specific position to function as intended, installation .iOL nateti instructions for mounting in the intended position shall be provided supplied with the valve.

#### BSR/UL 6703, Standard for Safety for Connectors for Use in Photovoltaic **Systems**

#### 1. Additional Requirements to Address the Field Assembly of PV Connectors onto Cables.

3.5.1 FACTORY ASSEMBLED CONNECTOR – A connector that is intended to be assembled and terminated to the cable under controlled conditions at a manufacturer's location.

3.5.2 FIELD ASSEMBLED CONNECTOR – A connector that is intended to be assembled and terminated to the cable in the field.

#### **8A Field Assembled Connectors**

8A.1 For field assembled connectors, the manufacturer shall provide all connector components. and assembly instructions in accordance with Assembly Instructions, Section 12. If any special or nonstandard tools are required for installation of the connector to the cable in the field, the connector manufacturer shall ensure the availability of these tools for installers, by either providing the required tools with the components shipment, or providing reliable supplier's information in the assembly instructions.

#### PERFORMANCE

#### 9 PV Connector Tests

#### 9.1 General

9.1.2 Preparation of specimens

let reproduction 9.1.2.6 For field assembled connectors, all test samples required by this standard shall be assembled from the connector components provided by the manufacturer. The sample assembly process shall be performed precisely according to the manufacturer's assembly instructions, including using manufacturer specified special or nonstandard tools, as described in 8A.1.

#### **12 Assembly Instructions**

#### 12.2 Required content

12.2.1 The instructions shall include the following in addition to any other information required by this standard:

a) The manufacturer's name, contact information, the catalog number of the connector being addressed.

 $\breve{A}$  list containing the date of the first edition of these instructions and the dates of any and all Bubsequent revisions, amendments, and tech notes related to these instructions.

c) The following statements:

1) "The connector is considered to be in compliance with UL 6703 only when assembled in the manner specified by these assembly instructions", and

2) "This connector is suitable for use only with Class B and C stranded copper conductors (See NFPA NEC 70 Chapter 9, Table 10)". If the connector is found to be suitable for use with other stranding classes, the connector shall be marked with those class conductors. See the Standard for Wire Connectors, UL 486A-486B.

d) The following technical information:

1) The minimum and maximum outer wire insulation diameter;

The minimum and maximum number of conductor strands;

3) The minimum and maximum wire size or wire range;

4) Conductor strip length for each allowable conductor size;

5) For a compression type connector, the specific tool(s) or specific removable tool part(s) (pressing die), where required for assembly, identified by:
i) Manufacturer, Catalog or type designation;
ii) Color coding;
iii) Die index number; or
iv) Other equivalent means.

6) For a mechanical type connector, the torque requirements for the setscrew;

7) For factory or other assembly using a press atable showing tool pressure and crimp height for each conductor size; and

8) For locking type connectors, the appropriate tool and it's disconnect operation, see 4.6, and

9) If the PV connector is intended to be field assembled and terminated to the cable in the field, additional procedures and requirements shall be provided as follows:

i) Torques, including any tightening torque for sealing and strain relief means. If different torque values are required for different temperatures, an equation or a table/chart for this adjustment shall be provided;

ble ambient temperature range for field assembly;

Application of adhesive or sealant, if it is provided as part of the connector;

iv) A statement requiring special precautions if assembly occurs in abnormal environmental conditions, such as in rain or snow, extremely hot or cold ambient, or in an area where there is excessive dust, and

UL COPYHER ted material v) A statement requiring special precautions if assembly occurs at a time without the other mating connector, such that a connector's contacts are left unmated and exposed. The statement should specify necessary precautions to prevent occurrences including, but not limited to, corrosion, contamination, icing, etc. that may compromise the integrity of the connector in its final use.