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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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# Comment Deadline: September 24, 2017

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

#### Addenda

BSR/ASHRAE Addendum a to BSR/ASHRAE Standard 90.4-201x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE 90.4-2016)

This addendum deletes the definition of alteration from Section 3 of Standard 90.4, thereby reverting to the definition of alteration in Standard 90.1 (which is reproduced in Standard 90.4 Annex 1).

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

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

#### Addenda

BSR/ASHRAE Addendum b to BSR/ASHRAE Standard 90.4-201x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE 90.4-2016)

This addendum clarifies the exception in Section 6.1.1.2 that addresses the case where existing HVAC systems and equipment serve an addition, and adds parallel criteria to Section 8.1.3 for electrical equipment.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

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

#### Revision

BSR/NSF 61-201x (i137r2), Drinking Water System Components - Health Effects (revision of ANSI/NSF 61-2016)

This Standard establishes minimum health effects requirements for the chemical contaminants and impurities that are indirectly imparted to drinking water from products, components, and materials used in drinking water systems. This Standard does not establish performance, taste, and odor, or microbial growth support requirements for drinking water system products, components, or materials.

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

Send comments (with copy to psa@ansi.org) to: Monica Leslie, (734) 827 -5643, mleslie@nsf.org

#### UL (Underwriters Laboratories, Inc.)

#### New National Adoption

BSR/UL 60947-4-1-201X, Standard for Safety for Low-Voltage Switchgear and Controlgear - Part 4-1: Contactors and Motor-Starters -Electromechanical Contactors and Motor-Starters (national adoption of IEC 60947-4-1 with modifications and revision of ANSI/UL 60947-4-1-2014)

The proposals cover: (1) Harmonization of endurance test cycle rates for contactors, starters, manual motor controllers, manual motor controllers used as a disconnecting means, and manual motor controllers used as tap conductor protection as a U.S.-only national difference; and (2) Harmonization of endurance test cycle rates for manual motor controller and manual self-protected combination motor controller as a U.S.-only national difference.

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

Send comments (with copy to psa@ansi.org) to: Megan Sepper, (847) 664 -3411, Megan.M.Sepper@ul.com

# UL (Underwriters Laboratories, Inc.)

### Revision

BSR/UL 486E-201x, Standard for Safety for Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors (revision of ANSI/UL 486E -2015)

(1) Representative testing with range of wire stranding.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Mitchell Gold, (847) 664 -2850, Mitchell.Gold@ul.com

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 943-201X, Standard for Safety for Ground-Fault Circuit-Interrupters (revision of ANSI/UL 943-2016)

(1) Expansion of auto-monitoring and end-of-life requirements to all types of GFCIs; (2) Addition of requirements for programmable components; (3) Improving the auto-monitoring function of permanently connected ground-fault circuit interrupters.

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

Send comments (with copy to psa@ansi.org) to: Patricia Sena, (919) 549 -1636, patricia.a.sena@ul.com

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 1581-201X, Standard for Safety for Reference Standard for Electrical Wires, Cables, and Flexible Cords (Proposal dated 8/25/17) (revision of ANSI/UL 1581-2017)

Addition of 300°C rated PFA, Revised Table 47.1 and New Table 50.138.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Linda Phinney, (510) 319 -4297, Linda.L.Phinney@ul.com

#### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 2034-201x, Standard for Safety for Single and Multiple Station Carbon Monoxide Alarms (revision of ANSI/UL 2034-2017)

Document dated 8-25-2017 proposes the following revisions to UL 2034: (a) Revisions to End-of-Life Test; (b) Section 6.5 clarification.

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

Send comments (with copy to psa@ansi.org) to: Paul Lloret, (510) 319 -4269, Paul.E.Lloret@ul.com

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 2775-201X, Standard for Fixed Condensed Aerosol Extinguishing System Units (revision of ANSI/UL 2775-2016)

UL proposes a recirculation of a proposal for UL 2775.

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

Send comments (with copy to psa@ansi.org) to: Nicolette Allen, (919) 549 -0973, Nicolette.Allen@ul.com

# Comment Deadline: October 9, 2017

### ADA (American Dental Association)

#### New National Adoption

BSR/ADA Standard No. 111-201x, Adhesion Test Methods to Tooth Structure (identical national adoption of ISO/TS 11405:2015, Dentistry - Testing of adhesion to tooth structure)

This standard provides test methods for quality testing of the adhesive bond between restorative dental materials and tooth structure, as well as substrate selection, storage, and handling. The standard does not include requirements for adhesive materials and their performance.

Single copy price: \$68.00

Obtain an electronic copy from: wardm@ada.org

Order from: Marilyn Ward, (312) 440-2506, wardm@ada.org

Send comments (with copy to psa@ansi.org) to: Paul Bralower, (312) 587 -4129, bralowerp@ada.org

### ADA (American Dental Association)

#### New National Adoption

BSR/ADA Standard No. 69-201x, Dental Ceramic (identical national adoption of ISO 6872:2015 and revision of ANSI/ADA Standard No. 69-2010 (R2015))

This standard specifies the requirements and the corresponding test methods for dental ceramic materials for fixed all-ceramic and metal-ceramic restorations and prostheses.

Single copy price: \$160.00

Obtain an electronic copy from: wardm@ada.org

Order from: Marilyn Ward, (312) 440-2506, wardm@ada.org

Send comments (with copy to psa@ansi.org) to: Paul Bralower, (312) 587 -4129, bralowerp@ada.org

# ADA (American Dental Association)

#### New National Adoption

BSR/ADA Standard No. 89-201x, Dental Operating Lights (identical national adoption of ISO 9680:2014 and revision of ANSI/ADA Standard No. 89-2008 (R2013))

This standard specifies requirements and test methods for operating lights used in the dental office and intended for illuminating the oral cavity of patients.

Single copy price: \$103.00

Obtain an electronic copy from: wardm@ada.org

Order from: Marilyn Ward, (312) 440-2506, wardm@ada.org

Send comments (with copy to psa@ansi.org) to: Paul Bralower, (312) 587 -4129, bralowerp@ada.org

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

#### Revision

BSR/ASHRAE Standard 128-201x, Method of Rating Portable Air Conditioners (revision of ANSI/ASHRAE Standard 128-2011)

This revision of Standard 128-2011 establishes a uniform set of requirements for rating the cooling capacity of portable air conditioners.

Single copy price: \$35.00

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

Order from: standards.section@ashrae.org

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

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

#### Revision

BSR/ASHRAE Standard 181-201X, Methods of Testing for Rating Liquid-to-Liquid Heat Exchangers (revision of ANSI/ASHRAE Standard 181-2014)

This standard prescribes methods of testing the thermal performance and pressure drop of liquid to liquid heat exchangers.

Single copy price: \$35.00

Obtain an electronic copy from: Free download at http://www.ashrae. org/standards-research--technology/public-review-drafts

Order from: standards.section@ashrae.org

Send comments (with copy to psa@ansi.org) to: Online Comment Database at http://www.ashrae.org/standards-research--technology/public-review-drafts

# ATIS (Alliance for Telecommunications Industry Solutions)

#### Revision

BSR/ATIS 0600004-201x, Equipment Surface Temperature (revision of ANSI/ATIS 0600004-2006 (R2011))

This standard sets forth the test methods and temperature limits for verifying surface temperatures of network telecommunications equipment. High exterior temperatures of exposed surfaces on equipment may cause injury or accidents to personnel working with or around the equipment.

Single copy price: \$60.00

Order from: Alexandra Blasgen, (202) 434-8840, ablasgen@atis.org

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

# AWS (American Welding Society)

#### Revision

BSR/AWS D10.10/D10.10M-201x, Recommended Practices for Local Heating of Welds in Piping and Tubing (revision and redesignation of ANSI/AWS D10.10M-2009)

This standard provides information on recommended practices, equipment, temperature control, insulation, and advantages and disadvantages for the methods presently available for local heating of welded joints in pipe and tubing.

Single copy price: \$32.00

Obtain an electronic copy from: sborrero@aws.org

Order from: Stephen Borrero, (305) 443-9353, sborrero@aws.org

Send comments (with copy to psa@ansi.org) to: adavis@aws.org

### CSA (CSA Group)

#### New Standard

BSR Z21.103-201x, Unvented Portable Type Gas Camp Heaters for Indoor and Outdoor Use (new standard)

Details test and examination criteria for gas-fired unvented portable type gas camp heaters including catalytic type, for emergency use, having an input up to and including 18 000 Btu/h (5.27 kW) using propane and liquefied petroleum gases. This standard applies heaters having a regulated outlet pressure not exceeding 5 psi.

Single copy price: Free

Obtain an electronic copy from: cathy.rake@csagroup.org

Order from: Cathy Rake, (216) 524-4990 x88321, cathy.rake@csagroup.org

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

# EOS/ESD (ESD Association, Inc.)

### Withdrawal

ANSI/ESD SP 5.2.1-2013, ESD Association Standard Practice for Electrostatic Discharge Sensitivity Testing -Machine Model (MM) Alternative Test Method: Supply Pin Ganging - Component Level (withdrawal of ANSI/ESD SP 5.2.1-2013)

For those high pin count components (e.g., ball grid array) that interconnect different power leads through common, low-resistance power and ground planes in the package, the number of power and ground leads can be reduced by ganging or grouping supply pins together on a custom test fixture board. A minimum number of power supply pins (i.e., power or ground) should be ganged to bring the total number of tester channels used equal to the number of tester channels available on the tester.

Single copy price: N/A

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl, (315) 339-6937, cearl@esda.org

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

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

#### Withdrawal

ANSI/ESD SP5.2.2-2012, ESD Association Standard Practice for Electrostatic Discharge Sensitivity Testing - Machine Model (MM) Alternative Test Method: Split Signal Pin - Component Level (withdrawal of ANSI/ESD SP5.2.2-2012)

For high pin count components (e.g., ball grid array) with a large number of signal pins, the total number of pins can be reduced by splitting the signal pins into two or more equal sets or subgroups. Special test fixture boards (TFBs) can be constructed to connect each set of signal pins to specific tester channels while floating the remaining unused signal pins. Additional TFBs can be constructed to connect each remaining set of signal pins to specific tester channels while floating the remaining unused signal pins. All power, ground, and control pins on the component should be wired to each TFB.

Single copy price: N/A

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl, (315) 339-6937, cearl@esda.org

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

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

#### Withdrawal

ANSI/ESD SP 5.3.2-2004 (R2013), ESD Association Standard Practice for Electrostatic Discharge Sensitivity Testing - Socketed Device Model (SDM) -Component Level (withdrawal of ANSI/ESD SP 5.3.2-2004 (R2013))

This standard practice defines a method on how to perform component-level socketed device model ESD tests and how to verify the operational state of the ESD simulator test equipment. This document is a standard practice and therefore does not provide any device classification guidelines.

Single copy price: N/A

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl, (315) 339-6937, cearl@esda.org

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

### FM (FM Approvals)

#### New Standard

BSR/FM 1035-201x, Nitrogen Generators (new standard)

Contains test requirements for the performance of nitrogen generator systems as well as design requirements to ensure the systems have a reasonable life. It also contains requirements for marking of the systems, allowable maintenance operations, and operational parameters.

Single copy price: Free

Obtain an electronic copy from: josephine.mahnken@fmapprovals.com

Order from: Josephine Mahnken, (781) 255-4813, josephine. mahnken@fmapprovals.com

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

#### FM (FM Approvals)

#### Revision

BSR/FM 5560-201x, Water Mist Systems (revision of ANSI FM 5560-2007) Provides comprehensive performance requirements for Water Mist Systems for use in fire protection applications. The standard addresses component, system, and fire test requirements for various applications and occupancies. Single copy price: Free

Obtain an electronic copy from: josephine.mahnken@fmapprovals.com

Order from: Josephine Mahnken, (781) 255-4813, josephine.

mahnken@fmapprovals.com

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

### HI (Hydraulic Institute)

#### Revision

BSR/HI 9.8-201x, Rotodynamic Pumps for Pump Intake Design (revision of ANSI/HI 9.8-2012)

The Intake Design Committee will produce a standard that addresses free surface intake designs for rotodynamic pumps.

Single copy price: \$50.00

Obtain an electronic copy from: esuarez@pumps.org

Order from: Edgar Suarez, (862) 217-2441, esuarez@pumps.org Send comments (with copy to psa@ansi.org) to: Same

# TIA (Telecommunications Industry Association)

#### New Standard

BSR/TIA 5050-201x, Telecommunications, Communications Products, Receive Volume Control Requirements for Wireless (Mobile) Devices (new standard)

This Standard establishes receive volume control requirements and testing methods for narrowband, wideband, super-wideband, and fullband wireless (mobile) handsets. Current volume control requirements for these devices are included in different standards documents with different requirements. The method in this standard uses conversational gain, the acoustic output signal from a device relative to the signal level that would be present in a face-to-face conversation at a distance of 1 meter.

Single copy price: \$93.00

Obtain an electronic copy from: standards@tiaonline.org

Order from: TIA (standards@tiaonline.org)

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

### UL (Underwriters Laboratories, Inc.)

#### New National Adoption

BSR/UL 62841-3-13-201x, Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-13: Particular Requirements for Transportable Drills (identical national adoption of IEC 62841-3-13)

(1) Proposed adoption of the first edition of IEC 62841-3-13, Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn And Garden Machinery - Safety - Part 3-13: Particular Requirements for Transportable Drills, as the first edition of UL 62841-3-13.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Beth Northcott, (847) 664 -3198, Elizabeth.Northcott@ul.com

# UL (Underwriters Laboratories, Inc.)

#### New Standard

BSR/UL 1576-201x, Standard for Safety for Flashlights and Lanterns (new standard)

(1) Proposed first edition of the Standard for Flashlights and Lanterns.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Beth Northcott, (847) 664 -3198, Elizabeth.Northcott@ul.com

# UL (Underwriters Laboratories, Inc.)

### Reaffirmation

BSR/ISA 92.04.01-2013 (R201X), Standard for Safety for Performance Requirements for Instruments Used to Detect Oxygen-Deficient/ Oxygen-Enriched Atmospheres (Proposal dated 08-25-17) (reaffirmation and redesignation of ANSI/ISA 92.04.01 Part 1-2007 (R2013))

Reaffirmation and continuance of ANSI/ISA-92.04.01-2013 edition of the Standard for Performance Requirements for Instruments Used to Detect Oxygen-Deficient/Oxygen- Enriched Atmospheres, UL 920401, as an American National Standard.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Vickie Hinton, (919) 549 -1851, Vickie.T.Hinton@ul.com

# UL (Underwriters Laboratories, Inc.) *Revision*

# BSR/UL 44-201X, Standard for Safety for Thermoset-Insulated Wires and Cables (Proposals dated 8/25/17) (revision of ANSI/UL 44-2014) Proposed new edition of UL 44.

Single copy price: Contact comm2000 for pricing and delivery options

Obtain an electronic copy from: http://www.comm-2000.com

Order from: comm2000

Send comments (with copy to psa@ansi.org) to: Linda Phinney, (510) 319 -4297, Linda.L.Phinney@ul.com

# VITA (VMEbus International Trade Association (VITA))

### Reaffirmation

BSR/VITA 46.3-2012 (R201x), Serial RapidIO on VPX Fabric Connector (reaffirmation of ANSI/VITA 46.3-2012)

The objectives of this standard are to assign Serial RapidIO ports to the VPX P1/J1 connector and to provide rules and recommendations for the use of the assigned Serial RapidIO ports.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

# VITA (VMEbus International Trade Association (VITA))

#### Reaffirmation

BSR/VITA 46.4-2012 (R201x), PCIExpress on the VPX Fabric Connector (reaffirmation of ANSI/VITA 46.4-2012)

The objective of this standard is to standardize the implementation of the PCI Express® Fabric in the VITA46 environment and define the mapping of the PCI Express® Links on the VPX Connector.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

### VITA (VMEbus International Trade Association (VITA))

#### Reaffirmation

BSR/VITA 46.7-2012 (R201x), Ethernet on VPX Fabric Connector (reaffirmation of ANSI/VITA 46.7-2012)

The objectives of this standard are to assign backplane Ethernet links to the VPX P1/J1 connector and to provide rules and recommendations for the use of Ethernet over backplane media.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

#### Reaffirmation

BSR/VITA 51.0-2012 (R201x), Reliability Prediction (reaffirmation of ANSI/VITA 51.0-2012)

This document provides a framework for electronics equipment reliability standards, and establishes a reliability Community of Practice. It addresses the limitations of existing prediction practices with a series of subsidiary specifications that contain the "best practices" within industry for performing electronics reliability analysis. The development of VITA 51.0 and the subsidiary specifications is an effort to give harmony, consistency, and repeatability to reliability practices.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

# VITA (VMEbus International Trade Association (VITA))

#### Reaffirmation

BSR/VITA 60-2012 (R201x), Alternative Connector for VPX (reaffirmation of ANSI/VITA 60-2012)

This proposed standard will provide an alternative connector for use on VPX modules.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

# VITA (VMEbus International Trade Association (VITA))

### Reaffirmation

BSR/VITA 66.1-2012 (R201x), Optical Interconnect on VPX - MT Variant (reaffirmation of ANSI/VITA 66.1-2012)

The objective of this standard is to define a family of blind-mate Fiber Optic interconnects for use with VPX backplanes and plug-in modules.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

# VITA (VMEbus International Trade Association (VITA))

#### Reaffirmation

BSR/VITA 67.0-2012 (R201x), Coaxial Interconnect on VPX - Base Standard (reaffirmation of ANSI/VITA 67.0-2012)

The objective of this standard is to define a family of blind-mate analog interconnects for use with VITA 46 backplanes and plug-in modules.

Single copy price: \$25.00

Obtain an electronic copy from: admin@vita.com

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

# Comment Deadline: October 24, 2017

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

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 248-15-201x, Standard for Safety for Low-Voltage Fuses - Part 15: Class T Fuses (revision of ANSI/UL 248-15-2005 (R2015))

This part applies to Class T fuses rated 1200 A or less and 300 or 600 V ac. DC ratings are optional.

Single copy price: \$Contact the UL Sales Site for pricing and delivery options

Obtain an electronic copy from: www.shopulstandards.com

Order from: www.shopulstandards.com

Send comments (with copy to psa@ansi.org) to: Mitchell Gold, (847) 664 -2850, Mitchell.Gold@ul.com

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 4248-8-201x, Standard for Safety for Fuseholders - Part 8: Class J (revision of ANSI/UL 4248-8-2013)

These requirements cover fuseholders intended for use with Class J Fuses as described in NMX-J-009/248/8-2000-ANCE, CSA C22.2 No. 248.8, UL 248-8, Low-Voltage Fuses - Part 8: Class J Fuses.

Single copy price: \$Contact the UL Sales Site for pricing and delivery options

Obtain an electronic copy from: www.shopulstandards.com

Order from: www.shopulstandards.com

Send comments (with copy to psa@ansi.org) to: Mitchell Gold, (847) 664 -2850, Mitchell.Gold@ul.com

# Comment Deadline: October 9, 2017

# NFPA 2017 Fall Revision Cycle Second Draft Report

Following the period of public review, the NFPA Committees have met and considered each comment received. The disposition of these comments is now published in the Second Draft Report for each document in the 2017 Fall Revision Cycle. The 2017 Fall Revision Cycle Second Draft Report and official scope will be located on each document's information page under the next edition tab. The document's specific URL, www.nfpa.org/doc#next (for example www.nfpa.org/101next), can easily access the document's information page. Accordingly, since they are available online, please note that 3 copies will no longer be sent to you for use.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 12-201x, Standard on Carbon Dioxide Extinguishing Systems (revision of ANSI/NFPA 12-2014)

Contains minimum requirements for carbon dioxide fire-extinguishing systems. This standard includes only the necessary essentials to make it workable in the hands of those skilled in this field.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 12A-201x, Standard on Halon 1301 Fire Extinguishing Systems (revision of ANSI/NFPA 12A-2014)

Contains minimum requirements for total flooding Halon 1301 fire extinguishing systems. It includes only the essentials necessary to make the standard workable in the hands of those skilled in this field. Only those skilled in this work are competent to design, install, maintain, decommission, and remove this equipment. It might be necessary for many of those charged with purchasing, inspecting, testing, approving, operating, and maintaining this equipment to consult with an experienced and competent fire protection engineer to effectively discharge their respective duties. (See Annex C.)

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 22-201x, Standard for Water Tanks for Private Fire Protection (revision of ANSI/NFPA 22-2012)

Provides the minimum requirements for the design, construction, installation, and maintenance of tanks and accessory equipment that supply water for private fire protection, including the following: (1) Gravity tanks, suction tanks, pressure tanks, and embankment-supported coated fabric suction tanks; (2) Towers; (3) Foundations; (4) Pipe connections and fittings; (5) Valve enclosures; (6) Tank filling; and (7) Protection against freezing.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 33-201x, Standard for Spray Application Using Flammable or Combustible Materials (revision of ANSI/NFPA 33-2015)

This standard shall apply to the spray application of flammable or combustible materials, as defined in this standard, either continuously or intermittently by any of the following methods: (1) Compressed air atomization; (2) Airless or hydraulic atomization; (3) Electrostatic application methods; or (4) Other means of atomized application. This standard shall also apply to the application of flammable or combustible materials, as defined in this standard, either continuously or intermittently by any of the following methods: (1) Fluidized bed application methods; (2) Electrostatic fluidized bed application methods; or (3) Other means of fluidized application. This standard shall also apply to spray application of water-borne, water-based, and water-reducible materials that contain flammable or combustible liquids or that produce combustible deposits or residues.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 34-201x, Standard for Dipping, Coating, and Printing Processes Using Flammable or Combustible Liquids (revision of ANSI/NFPA 34 -2014)

This standard shall apply to dipping, roll coating, flow coating, curtain coating, printing, cleaning, and similar processes, referred to in this standard as "coating processes" or "processes," in which articles or materials are passed through tanks, vats, or containers, or passed over rollers, drums, or other process equipment that contain flammable or combustible liquids.

# NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 68-201x, Standard on Explosion Protection by Deflagration Venting (revision of ANSI/NFPA 68-2012)

This standard applies to the design, location, installation, maintenance, and use of devices and systems that vent the combustion gases and pressures resulting from a deflagration within an enclosure so that structural and mechanical damage is minimized.

#### Revision

BSR/NFPA 79-201x, Electrical Standard for Industrial Machinery (revision of ANSI/NFPA 79-2012)

The provisions of this standard shall apply to the electrical/electronic equipment, apparatus, or systems of industrial machines operating from a nominal voltage of 600 volts or less, and commencing at the point of connection of the supply circuit conductors to the electrical equipment of the machine. This standard does not include the additional requirements for machines intended for use in hazardous (classified) locations.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 92-201x, Standard for Smoke Control Systems (revision of ANSI/NFPA 92-2014)

This standard shall apply to the design, installation, acceptance testing, operation, and ongoing periodic testing of smoke control systems.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 204-201x, Standard for Smoke and Heat Venting (revision of ANSI/NFPA 204-2014)

This standard shall apply to the design of venting systems for the emergency venting of products of combustion from fires in buildings. The provisions of Chapters 4 through 10 shall apply to the design of venting systems for the emergency venting of products of combustion from fires in non-sprinklered, single-story buildings using both hand calculations and computer-based solution methods as provided in Chapter 9. Chapter 11 shall apply to venting in sprinklered buildings.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 241-201x, Standard for Safeguarding Construction, Alteration, and Demolition Operations (revision of ANSI/NFPA 241-2012) This standard shall apply to structures in the course of construction, alteration, or demolition, including those in underground locations.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 259-201x, Standard Test Method for Potential Heat of Building Materials (revision of ANSI/NFPA 259-2012)

This method of test shall provide a means of determining, under controlled laboratory conditions, the potential heat of building materials subjected to a defined high-temperature exposure condition.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 260-201x, Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture (revision of ANSI/NFPA 260-2012)

The tests described in this document apply to upholstered furniture components that are tested in a standard, defined composite. These tests shall apply to cover fabrics, interior fabrics, welt cords, decking materials, barrier materials, and filling/padding materials including, but not limited to, battings of natural or man-made fibers, foamed or cellular filling materials, resilient pads of natural or man-made fibers, and loose particulate filling materials such as shredded polyurethane foam or feathers and down.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 261-201x, Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes (revision of ANSI/NFPA 261-2012)

This test shall apply to upholstered furniture mock-ups. Mock-up testing is used in assessing the relative resistance to continuing combustion of individual materials used in furniture, such as cover fabrics, filling materials, and welt tape, in realistic combinations and in an ideal geometric arrangement of the seat cushions, back, and arms of furniture items.

#### Revision

BSR/NFPA 270-201x, Standard Test Method for Measurement of Smoke Obscuration Using a Conical Radiant Source in a Single Closed Chamber (revision of ANSI/NFPA 270-2012)

This shall be a fire-test-response standard. This test method shall provide a means of measuring smoke obscuration resulting from subjecting essentially flat materials, products, or assemblies (including surface finishes) not exceeding 25 mm in thickness to specified levels of thermal irradiance from a conical heater, in a single closed chamber, in the absence or presence of a pilot flame, and when placed in a horizontal orientation. The principal fire-test-response characteristic obtained from this test method shall be the specific optical density of smoke from the specimens tested, which is obtained as a function of time, for a period of 10 minutes. Other fire-test-response characteristics shall also be permitted to be determined.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 274-201x, Standard Test Method to Evaluate Fire Performance Characteristics of Pipe Insulation (revision of ANSI/NFPA 274-2012) This standard describes a test method for determining the heat release and the smoke generation of pipe insulation assemblies mounted on steel pipes in a full-scale pipe chase.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 289-201x, Standard Method of Fire Test for Individual Fuel Packages (revision of ANSI/NFPA 289-2012)

This standard describes a fire test method for determining the fire test response characteristics of individual fuel packages when exposed to various ignition sources.

### NFPA (National Fire Protection Association)

Revision

BSR/NFPA 495-201x, Explosive Materials Code (revision of ANSI/NFPA 495-2012)

This code shall apply to the manufacture, transportation, storage, sale, and use of explosive materials.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 498-201x, Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives (revision of ANSI/NFPA 498-2012)

This standard shall apply to safe havens that are used for the parking of vehicles transporting explosives and to explosives interchange lots that are safe areas where less-than truckloads of explosives shall be permitted to be held for transfer from one vehicle to another for continuance in transportation.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 705-201x, Recommended Practice for a Field Flame Test for Textiles and Films (revision of ANSI/NFPA 705-2012)

This recommended practice provides guidance to enforcement officials for the field application of an open flame to textiles and films that have been in use in the field or for which reliable laboratory data are not available. There is no known correlation between this recommended practice and NFPA 701, or full-scale fire behavior.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1001-201x, Standard for Fire Fighter Professional Qualifications (revision of ANSI/NFPA 1001-2012)

This standard identifies the minimum job performance requirements (JPRs) for career and volunteer fire fighters whose duties are primarily structural in nature.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1026-201x, Standard for Incident Management Personnel Professional Qualifications (revision of ANSI/NFPA 1026-2013) This standard identifies the minimum job performance requirements (JPRs) for personnel performing roles within an all-hazard incident management system.

#### Revision

BSR/NFPA 1061-201x, Standard for Professional Qualifications for Public Safety Telecommunications Personnel (revision of ANSI/NFPA 1061-2013) This standard identifies the minimum job performance requirements for personnel working in public safety telecommunications.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1081-201x, Standard for Industrial Fire Brigade Member Professional Qualifications (revision of ANSI/NFPA 1081-2011)

This standard identifies the minimum job performance requirements (JPRs) necessary to perform the duties as a member of an organized industrial fire brigade providing services at a specific facility or site.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1404-201x, Standard for Fire Service Respiratory Protection Training (revision of ANSI/NFPA 1404-2012)

This standard shall contain minimum requirements for the training component of the Respiratory Protection Program found in NFPA 1500, Standard on Fire Department Occupational Safety and Health Program.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1451-201x, Standard for a Fire and Emergency Service Vehicle Operations Training Program (revision of ANSI/NFPA 1451-2012)

This standard shall contain the minimum requirements for a fire and emergency service organization (FESO) vehicle operations training program. This standard shall outline the development of a written FESO vehicle training program, which includes the organizational procedures for training personnel, maintaining vehicles, and identifying equipment deficiencies; design; financing; and other areas. The knowledge and skills required of safety, training, maintenance, and administrative officers charged with developing and implementing the FESO vehicle operations training program shall also be outlined within this standard.

### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1855-201x, Standard on Selection, Care, and Maintenance of Protective Ensembles for Technical Rescue Incidents (revision of ANSI/NFPA 1855-2012)

This standard shall specify the minimum selection, care, and maintenance requirements for utility technical rescue protective, rescue and recovery technical rescue protective, and chemicals, biological agents, and radiological particulate [also known as chemical, biological, radiological, and nuclear (CBRN) technical rescue] ensembles and the individual ensemble elements, including garments, helmets, gloves, footwear, and interface components, that are compliant with NFPA 1951. This standard shall also specify requirements for urban search and rescue (USAR) operation protective ensembles, ensemble elements, clothing, and equipment certified as compliant with the 2001 edition of NFPA 1951.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1925-201x, Standard on Marine Fire-Fighting Vessels (revision of ANSI/NFPA 1925-2012)

This standard shall provide minimum requirements for marine fire-fighting vessels. This standard shall also provide minimum maintenance and testing requirements for marine fire-fighting vessels.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1962-201x, Standard for the Care, Use, Inspection, Service Testing, and Replacement of Fire Hose, Couplings, Nozzles, and Fire Hose Appliances (revision of ANSI/NFPA 1962-2008)

This standard covers the care, use, inspection, service testing, and replacement of fire hose, fire hose couplings, fire-fighting nozzles, and fire hose appliances, and the associated record keeping.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1964-201x, Standard for Spray Nozzles (revision of ANSI/NFPA 1964-2012)

This standard covers the requirements for new adjustable-pattern spray nozzles intended for general firefighting use, for marine and offshore platform fire-fighting use, or for use with fire hoses affixed to standpipe systems.

#### Revision

BSR/NFPA 1981-201x, Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services (revision of ANSI/NFPA 1981 -2012)

This standard shall specify the minimum requirements for the design, performance, testing, and certification of new compressed breathing air opencircuit self-contained breathing apparatus (SCBA) and compressed breathing air combination open-circuit self-contained breathing apparatus and supplied air respirators (SCBA/SARs) and for the replacement parts, components, and accessories for these respirators.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 1982-201x, Standard on Personal Alert Safety Systems (PASS) (revision of ANSI/NFPA 1982-2012)

This standard shall specify minimum requirements for the design, performance, testing, and certification for all personal alert safety systems (PASS) for emergency services personnel.

#### NFPA (National Fire Protection Association)

#### Revision

BSR/NFPA 2001-201x, Standard on Clean Agent Fire Extinguishing Systems (revision of ANSI/NFPA 2001-2014)

This standard contains minimum requirements for total flooding and local application clean agent fire extinguishing systems. It does not cover fire extinguishing systems that use carbon dioxide or water as the primary extinguishing media, which are addressed by other NFPA documents.

# **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.

# AAMI (Association for the Advancement of Medical

Instrumentation)

Office: 4301 N Fairfax Drive Suite 301 Arlington, VA 22203-1633 Contact: Jennifer Moyer

Phone: (703) 253-8274 Fax: (703) 276-0793 E-mail: jmoyer@aami.org

BSR/AAMI/IEC 62366-1, Amendment 1-201x, Medical devices - Part 1: Application of usability engineering to medical devices (addenda to ANSI/AAMI/IEC 62366-1-2015)

# ASHRAE (American Society of Heating, Refrigerating and Air-

Conditioning Engineers, Inc.) Office: 1791 Tullie Circle NE

 Atlanta, GA 30329

 Contact:
 Tanisha Meyers-Lisle

 Phone:
 (678) 539-1111

 Fax:
 (678) 539-2111

- E-mail: tmlisle@ashrae.org
- BSR/ASHRAE Standard 22-201X, Methods of Testing for Rating Liquid-Cooled Refrigerant Condensers (revision of ANSI/ASHRAE Standard 22-2014)

BSR/ASHRAE Standard 181-201X, Methods of Testing for Rating Liquid-to-Liquid Heat Exchangers (revision of ANSI/ASHRAE Standard 181-2014)

BSR/ASHRAE Standard 203-201X, Method of Test for Determining Heat Gain of Office Equipment Used in Buildings (revision of ANSI/ASHRAE Standard 203-2015)

#### ASSE (ASC A10) (American Society of Safety Engineers)

 
 Office:
 520 N. Northwest Highway Park Ridge, IL 60068

 Contact:
 Tim Fisher

 Phone:
 (847) 768-3411

 Fax:
 (847) 296-9221

- E-mail: TFisher@ASSE.org
- BSR ASSE A10.50-201X, Practices for the safe use of drones for construction and demolition operations. (new standard)

#### ATIS (Alliance for Telecommunications Industry Solutions)

Office: 1200 G Street NW Suite 500 Washington, DC 20005 Contact: Alexandra Blasgen

**Phone:** (202) 434-8840

- E-mail: ablasgen@atis.org
- BSR/ATIS 0600004-201x, Equipment Surface Temperature (revision of ANSI/ATIS 0600004-2006 (R2011))

#### HI (Hydraulic Institute)

- Office: 6 Campus Drive Parsippany, NJ 07054
- Contact: Edgar Suarez
- Phone: (862) 217-2441
- E-mail: esuarez@pumps.org
- BSR/HI 9.8-201x, Rotodynamic Pumps for Pump Intake Design (revision of ANSI/HI 9.8-2012)

#### IEST (Institute of Environmental Sciences and Technology)

Office:	1827 Walden Office Square Suite 400 Schaumburg, IL 60173
Contact:	Jennifer Sklena
Phone:	(847) 981-0100
Fax:	(847) 981-4130
E-mail:	jsklena@iest.org

BSR/ISO 14644-15-201x, Cleanrooms and associated controlled environments - Part 15: Assessment of suitability for use of equipment and materials by airborne chemical concentration (identical national adoption of ISO/FDIS 14644-15)

#### ISA (International Society of Automation)

- Office: 67 Alexander Drive Research Triangle Park, NC 27709
- Contact: Charles Robinson

Phone:	(919) 990-9213
Fax:	(919) 549-8288

E-mail: crobinson@isa.org

BSR/ISA 106.00.03-201x, Procedure Automation for Continuous Process Operations -- Work Processes (new standard) BSR/ISA 61514-2 (75.13.02)-201x, Methods of Evaluating the Performance of Intelligent Valve Positioners with Pneumatic Outputs (identical national adoption of IEC 61514-2)

#### NALFA (North American Laminate Flooring Association)

Office: 1747 Pennsylvania Avenue, NW Suite 1000 Washington, DC 20006 Contact: David Goch

Phone: (202) 785-9500

**Fax:** (202) 835-0243

E-mail: dgoch@wc-b.com

BSR/NALFA LF-01-201x, Laminate Flooring Specifications and Test Methods (revision of ANSI/NALFA LF-01-2010)

BSR/NALFA LF-03-2018-201x, Flooring Underlayment Specifications and Test Methods (new standard)

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

Office: 789 N. Dixboro Road Ann Arbor, MI 48105-9723

 Contact:
 Monica Leslie

 Phone:
 (734) 827-5643

 Fax:
 (734) 827-7880

 E-mail:
 mleslie@nsf.org

BSR/NSF 61-201x (i137r2), NSF 61-2016 - Drinking Water System Components - Health effects (revision of ANSI/NSF 61-2016)

#### **TIA (Telecommunications Industry Association)**

Office: 1320 North Courthouse Road Suite 200 Arlington, VA 22201 Contact: Teesha Jenkins

Phone: (703) 907-7706

Fax:(703) 907-7727E-mail:standards@tiaonline.org

BSR/TIA 5050-201x, Telecommunications, Communications Products, Receive Volume Control Requirements for Wireless (Mobile) Devices (new standard)

#### VITA (VMEbus International Trade Association (VITA))

Office: 929 W. Portobello Avenue Mesa, AZ 85210 Contact: Jing Kwok

Phone: (602) 281-4497

**E-mail:** jing.kwok@vita.com

BSR/VITA 46.3-2012 (R201x), Serial RapidIO on VPX Fabric Connector (reaffirmation of ANSI/VITA 46.3-2012)

BSR/VITA 46.4-2012 (R201x), PCIExpress on the VPX Fabric Connector (reaffirmation of ANSI/VITA 46.4-2012)

BSR/VITA 46.7-2012 (R201x), Ethernet on VPX Fabric Connector (reaffirmation of ANSI/VITA 46.7-2012) BSR/VITA 51.0-2012 (R201x), Reliability Prediction (reaffirmation of ANSI/VITA 51.0-2012)

BSR/VITA 60-2012 (R201x), Alternative Connector for VPX (reaffirmation of ANSI/VITA 60-2012)

BSR/VITA 66.1-2012 (R201x), Optical Interconnect on VPX - MT Variant (reaffirmation of ANSI/VITA 66.1-2012)

BSR/VITA 67.0-2012 (R201x), Coaxial Interconnect on VPX - Base Standard (reaffirmation of ANSI/VITA 67.0-2012)

# **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.

# AAMI (Association for the Advancement of Medical Instrumentation)

#### New National Adoption

ANSI/AAMI/ISO 17664-2017, Sterilization of health care products -Information to be provided by the device manufacturer for the processing of medical devices (identical national adoption of ISO 17664): 8/18/2017

# APSP (Association of Pool & Spa Professionals)

#### Revision

\* ANSI/APSP/ICC 16-2017, Standard for Suction Outlet Fitting Assemblies for Use in Pools, Spas, and Hot Tubs (revision and redesignation of ANSI/APSP 16-2011): 8/18/2017

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

ANSI/ASME B89.1.17-2001 (R2017), Measurement of Thread Measuring Wires (reaffirmation of ANSI/ASME B89.1.17-2001 (R2007)): 8/21/2017

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

#### Revision

ANSI/ASTM F1890-2017, Test Method for Measuring Softball Bat Performance Factor (revision of ANSI/ASTM F1890-2011): 8/15/2017

### AWEA (American Wind Energy Association)

#### New National Adoption

- ANSI/AWEA 61400-11-2017, Wind Turbine Generator Systems: Acoustic Noise Measurement Techniques (identical national adoption of IEC 61400-11 Ed.3): 8/18/2017
- ANSI/AWEA 61400-13-2017, Wind turbines Measurement of mechanical loads (identical national adoption of IEC 61400-13 Ed. 1): 8/18/2017
- ANSI/AWEA 61400-23-2017, Full scale structural testing of rotor blades (identical national adoption of IEC 61400-23:2014): 8/21/2017

### AWS (American Welding Society)

#### New Standard

ANSI/AWS F1.6-2017, Guide for Estimating Welding Emissions for EPA and Ventilation Permit Reporting (new standard): 8/18/2017

#### Revision

ANSI/AWS D8.14M-2017, Specification for Automotive Weld Quality -Arc Welding of Aluminum (revision of ANSI/AWS D8.14M-2008): 8/18/2017

# AWWA (American Water Works Association)

#### Reaffirmation

ANSI/AWWA C620-2008 (R2017), Spray-Applied In-Place Epoxy Lining of Water Pipelines, 3 in. (75 mm) and Larger (reaffirmation of ANSI/AWWA C620-2008): 8/18/2017

# CSA (CSA Group)

### Revision

- \* ANSI Z21.5.1-2017, Gas Clothes Dryers, Volume I, Type 1 Clothes Dryers (same as CSA 7.1-201x) (revision of ANSI Z21.5.1-2016): 8/21/2017
- \* ANSI Z21.10.1-2017, Gas water heaters, volume I, storage water heaters with input ratings of 75,000 Btu per hour or less (same as CSA 4.1-201X) (revision of ANSI Z21.10.1-2014): 8/21/2017
- \* ANSI Z21.10.3-2017, Gas water heaters, volume III, storage water heaters with input ratings Above 75,000 Btu per hour, Circulating or Instantaneous (same as CSA 4.3-201x) (revision of ANSI Z21.10.3 -2015): 8/21/2017

# ECIA (Electronic Components Industry Association) *Reaffirmation*

- ANSI/EIA 364-02D-2012 (R2017), Air Leakage Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-02D-2012): 8/18/2017
- ANSI/EIA 364-06C-2006 (R2017), Contact Resistance Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-06C-2006 (R2012)): 8/21/2017
- ANSI/EIA 364-23C-2006 (R2017), Low Level Contact Resistance Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-23C-2006 (R2012)): 8/21/2017
- ANSI/EIA 364-34-2012 (R2017), Ambient Condensation Test Procedure for Electrical Connectors and Sockets (reaffirmation of ANSI/EIA 364-34-2012): 8/21/2017
- ANSI/EIA 364-35C-2012 (R2017), Insert Retention Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-35C-2012): 8/21/2017

#### Revision

ANSI/EIA 364-57A-2017, Coupling Pin Strength Test Procedure for Circular Bayonet Electrical Connectors (revision and redesignation of ANSI/EIA 364-57-2011): 8/21/2017

### HL7 (Health Level Seven) Reaffirmation

ANSI/HL7 V3 AB, R2-2008 (R2017), HL7 Version 3 Standard: Accounting & Billing, Release 2 (reaffirmation of ANSI/HL7 V3 AB, R2-2008 (R2012)): 8/18/2017

- ANSI/HL7 V3 CR, R4-2008 (R2017), HL7 Version 3 Standard: Claims and Reimbursement, Release 4 (reaffirmation of ANSI/HL7 V3 CR, R4-2008 (R2012)): 8/18/2017
- ANSI/HL7 V3 TR ebXMLebM2, R1-2012 (R2017), HL7 Version 3 Standard: Transport Specification - ebXML Using eb MS2.0, Release 1 (reaffirmation of ANSI/HL7 V3 TR ebXMLebM2, R1 -2012): 8/18/2017

# IEEE (Institute of Electrical and Electronics Engineers)

#### New Standard

ANSI/IEEE 421.3-2016, Standard for High-Potential Test Requirements for Excitation Systems for Synchronous Machines (new standard): 8/16/2017

#### ISTA (International Safe Transit Association)

#### New Standard

ANSI/ISTA Procedure 3E-2017, Similar Packaged-Products in Unitized Loads for Truckload Shipment (new standard): 8/16/2017

# NCPDP (National Council for Prescription Drug Programs)

#### Revision

ANSI/NCPDP Benefit Integration Standard v12-2017, NCPDP Benefit Integration Standard v12 (revision and redesignation of ANSI/NCPDP Benefit Integration Standard v11-2017): 8/18/2017

# NEMA (ASC C29) (National Electrical Manufacturers Association)

#### Revision

- ANSI C29.8-2017, Wet Process Porcelain Insulators Apparatus, Cap and Pin Type (revision of ANSI C29.8-1985 (R2012)): 8/18/2017
- ANSI C29.10-2017, Wet Process Porcelain Insulators Indoor Apparatus Type (revision of ANSI C29.10-1989 (R2012)): 8/18/2017

# **NSF (NSF International)**

#### Revision

- \* ANSI/NSC 373-2017 (i1r1), Sustainable Production of Natural Dimension Stone (revision and redesignation of ANSI/NSC 373 -2014 (i2r1)): 8/8/2017
- \* ANSI/NSF 60-2017 (i76r1), Drinking Water Treatment Chemicals (revision of ANSI/NSF 60-2016): 4/26/2017

# SCTE (Society of Cable Telecommunications Engineers)

#### Revision

- ANSI/SCTE 30-2017, Digital Program Insertion Splicing API (revision of ANSI/SCTE 30-2015): 8/21/2017
- ANSI/SCTE 35-2017, Digital Program Insertion Cueing Message for Cable (revision of ANSI/SCTE 35-2016): 8/21/2017
- ANSI/SCTE 79-3-2017, DOCSIS 2.0 + IPv6 Cable Modem Standard (revision of ANSI/SCTE 79-3-2011): 8/21/2017

- ANSI/SCTE 107-2017, Embedded Cable Modem Devices (revision of ANSI/SCTE 107-2009): 8/21/2017
- ANSI/SCTE 133-2017, Downstream RF Interface for Cable Modem Termination System (revision of ANSI/SCTE 133-2010): 8/21/2017
- ANSI/SCTE 137-1-2017, Modular Headend Architecture Part 1: DOCSIS Timing Interface (revision of ANSI/SCTE 137-1-2010): 8/21/2017
- ANSI/SCTE 142-2017, Recommended Practice for Transport Stream Verification (revision of ANSI/SCTE 142-2009): 8/21/2017
- ANSI/SCTE 168-6-2017, Recommended Practice for Monitoring Multimedia Distribution Quality (revision of ANSI/SCTE 168-6-2010): 8/21/2017
- ANSI/SCTE 168-7-2017, Recommended Practice for Transport Stream Verification in an IP Transport Network (revision of ANSI/SCTE 168-7-2010): 8/21/2017
- ANSI/SCTE 175-2017, Recommended Practice for Qualifying Network Devices for High Availability Streaming Video (revision of ANSI/SCTE 175-2011): 8/21/2017

#### SJI (Steel Joist Institute)

#### Revision

ANSI/SJI 200-2015, Standard Specification For CJ-Series Composite Steel Joists (revision and redesignation of ANSI/SJI CJ-2010): 8/18/2017

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

- ANSI A108.1A-2017, Installation of Ceramic Tile in the Wet-Set Method, with Portland Cement Mortar (revision of ANSI A108.1A -2014): 8/21/2017
- ANSI A108.1B-2017, Installation of Ceramic Tile on a Cured Portland Cement Mortar Setting Bed with Dry-Set or Latex-Portland Cement Mortar (revision of ANSI A108.1b-1999 (R2010)): 8/21/2017
- ANSI A108.10-2017, Installation of Grout in Tilework (revision of ANSI A108.10-1999 (R2010)): 8/21/2017
- \* ANSI A118.11-2017, Standard Specification for EGP (Exterior Glue Plywood) Modified Dry-Set Mortar (revision of ANSI A118.11-1999 (R2010)): 8/21/2017

# TIA (Telecommunications Industry Association) *Revision*

ANSI/TIA 1179-A-2017, Healthcare Facility Telecommunications Infrastructure Standard (revision and redesignation of ANSI/TIA 1179-2010): 8/21/2017

# UL (Underwriters Laboratories, Inc.) *Reaffirmation*

- ANSI/UL 2335-2012 (R2017), Standard for Safety for Fire Tests of Storage Pallets (reaffirmation of ANSI/UL 2335-2012): 8/17/2017
- ANSI/UL 60730-2-3-2013 (R2017), Automatic Electrical Controls for Household and Similar Use; Part 2 Particular Requirements for Thermal Protectors for Ballasts for Tubular Fluorescent Lamps (reaffirmation of ANSI/UL 60730-2-3-2013): 8/16/2017

#### Revision

- ANSI/UL 1-2017, Standard for Safety for Flexible Metal Conduit (revision of ANSI/UL 1-2007 (R2012)): 8/17/2017
- ANSI/UL 514A-2017, Standard for Safety for Metallic Outlet Boxes (revision of ANSI/UL 514A-2015): 8/11/2017
- ANSI/UL 1322-2017, Standard for Safety for Fabricated Scaffold Planks and Stages (revision of ANSI/UL 1322-2010 (R2015)): 8/11/2017
- \* ANSI/UL 8750-2017b, Standard for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750 -2016): 8/17/2017
- \* ANSI/UL 8750-2017c, Standard for Safety for Light Emitting Diode (LED) Equipment for Use in Lighting Products (revision of ANSI/UL 8750-2016): 8/17/2017

# **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. To view information about additional standards for which a PINS has been submitted and to search approved ANS, please visit www.NSSN.org, which is a database of standards information. Note that this database is not exhaustive.

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.

# AAMI (Association for the Advancement of Medical Instrumentation)

Office: 4301 N Fairfax Drive Suite 301 Arlington, VA 22203-1633 Contact: Jennifer Moyer

Fax: (703) 276-0793

E-mail: jmoyer@aami.org

BSR/AAMI/IEC 62366-1, Amendment 1-201x, Medical devices - Part 1: Application of usability engineering to medical devices (addenda to ANSI/AAMI/IEC 62366-1-2015)

Stakeholders: Manufacturers, regulators, test houses, clinicians.

Project Need: This amendment corrects a number of known issues in the current edition.

This amendment corrects known issues in the first edition caused by problematic typos, inconsistencies with language, and misleading statements.

#### ASSE (ASC A10) (American Society of Safety Engineers)

Office: 520 N. Northwest Highway Park Ridge, IL 60068

Contact: Tim Fisher

**Fax:** (847) 296-9221 **E-mail:** TFisher@ASSE.org

BSR ASSE A10.50-201X, Practices for the safe use of drones for construction and demolition operations (new standard)

Stakeholders: Occupational safety and health professionals working in the construction and demolition industry using drones.

Project Need: Based upon the consensus of the A10 Committee and feedback from construction safety professionals using this equipment.

This standard establishes practices for the safe use of drones for construction and demolition operations.

#### ASTM (ASTM International)

Office:	100 Barr Harbor Drive West Conshohocken, PA 19428-2959
Contact:	Corice Leonard
Fax:	(610) 834-3683
E-mail:	accreditation@astm.org
BSR/AST	M WK60166-201x New Specification for

BSR/ASTM WK60166-201x, New Specification for Poly(VinyliDene Fluoride) (PVDF) Pressure Pipe (new standard)

Stakeholders: Vinyl Based Pipe industry.

Project Need: This specification covers requirements and test methods for PVDF materials and pipe used in a variety of pressure applications, such as oil and gas production, dry or wet gas, water, industrial, and gas distribution. This standard is for PVDF pressure pipe that can be used in higher pressure and higher temperature applications than other thermoplastic piping materials.

https://www.astm.org/DATABASE.CART/WORKITEMS/WK60166.htm

#### GTESS (Georgia Tech Energy & Sustainability Services)

Office:	75 Fifth Street N.W	
	Suite 300	
	Atlanta, GA 30308	
Contact:	Moon Kim	

Fax: (404) 894-8194

E-mail: Moon.Kim@gtri.gatech.edu

BSR/MSE/ISO 50007-201x, Energy services - Guidelines for the assessment and improvement of the energy service to users (identical national adoption of ISO 50007:2017)

Stakeholders: Energy service providers.

Project Need: This Standard is intended to provide guidance in the provision of energy services in situations where there is no clear legislation or regulation in place, covering aspects such as service contracts, payment methods, price determinations, tariffs and subsidies, equitable supply management and the needs of poor and/or vulnerable consumers. This Standard is also requested from the U.S. TAG to ISO/TC 242 for U.S. identical national adoption.

This Standard provides guidance in the provision of energy services in situations where there is no clear legislation or regulation in place, covering aspects such as service contracts, payment methods, price determinations, tariffs and subsidies, equitable supply management, and the needs of poor and/or vulnerable consumers. This Standard also covers concepts including the provision of energy informational advice and services to guide users to manage costs and to promote efficiency and conservation.

#### IEST (Institute of Environmental Sciences and Technology)

Office:	1827 Walden Office Square	
	Suite 400	
	Schaumburg, IL 60173	
Contact:	Jennifer Sklena	

Fax: (847) 981-4130

E-mail: jsklena@iest.org

BSR/ISO 14644-15-201x, Cleanrooms and associated controlled environments - Part 15: Assessment of suitability for use of equipment and materials by airborne chemical concentration (identical national adoption of ISO/FDIS 14644-15)

Stakeholders: Cleanrooms and associated controlled environments provide for the control of contamination to levels appropriate for accomplishing contamination-sensitive activities. Products and processes that benefit from the control of contamination include those in such industries as aerospace, microelectronics, optics, nuclear, and life sciences (pharmaceuticals, medical devices, food, healthcare). Project Need: This document addresses the cleanroom classification of air cleanliness by chemical concentration to the suitability of equipment for use in cleanrooms and associated controlled environments.

This document provides requirements and guidelines for assessing the chemical airborne cleanliness of equipment and materials which are foreseen to be used in cleanrooms and associated controlled environments which are linked to the ISO standard for cleanliness classes by chemical concentration (see ISO 14644-8). Health and safety requirements are not covered by this document and could be covered by legal documents of the specific country.

#### ISA (International Society of Automation)

Office:	67 Alexander Drive	
	Research Triangle Park, NC	27709
Contact:	Charles Robinson	

- Fax: (919) 549-8288
- E-mail: crobinson@isa.org

BSR/ISA 106.00.03-201x, Procedure Automation for Continuous Process Operations - Work Processes (new standard)

Stakeholders: End users and equipment/system suppliers in the continuous process industries.

Project Need: To improve the design and implementation of procedures for automating continuous process operations

Defines requirements for applying procedure automation across continuous process industries - focusing on the lifecycle of automated procedures that reside on systems within the supervisory control, monitoring, and automated process control section of the production process.

#### ISA (International Society of Automation)

Office:	67 Alexander Drive Research Triangle Park, NC 27709
Contact:	Eliana Brazda
Fax:	(919) 549-8288

E-mail: ebrazda@isa.org

BSR/ISA 61514-2 (75.13.02)-201x, Methods of Evaluating the Performance of Intelligent Valve Positioners with Pneumatic Outputs (identical national adoption of IEC 61514-2)

Stakeholders: Manufacturers, users, regulatory bodies, testing laboratories.

Project Need: To assist manufacturers of intelligent positioners to determine performance of their products and aid users or testing laboratories in verifying equipment performance specifications.

This standard specifies design reviews and tests intended to measure and determine the static and dynamic performance, the degree of intelligence, and the communication capabilities of single-acting or double-acting intelligent valve positioners. The tests may be applied to positioners which receive standard analogue electrical input signals and/or digital signals via a data communication link and have a pneumatic output.

#### NALFA (North American Laminate Flooring Association)

Office:	1747 Pennsylvania Avenue, NW		
	Suite 1000		
	Washington, DC	20006	
Contact:	David Goch		

**Fax:** (202) 835-0243

E-mail: dgoch@wc-b.com

BSR/NALFA LF-01-201x, Laminate Flooring Specifications and Test Methods (revision of ANSI/NALFA LF-01-2010)

Stakeholders: Producers (manufacturers), distributors, test labs, users (consumers), government, general interest.

Project Need: To update, and expand, the current standard based on additional industry experience and technology advancements.

The product standard shall apply to the performance of residential, commercial, and industrial use of laminate flooring. The standard will be useful in guiding manufacturers and educating suppliers and consumers about the minimal performance requirements of laminate flooring in residential, light commercial, and commercial- and industrial-use settings.

\* BSR/NALFA LF-02-201x, Sustainability Assessment of Laminate Flooring (revision of ANSI/NALFA LF-02-2010)

Stakeholders: Producers (manufacturers), distributors, test labs, users (consumers), government, general interest.

Project Need: To update the current standard.

To assist in the clarification, and quantification, of the sustainability, i.e., the "green", properties of consumer, commercial, and industrial laminate flooring.

\* BSR/NALFA LF-03-2018-201x, Flooring Underlayment Specifications and Test Methods (new standard)

Stakeholders: Producers (manufacturers) of underlayment and laminate flooring, distributors, test, labs, users (consumers), government, general interest.

Project Need: The product standard shall create performance standards for underlayment when used with residential, commercial, and industrial laminate flooring. The standard will be useful in guiding manufacturers and educating suppliers and consumers about the minimal performance requirements of underlayment in residential, light commercial, and commercial and industrial laminate flooring use settings.

The product standard shall apply to the performance of underlayment for use with residential, commercial and industrial laminate flooring. The standard will be useful in guiding manufacturers and educating suppliers and consumers about the minimal performance requirements of underlayment in residential, light commercial, and commercial and industrial laminate flooring use settings.

# 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)
- AAMVA (American Association of Motor Vehicle Administrators)
- AARST (The AARST Consortium on National Radon Standards)
- AGA (American Gas Association)
- AGSC-AGRSS (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 (The Green Building Initiative)
- GEIA (Greenguard Environmental Institute)
- HI (Home Innovation)
- HL7 (Health Level Seven)
- IESNA (The Illuminating Engineering Society of North America)
- MHI (ASC MH10) (Material Handling Industry)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit *ANSI Online* at <u>www.ansi.org/asd</u>, select "Standards Activities," click on "Public Review and Comment" and "American National Standards Maintained Under Continuous Maintenance." This information is also available directly at <u>www.ansi.org/publicreview</u>.

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at psa@ansi.org or via fax at 212-840-2298. If you request that information be provided via E-mail, please include your E-mail address; if you request that information be provided via fax, please include your fax number. Thank you.

# **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.

#### AAMI

Association for the Advancement of Medical Instrumentation

4301 N Fairfax Drive Suite 301 Arlington, VA 22203-1633 Phone: (703) 253-8274 Fax: (703) 276-0793 Web: www.aami.org

#### ADA (Organization)

American Dental Association

211 East Chicago Avenue Chicago, IL 60611-2678 Phone: (312) 587-4129 Fax: (312) 440-2529 Web: www.ada.org

#### APSP

Association of Pool & Spa Professionals

2111 Eisenhower Ave. Suite 500 Alexandria, VA 22314 Phone: (703) 838-0083 X150 Fax: (703) 549-0493 Web: www.apsp.org

#### ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, NE Atlanta, GA 30329-2305 Phone: (678) 539-1125 Fax: (678) 539-1125 Web: www.ashrae.org

#### ASME

American Society of Mechanical Engineers

Two Park Avenue New York, NY 10016 Phone: (212) 591-8521 Fax: (212) 591-8501 Web: www.asme.org

#### ASSE (Safety)

American Society of Safety Engineers 520 N. Northwest Highway Park Ridge, IL 60068 Phone: (847) 768-3411 Fax: (847) 296-9221 Web: www.asse.org

#### ASTM

ASTM International

100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9744 Fax: (610) 834-3683 Web: www.astm.org

#### ATIS

Alliance for Telecommunications Industry Solutions 1200 G Street NW Suite 500 Washington, DC 20005 Phone: (202) 434-8840 Web: www.atis.org

#### AWEA

American Wind Energy Association 1501 M Street, NW,

Suite 1000 Washington, DC 20005 Phone: (202) 383-2500 Web: www.awea.org

#### AWS

American Welding Society 8669 NW 36th Street Suite 130 Doral, FL 33166 Phone: (305) 443-9353 Fax: (305) 443-5951 Web: www.aws.org

#### AWWA

American Water Works Association 6666 W. Quincy Ave. Denver, CO 80235 Phone: (303) 347-6178 Fax: (303) 795-7603 Web: www.awwa.org

#### CSA CSA Group

8501 East Pleasant Valley Rd. Cleveland, OH 44131 Phone: (216) 524-4990 x88321 Fax: (216) 520-8979 Web: www.csa-america.org

#### ECIA

Electronic Components Industry Association

2214 Rock Hill Road Suite 265 Herndon, VA 20170-4212 Phone: (571) 323-0294 Fax: (571) 323-0245 Web: www.ecianow.org

#### EOS/ESD

ESD Association 7900 Turin Rd., Bldg. 3 Rome, NY 13440 Phone: (315) 339-6937 Fax: (315) 339-6793 Web: www.esda.org

#### FM FM Approvals

1151 Boston-Providence Turnpike Norwood, MA 02062 Phone: (781) 255-4813 Fax: (781) 762-9375 Web: www.fmglobal.com

#### GTESS

Georgia Tech Energy & Sustainability Services 75 Fifth Street N.W Suite 300 Atlanta, GA 30308 Phone: (404) 407-6404 Fax: (404) 894-8194

# Web: www.innovate.gatech.edu

Hydraulic Institute

6 Campus Drive Parsippany, NJ 07054 Phone: (862) 217-2441 Web: www.pumps.org

#### HL7

Health Level Seven 3300 Washtenaw Avenue Suite 227 Ann Arbor, MI 48104 Phone: (734) 677-7777 Fax: (734) 677-6622 Web: www.hl7.org

#### IEEE

Institute of Electrical and Electronics Engineers (IEEE)

445 Hoes Lane Piscataway, NJ 08854 Phone: (732) 562-3854 Fax: (732) 796-6966 Web: www.ieee.org

#### IEST

Institute of Environmental Sciences and Technology

1827 Walden Office Square Suite 400 Schaumburg, IL 60173 Phone: (847) 981-0100 Fax: (847) 981-4130 Web: www.iest.org

#### ISA (Organization)

International Society of Automation 67 Alexander Drive Research Triangle Park, NC 27709 Phone: (919) 990-9228 Fax: (919) 549-8288 Web: www.isa.org

#### ISTA

International Safe Transit Association

1400 Abbot Rd.,Suite 160 East Lansing, MI 48823 Phone: (517) 333-3437 Web: www.ista.org

#### NALFA

North American Laminate Flooring Association

1747 Pennsylvania Avenue, NW Suite 1000 Washington, DC 20006 Phone: (202) 785-9500 Fax: (202) 835-0243 Web: www.nalfa.com

#### NCPDP

National Council for Prescription Drug Programs 9240 East Raintree Drive Scottsdale, AZ 85260 Phone: (480) 296-4584

Phone: (480) 296-4584 Fax: (480) 767-1042 Web: www.ncpdp.org

#### NEMA (ASC C29)

National Electrical Manufacturers Association

1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3231 Web: www.nema.org

#### NFPA

National Fire Protection Association

One Batterymarch Park Quincy, MA 02169 Phone: (617) 770-3000 Web: www.nfpa.org

#### NSF

NSF International

789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 827-5643 Fax: (734) 827-7880 Web: www.nsf.org

#### SCTE

Society of Cable Telecommunications Engineers

140 Philips Rd Exton, PA 19341 Phone: (800) 542-5040 Fax: (800) 542-5040 Web: www.scte.org

#### SJI

Steel Joist Institute

234 W. Cheves Street Florence, SC 29501 Phone: (843) 407-4091 Fax: (843) 407-4044 Web: www.steeljoist.org

#### TCNA (ASC A108)

Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625 Phone: (864) 646-8453 Fax: (864) 646-2821 Web: www.tileusa.com

#### ΤΙΑ

Telecommunications Industry Association 1320 North Courthouse Road Suite 200 Arlington, VA 22201 Phone: (703) 907-7706 Fax: (703) 907-7727 Web: www.tiaonline.org

#### UL

Underwriters Laboratories, Inc.

333 Pfingsten Road Northbrook, IL 60062 Phone: (847) 664-3411 Fax: (847) 664-3411 Web: www.ul.com

#### VITA

VMEbus International Trade Association (VITA) 929 W. Portobello Avenue Mesa, AZ 85210 Phone: (602) 281-4497 Web: www.vita.com

# **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**

#### ACOUSTICS (TC 43)

ISO/DIS 17201-1, Acoustics - Noise from shooting ranges - Part 1: Determination of muzzle blast by measurement - 9/8/2017, \$112.00

#### **CERAMIC TILE (TC 189)**

ISO/DIS 10545-4, Ceramic tiles - Part 4: Determination of modulus of rupture and breaking strength - 11/2/2017, \$58.00

#### **ENVIRONMENTAL MANAGEMENT (TC 207)**

ISO/DIS 14067, Greenhouse gases - Carbon footprint of products -Requirements and guidelines for quantification - 11/2/2017, \$125.00

#### FLUID POWER SYSTEMS (TC 131)

- ISO 3601-3/DAmd1, Fluid power systems O-rings Part 5: Specification of elastomeric materials for industrial applications -Amendment 1 - 9/7/2017, \$33.00
- ISO/DIS 18582-2, Fluid power Specifications of reference dictionary -Part 2: Classes and properties definitions for pneumatics -11/3/2017, \$185.00

#### FORENSIC SCIENCES (TC 272)

- ISO/DIS 21043-1, Forensic Sciences Part 1: Terms, definitions and framework 9/6/2017, \$40.00
- ISO/DIS 21043-2, Forensic sciences Part 2: Recognition, recording, recovering, transport and storage of material 9/6/2017, \$62.00

#### GAS TURBINES (TC 192)

ISO/DIS 10494, Turbines and turbine sets - Measurement of emitted airborne noise - Engineering/survey method - 9/7/2017, \$107.00

#### **GRAPHIC TECHNOLOGY (TC 130)**

ISO/DIS 19302, Graphic technology - Colour conformity assessment of printed products - 10/30/2017, \$77.00

#### **HEALTH INFORMATICS (TC 215)**

ISO/DIS 12381, Health informatics - Time standards for healthcare specific problems - 11/5/2017, \$82.00

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

ISO/DIS 19903, Petroleum and natural gas industries - Concrete offshore structures - 9/9/2017, \$175.00

#### PAINTS AND VARNISHES (TC 35)

- ISO/DIS 20266, Paints and varnishes Determination of image clarity (degree of sharpness of reflected or transmitted image) 9/7/2017, \$58.00
- ISO/DIS 11126-7, Preparation of steel substrates before application of paints and related products Specifications for non-metallic blastcleaning abrasives - Part 7: Fused aluminium oxide - 11/5/2017, \$40.00

# PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)

ISO/DIS 18639-5, PPE ensembles for firefighters undertaking specialist rescue activities - Part 5: Helmet - 11/5/2017, \$62.00

#### PLASTICS AND RUBBER MACHINES (TC 270)

ISO/DIS 20430, Plastics and rubber machines - Injection moulding machines - Safety requirements - 8/22/2017, \$175.00

#### PLASTICS PIPES, FITTINGS AND VALVES FOR THE TRANSPORT OF FLUIDS (TC 138)

ISO/DIS 8533, Glass-reinforced thermosetting plastics (GRP) pipes and fittings - Test methods to prove the design of cemented or wrapped rigid joints - 12/23/2012, \$58.00

#### **ROAD VEHICLES (TC 22)**

- ISO/DIS 17840-2, Road vehicles Information for first and second responders Part 2: Rescue sheet for buses, coaches and heavy commercial vehicles 11/2/2017, \$71.00
- ISO/DIS 17840-3, Road vehicles Information for first and second responders Part 3: Emergency response guide template 11/4/2017, \$112.00

#### SHIPS AND MARINE TECHNOLOGY (TC 8)

ISO/DIS 799-1, Ships and marine technology - Pilot ladders - Part 1: Design and specification - 11/2/2017, \$62.00



- ISO/DIS 21159, Ships and marine technology Butterfly valves for use in low temperature applications - Design and testing requirements -11/3/2017, \$62.00
- ISO/DIS 17325-3, Ships and marine technology Marine environment protection Oil booms Part 3: End connectors 9/6/2017, \$67.00

#### STEEL (TC 17)

- ISO/DIS 4960, Steel strip, cold-reduced with a mass fraction of carbon over 0,25% 9/7/2017, \$53.00
- ISO/DIS 5952, Steel sheet, hot-rolled, of structural quality with improved atmospheric corrosion resistance 9/6/2017, \$58.00

#### **STERILIZATION OF HEALTH CARE PRODUCTS (TC 198)**

ISO/DIS 11139, Sterilization of health care products - Vocabulary -Terms used in sterilization and related equipment and process standards - 9/9/2017, \$125.00

# TECHNICAL SYSTEMS AND AIDS FOR DISABLED OR HANDICAPPED PERSONS (TC 173)

ISO/DIS 19894, Walking trolleys - Requirements and test methods - 11/2/2017, \$119.00

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

- ISO/DIS 18184, Textiles Determination of antiviral activity of textile products 9/7/2017, \$107.00
- ISO/DIS 1833-6, Textiles Quantitative chemical analysis Part 6: Mixtures of viscose, certain types of cupr, modal or lyocell with certain other fibres (method using formic acid and zinc chloride) -9/8/2017, \$33.00

#### **THERMAL INSULATION (TC 163)**

ISO/DIS 16535, Thermal insulating products for building applications -Determination of long-term water absorption by immersion -10/30/2017, \$67.00

#### **TOBACCO AND TOBACCO PRODUCTS (TC 126)**

ISO/DIS 21766, Tobacco and tobacco products - Determination of tobacco-specific nitrosamines in tobacco products - Method using LC-MS/MS - 11/4/2017, \$77.00

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

ISO/DIS 24347, Agricultural vehicles - Mechanical connections between towed and towing vehicles - Dimensions of ball-type coupling device (80 mm) - 11/2/2017, \$77.00

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

- ISO/DIS 2401, Welding consumables Covered electrodes -Determination of the efficiency, metal recovery and deposition coefficient - 9/7/2017, \$40.00
- ISO/DIS 5171, Gas welding equipment Pressure gauges used in welding, cutting and allied processes 9/8/2017, \$58.00

# ISO/IEC JTC 1, Information Technology

- ISO/IEC 7816-4/DAmd1, Identification cards Integrated circuit cards -Part 4: Organization, security and commands for interchange -Amendment 1: Record handling - 11/5/2017, \$53.00
- ISO/IEC 7816-4/DAmd2, Identification cards Integrated circuit cards -Part 4: Organization, security and commands for interchange-Amendment 2: Waiting time management - 11/5/2017, \$40.00
- ISO/IEC DIS 18328-4, Identification cards ICC-managed devices -Part 4: Test methods for logical characteristics - 11/5/2017, \$93.00

- ISO/IEC DIS 23005-5, Information technology Media context and control - Part 5: Data formats for interaction devices - 11/4/2017, \$245.00
- ISO/IEC DIS 23005-6, Information technology Media context and control Part 6: Common types and tools 11/3/2017, \$165.00
- ISO/IEC DIS 29167-21, Information technology Automatic identification and data capture techniques - Part 21: Crypto suite SIMON security services for air interface communications -11/3/2017, \$125.00
- ISO/IEC DIS 29167-22, Information technology Automatic identification and data capture techniques - Part 22: Crypto suite SPECK security services for air interface communications - 11/3/2017, \$119.00
- ISO/IEC/IEEE DIS 26511, Systems and software engineering -Requirements for managers of information for users of systems, software, and services - 9/7/2017, \$146.00

#### OTHER

ISO/IEC DGuide 41, Packaging - Recommendations for addressing consumer needs - 8/19/2017, \$68.00

# **IEC Standards**

- CABPUB/151/FDIS, Final Draft ISO/IEC FDIS 17025: General requirements for the competence of testing and calibration laboratories, 2017/9/29
- CABPUB/150/FDIS, Final Draft ISO/IEC FDIS 17011: Conformity assessment - Requirements for accreditation bodies accrediting conformity assessment bodies, 2017/9/29
- 4/329/CDV, IEC 60193 ED3: Hydraulic turbines, storage pumps and pump-turbines - Model acceptance tests, /2017/11/1
- 8B/3/DTS, IEC TS 62898-2 ED1: Microgrids Guidelines for Microgrid Operation (and Control), /2017/11/1
- 10/1026/CD, IEC 60480 ED3: Specification for re-use of SF6 and its mixtures in electrical equipment, /2017/11/1
- 13/1749/CDV, IEC 62056-8-4 ED1: Electricity metering data exchange - The DLMS/COSEM suite - Part 8-4: Communication profiles for narrow-band OFDM PLC PRIME neighbourhood networks, /2017/11/1
- 14/924/DTS, IEC TS 60076-23 ED1: Power transformers Part 23: Suppression devices of DC magnetic bias of electric power transformers, /2017/11/1
- 44/795/CD, IEC 62998-721 ED1: Safety of machinery Electrosensitive protective equipment - Safety-related sensors used for protection of person, /2017/11/1
- 46F/380/CD, IEC 63137-1 ED1: Standard test radio-frequency connectors Part 1: Generic specification General requirements and test methods, /2017/11/1
- 46F/381/CD, IEC 63138-1 ED1: Multi-radio frequency channel connectors Part 1: Generic specification General requirements and measuring methods, /2017/11/1
- 47F/288/CD, IEC 62047-31 ED1: Semiconductor devices Microelectromechanical devices - Part 31: Four-point bending test method for interfacial adhesion energy of layered MEMS materials, /2017/10/1
- 57/1911/DTR, IEC TR 62361-103 ED1: Power systems management and associated information exchange - Interoperability in the long term - Part 103: Standard profiling, /2017/10/1
- 65B/1099/CD, IEC TR 63153 ED1: Sampling and Conditioning LNG for Continuous Analysis, /2017/11/1
- 82/1328/CD, IEC 62093 ED2: Power conversion equipment for photovoltaic systems - Design qualification testing, /2017/11/1

- 91/1460/CD, IEC 60194-1 ED1: Printed boards design, manufacture and assembly - Vocabulary - Part 1: Common usage in printed board and electronic assembly technologies, /2017/10/1
- 100/2960/CDV, IEC 60268-3 ED5: Sound system equipment Part 3: Amplifiers, /2017/11/1
- 100/2975/FDIS, IEC 60728-3 ED5: Cable networks for television signals, sound signals and interactive services - Part 3: Active wideband equipment for cable networks (TA 5), 2017/9/29
- 104/735/CDV, IEC 60068-2-5 ED3: Environmental testing Part 2-5: Tests - Test S: Simulated solar radiation at ground level and guidance for solar radiation testing and weathering, /2017/11/1
- 105/653/CD, IEC 62282-8-101 ED1: Fuel cell technologies Part 8 -101: Energy storage systems using fuel cell modules in reverse mode - Test procedures for solid oxide single cell and stack performance including reversing operation, /2017/10/1
- 110/900/CD, IEC 62906-5-1 ED1: Laser display devices Part 5-1: Measurement of optical performance for laser front projection, /2017/10/1
- 110/901/FDIS, IEC 62341-6-3 ED2: Organic light emitting diode (OLED) displays - Part 6-3: Measuring methods of image quality, 2017/9/29
- 119/186/CD, IEC 62899-101 ED1: Printed Electronics Part 101: Terminology - Vocabulary, /2017/11/1
- 121A/165/CD, IEC 60947-9-1 ED1: Low-voltage switchgear and controlgear Part 9-1: Arc quenching devices, /2017/11/1
- CIS/H/331/DC, CISPR/H/312/CDV Project IEC 61000-6-3/AMD2 ED2 - Amendment 2 to IEC 61000 6 3: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments - Class A/Class B limits within the commercial and light Industrial environments, 2017/9/29
- CIS/H/334/DC, CIS/H/312/CDV Project IEC 61000-6-3/AMD2 ED2 -Amendment 2 to IEC 61000 6 3: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments - Proposal to clarify asymmetric mode conducted emissions in accordance with CISPR 32, 2017/9/29
- CIS/H/332/DC, CISPR/H/312/CDV Project IEC 61000-6-3/AMD2 ED2 - Amendment 2 to IEC 61000 6 3: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for residential, commercial and light-industrial environments -Clarification of test requirements and conditions for DC powered systems operated with an external charger/converter (AC/DC and DC/DC), 2017/9/29
- CIS/I/567/CD, Amendment 1 CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements -Fragment 5, /2017/11/1
- CIS/I/564/CD, Amendment 1 CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements - Fragment 1, /2017/11/1
- CIS/I/566/CD, Amendment 1 CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements -Fragment 2, /2017/11/1
- CIS/I/565/CD, Amendment 1 CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements -Fragment 3, /2017/11/1
- CIS/I/568/CD, Amendment 1 CISPR 32: Electromagnetic compatibility of multimedia equipment - Emission requirements -Fragment 6, /2017/11/1

# **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**

#### ACOUSTICS (TC 43)

ISO 9296:2017, Acoustics - Declared noise emission values of information technology and telecommunications equipment, \$103.00

#### AIRCRAFT AND SPACE VEHICLES (TC 20)

- ISO 10842:2017, Aircraft Ground service connections Locations and types, \$68.00
- ISO 19683:2017. Space systems Design qualification and acceptance tests of small spacecraft and units, \$232.00

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

<u>ISO 19280:2017</u>, Corrosion of metals and alloys - Measurement of critical crevice temperature for cylindrical crevice geometries in ferric chloride solution, \$103.00

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

ISO 6183/Amd1:2017, Fire protection equipment - Carbon dioxide extinguishing systems for use on premises - Design and installation - Amendment 1, \$19.00

#### **ERGONOMICS (TC 159)**

ISO 7243:2017, Ergonomics of the thermal environment - Assessment of heat stress using the WBGT (wet bulb globe temperature) index, \$103.00

#### FINE CERAMICS (TC 206)

ISO 19674:2017, Fine ceramics (advanced ceramics, advanced technical ceramics) - Methods of test for ceramic coatings - Determination of internal stress in ceramic coatings by application of the Stoney formula, \$68.00

#### **GRAPHIC TECHNOLOGY (TC 130)**

<u>ISO 2846-1:2017</u>, Graphic technology - Colour and transparency of printing ink sets for four-colour printing - Part 1: Sheet-fed and heatset web offset lithographic printing, \$103.00

#### **HEALTH INFORMATICS (TC 215)**

<u>ISO 12052:2017.</u> Health informatics - Digital imaging and communication in medicine (DICOM) including workflow and data management, \$103.00

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

ISO 28500:2017, Information and documentation - WARC file format, \$138.00

#### **IRON ORES (TC 102)**

<u>ISO 15633:2017.</u> Iron ores - Determination of nickel - Flame atomic absorption spectrometric method, \$103.00

<u>ISO 22682:2017</u>, Iron ores - Determination of trace elements - Plasma spectrometric method, \$138.00

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

ISO 14692-1:2017, Petroleum and natural gas industries - Glassreinforced plastics (GRP) piping - Part 1: Vocabulary, symbols, applications and materials, \$209.00

ISO 14692-2:2017, Petroleum and natural gas industries - Glassreinforced plastics (GRP) piping - Part 2: Qualification and manufacture, \$209.00

- ISO 14692-3:2017, Petroleum and natural gas industries Glassreinforced plastics (GRP) piping - Part 3: System design, \$185.00
- ISO 14692-4:2017, Petroleum and natural gas industries Glassreinforced plastics (GRP) piping - Part 4: Fabrication, installation and operation, \$209.00

#### MEASUREMENT OF FLUID FLOW IN CLOSED CONDUITS (TC 30)

ISO 12764:2017, Measurement of fluid flow in closed conduits -Flowrate measurement by means of vortex shedding flowmeters inserted in circular cross-section conduits running full, \$138.00

#### **MECHANICAL CONTRACEPTIVES (TC 157)**

<u>ISO 25841:2017</u>, Female condoms - Requirements and test methods, \$209.00

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

ISO 14997:2017, Optics and photonics - Test methods for surface imperfections of optical elements, \$103.00

ISO 10110-7:2017, Optics and photonics - Preparation of drawings for optical elements and systems - Part 7: Surface imperfections, \$68.00

#### PAPER, BOARD AND PULPS (TC 6)

ISO 8791-3:2017, Paper and board - Determination of roughness/smoothness (air leak methods) - Part 3: Sheffield method, \$103.00

#### PLASTICS (TC 61)

- <u>ISO 3616/Amd1:2017</u>, Textile glass Chopped-strand and continuousfilament mats - Determination of average thickness, thickness under load and recovery after compression - Amendment 1, \$19.00
- <u>ISO 4582:2017</u>, Plastics Determination of changes in colour and variations in properties after exposure to glass-filtered solar radiation, natural weathering or laboratory radiation sources, \$103.00
- <u>ISO 19699-1:2017.</u> Superabsorbent polymer Sodium polyacrylate resin for absorbing blood Part 1: Test methods, \$68.00
- <u>ISO 19699-2:2017</u>, Superabsorbent polymer Sodium polyacrylate resin for absorbing blood Part 2: Specifications, \$45.00

#### **RAILWAY APPLICATIONS (TC 269)**

<u>ISO 19659-1:2017</u>, Railway applications - Heating, ventilation and air conditioning systems for rolling stock - Part 1: Terms and definitions, \$45.00

#### **ROLLING BEARINGS (TC 4)**

ISO 20015:2017, Spherical plain bearings - Method for the calculation of static and dynamic load ratings, \$68.00

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

- ISO 11236:2017, Rubber compounding ingredients p-Phenylenediamine antidegradants (PPDs) - Test methods, \$138.00
- ISO 7267-1:2017, Rubber-covered rollers Determination of apparent hardness Part 1: IRHD method, \$45.00
- ISO 7267-3:2017, Rubber-covered rollers Determination of apparent hardness Part 3: Pusey and Jones method, \$68.00
- ISO 19984-1:2017. Rubber and rubber products Determination of biobased content - Part 1: General principles and calculation methods using the formulation of the rubber compound, \$103.00
- ISO 19984-2:2017. Rubber and rubber products Determination of biobased content Part 2: Biobased carbon content, \$138.00
- ISO 19984-3:2017. Rubber and rubber products Determination of biobased content Part 3: Biobased mass content, \$138.00

#### SHIPS AND MARINE TECHNOLOGY (TC 8)

ISO 20155:2017. Ships and marine technology - Test method of flow induced in-pipe noise source characteristics for a ship-used pump, \$138.00

#### SURFACE CHEMICAL ANALYSIS (TC 201)

<u>ISO 19668:2017</u>, Surface chemical analysis - X-ray photoelectron spectroscopy - Estimating and reporting detection limits for elements in homogeneous materials, \$138.00

#### **THERMAL INSULATION (TC 163)**

<u>ISO 12569:2017.</u> Thermal performance of buildings and materials -Determination of specific airflow rate in buildings - Tracer gas dilution method, \$209.00

#### **TRADITIONAL CHINESE MEDICINE (TC 249)**

ISO 20333:2017, Traditional Chinese medicine - Coding rules for Chinese medicines in supply chain management, \$68.00

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

- <u>ISO 9455-11:2017</u>, Soft soldering fluxes Test methods Part 11: Solubility of flux residues, \$45.00
- <u>ISO 9455-13:2017.</u> Soft soldering fluxes Test methods Part 13: Determination of flux spattering, \$45.00
- <u>ISO 9455-14:2017.</u> Soft soldering fluxes Test methods Part 14: Assessment of tackiness of flux residues, \$45.00

### **ISO Technical Reports**

#### MACHINE TOOLS (TC 39)

ISO/TR 17243-2:2017. Machine tool spindles - Evaluation of spindle vibrations by measurements on non-rotating parts - Part 2: Directdriven spindles and belt-driven spindles with rolling element bearings operating at speeds between 600 r/min and 30 000 r/min, \$103.00

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

<u>ISO/TR 21477:2017</u>, Optics and photonics - Preparation of drawings for optical elements and systems - Surface imperfection specification and measurement systems, \$45.00

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

<u>ISO/TR 19727:2017</u>, Medical devices - Pump tube spallation test -General procedure, \$45.00

### **ISO Technical Specifications**

#### OTHER

<u>ISO/TS 20273:2017</u>, Guidelines on weld quality in relationship to fatigue strength, \$185.00

#### PACKAGING (TC 122)

<u>ISO/TS 17451-2:2017</u>, Packaging - Codification of contents for inventories for shipments of household goods and personal effects -Part 2: XML messaging structure for electronic transmission of inventory data, \$138.00

#### **ROAD VEHICLES (TC 22)**

<u>ISO/TS 19466:2017</u>, Electrically propelled mopeds and motorcycles -Test method for evaluating performance of regenerative braking systems, \$103.00

### ISO/IEC JTC 1, Information Technology

- <u>ISO/IEC 29151:2017.</u> Information technology Security techniques -Code of practice for personally identifiable information protection, \$185.00
- <u>ISO/IEC 14543-5-8:2017.</u> Information technology Home electronic systems (HES) architecture Part 5-8: Intelligent grouping and resource sharing for HES Class 2 and Class 3 Remote access core protocol, \$185.00
- ISO/IEC 14543-5-9:2017, Information technology Home electronic systems (HES) architecture - Part 5-9: Intelligent grouping and resource sharing for HES class 2 and class 3 - Remote access service platform, \$138.00

# **IEC Standards**

#### AUTOMATIC CONTROLS FOR HOUSEHOLD USE (TC 72)

IEC 60730-2-15 Ed. 3.0 b:2017, Automatic electrical controls - Part 2 -15: Particular requirements for automatic electrical air flow, water flow and water level sensing controls, \$235.00

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

- IEC 60153-4 Ed. 3.0 en:2017, Hollow metallic waveguides Part 4: Relevant specifications for circular waveguides, \$82.00
- <u>IEC 61169-11 Ed. 1.0 b:2017</u>, Radio-frequency connectors Part 11: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 9,5 mm with threaded coupling - characteristic impedance 50  $\Omega$  (Type 4,1-9,5), \$164.00
- <u>IEC 61169-52 Ed. 1.0 b:2015</u>, Radio-frequency connectors Part 52: Sectional specification for series MMCX RF coaxial connectors, \$164.00

#### **FIBRE OPTICS (TC 86)**

- IEC 62343-1 Ed. 1.0 b:2016, Dynamic modules Part 1: Performance standards General conditions, \$47.00
- IEC 62572-3 Ed. 3.0 b:2016. Fibre optic active components and devices Reliability standards Part 3: Laser modules used for telecommunication, \$117.00
- <u>IEC 62343-3-1 Ed. 2.0 b:2016</u>, Dynamic modules Part 3-1: Performance specification templates - Dynamic channel equalizers, \$47.00
- IEC 62343-4-1 Ed. 1.0 b:2016, Dynamic modules Part 4-1: Software and hardware interface - 1 x 9 wavelength selective switch, \$199.00
- IEC 60793-1-33 Ed. 2.0 b:2017. Optical fibres Part 1-33: Measurement methods and test procedures - Stress corrosion susceptibility, \$281.00

#### **INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL (TC 65)**

#### IEC 61511-SER Ed. 1.0 b:2017, Functional safety - Safety

instrumented systems for the process industry sector - ALL PARTS, \$1267.00

<u>IEC 61511-1 Ed. 2.1 en:2017.</u> Functional safety - Safety instrumented systems for the process industry sector - Part 1: Framework, definitions, system, hardware and application programming requirements, \$469.00

IEC 61511-1 Amd.1 Ed. 2.0 en:2017, Amendment 1 - Functional safety
 Safety instrumented systems for the process industry sector - Part
 1: Framework, definitions, system, hardware and application
 programming requirements, \$23.00

#### LAMPS AND RELATED EQUIPMENT (TC 34)

IEC 62733 Ed. 1.0 b cor.1:2017, Corrigendum 1 - Programmable components in electronic lamp controlgear - General and safety requirements, \$0.00

# PERFORMANCE OF HOUSEHOLD ELECTRICAL APPLIANCES (TC 59)

<u>IEC 62863 Ed. 1.0 en:2017</u>, Methods of measuring performances of electric hair clippers or trimmers for household use, \$82.00

#### **POWER CAPACITORS (TC 33)**

IEC 61071 Ed. 2.0 b:2017, Capacitors for power electronics, \$281.00

<u>S+ IEC 61071 Ed. 2.0 en:2017 (Redline version)</u>, Capacitors for power electronics, \$366.00

#### **SEMICONDUCTOR DEVICES (TC 47)**

- <u>IEC 60747-16-3 Amd.2 Ed. 1.0 en:2017</u>, Amendment 2 -Semiconductor devices - Part 16-3: Microwave integrated circuits -
- Frequency converters, \$12.00 <u>IEC 60747-16-3 Ed. 1.2 en:2017</u>, Semiconductor devices - Part 16-3: Microwave integrated circuits - Frequency converters, \$352.00

IEC 60747-16-4 Amd.2 Ed. 1.0 en:2017, Amendment 2 -

Semiconductor devices - Part 16-4: Microwave integrated circuits -Switches, \$12.00

IEC 60747-16-4 Ed. 1.2 en:2017, Semiconductor devices - Part 16-4: Microwave integrated circuits - Switches, \$293.00

#### SOLAR PHOTOVOLTAIC ENERGY SYSTEMS (TC 82)

IEC 62805-1 Ed. 1.0 b:2017. Method for measuring photovoltaic (PV) glass - Part 1: Measurement of total haze and spectral distribution of haze, \$82.00

IEC 62805-2 Ed. 1.0 b:2017, Method for measuring photovoltaic (PV) glass - Part 2: Measurement of transmittance and reflectance, \$82.00

#### SWITCHGEAR AND CONTROLGEAR (TC 17)

IEC 62271-211 Ed. 1.0 b cor.2:2017, Corrigendum 2 - High-voltage switchgear and controlgear - Part 211: Direct connection between power transformers and gas-insulated metal-enclosed switchgear for rated voltages above 52 kV, \$0.00

#### WINDING WIRES (TC 55)

IEC 60317-0-7 Ed. 2.0 b:2017, Specifications for particular types of winding wires - Part 0-7: General requirements - Fully insulated (FIW) zero-defect enamelled round copper wire, \$164.00

IEC 60317-67 Ed. 1.0 b:2017, Specifications for particular types of winding wires - Part 67: Polyvinyl acetal enamelled rectangular aluminium wire, class 105, \$47.00

IEC 60317-68 Ed. 1.0 b:2017, Specifications for particular types of winding wires - Part 68: Polyvinyl acetal enamelled rectangular aluminium wire, class 120, \$47.00

#### IEC Technical Reports

#### **ELECTRICAL EQUIPMENT IN MEDICAL PRACTICE (TC 62)**

IEC/TR 60601-4-4 Ed. 1.0 en:2017, Medical electrical equipment - Part 4-4: Guidance and interpretation - Guidance for writers of particular standards when creating alarm system-related requirements, \$164.00

### **IEC Technical Specifications**

#### SOLAR PHOTOVOLTAIC ENERGY SYSTEMS (TC 82)

IEC/TS 62788-2 Ed. 1.0 en:2017, Measurement procedures for

materials used in photovoltaic modules - Part 2: Polymeric materials - Frontsheets and backsheets, \$352.00

# **Registration of Organization Names in the United States**

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

The following is a list of alphanumeric organization names that have been submitted to ANSI for registration. Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

# **PUBLIC REVIEW**

#### ORSUS

Public Review: August 11 to November 9, 2017

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

A challenge is initiated when a letter from an interested entity is received by the Registration Coordinator. The letter shall identify the alphanumeric organization name being challenged and state the rationale supporting the challenge.

A challenge fee shall accompany the letter. After receipt of the challenge, the alphanumeric organization name shall be marked as challenged in the Public Review list. The Registration Coordinator shall take no further action to register the challenged name until the challenge is resolved among the disputing parties.

# **Proposed Foreign Government Regulations**

# **Call for Comment**

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

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

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

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

### Withdrawal of American National Standard (ANS)

# NGWA 01-2014, NGWA Water-Well Construction Standard

NGWA-01-2014, NGWA Water Well Construction Standard, was withdrawn as an American National Standard (ANS) effective August 14, 2017. Questions may be directed to Jessica Michell at jmichell@ngwa.org.

# ANSI Accreditation Program for Greenhouse Gas Validation/Verification Bodies

### Reaccreditation

Internat Energy Solutions Canada, Inc.

#### Comment Deadline: September 25, 2017

In accordance with the following ISO standards:

ISO 14065:2013, Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition

#### Internat Energy Solutions Canada, Inc.

Livio Nichilo 425 Adelaide Street West, Suite 403A Toronto, ON M5V 3C1, Canada Phone: 416-628-4658, ext. 140 E-mail: I.nichilo@internatenergy.com

On August 21, 2017, ANSI's Greenhouse Gas Validation/Verification Body Accreditation Committee granted Internat Energy Solutions Canada, Inc. reaccreditation for the following:

#### Activity and Scope:

Verification of assertions related to GHG emissions and removals at the organizational level:

- 01. General
- 02. Manufacturing
- 03. Power Generation
- 05. Mining and Mineral Production
- 06. Metals Production
- 07. Chemical Production
- 08. Oil and gas extraction, production and refining including petrochemicals
- 09. Waste

Please send your comments by September 25, 2017 to Phillip Mariscal, Senior Coordinator, Environmental Accreditation Programs, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293-9287 or e-mail: <u>pmariscal@ansi.org</u>.

# Lloyd's Register Quality Assurance, Inc.

#### Comment Deadline: September 25, 2017

In accordance with the following ISO standards:

ISO 14065:2013, Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition

#### Lloyd's Register Quality Assurance, Inc. Derek Markolf

1330 Enclave Parkway, Suite 200, Houston, TX 77077 Phonel: 213-814-9504 E-mail: derek.markolf@lrga.com

On August 21, 2017, ANSI's Greenhouse Gas Validation/Verification Body Accreditation Committee granted Lloyd's Register Quality Assurance, Inc. reaccreditation for the following:

#### Activity and Scope:

Verification of assertions related to GHG emissions and removals at the organizational level:

- 01. General
- 02. Manufacturing
- 03. Power Generation
- 04. Electric Power Transactions
- 05. Mining and Mineral Production
- 08. Oil and gas extraction, production and refining including petrochemicals

#### 09. Waste

Please send your comments by September 25, 2017 to Phillip Mariscal, Senior Coordinator, Environmental Accreditation Programs, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293-9287 or e-mail: pmariscal@ansi.org.

#### Scope Extension

### ERM CVS Ltd.

#### Comment Deadline: September 25, 2017

In accordance with the following ISO standards:

ISO 14065:2013, Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition

ERM CVS Ltd. Amanda Russell 2nd Floor, Exchequer Court, 33 St. Mary Axe, London EC3A 8AA, United Kingdom Phonel: +44 (0)20 3206 5342 E-mail: amanda.russell@ermcvs.com

On August 21, 2017, ANSI's Greenhouse Gas Validation/Verification Body Accreditation Committee granted ERM CVS Ltd. scope extension for the following:

#### Activity and Scope:

Verification of assertions related to GHG emissions and removals at the organizational level:

- 07. Chemical Production
- 08. Oil and gas extraction, production and refining including petrochemicals

Please send your comments by September 25, 2017 to Phillip Mariscal, Senior Coordinator, Environmental Accreditation Programs, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293-9287 or e-mail: <u>pmariscal@ansi.org</u>.

# International Organization for Standardization (ISO)

# ISO Proposals for New Fields of ISO Technical Activity

### **Ageing Societies**

### Comment Deadline: September 15, 2017

BSI, the ISO member from the United Kingdom, has submitted to ISO a proposal for a new field of ISO technical activity on Ageing Societies, with the following scope statement:

Standardization in the field of ageing societies.

The program of work will promote lifelong support and quality of life in ageing populations. This will enable people to remain independent throughout their life with a sense of value and contribution to their communities. It will take a holistic approach in addressing services and products that will help manage the advancement of ageing societies. It will take note of where innovation and technology require standards to support this demographic.

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, September 15, 2017.

### Transfer of Secretariat and U.S. TAG Administrator

#### ISO/TC 204 – Intelligent transport systems

#### Comment Deadline: September 8, 2017

The Intelligent Transportation Society of America (ITSA) has requested ANSI to delegate the responsibilities of the administration of the ISO/TC 204 secretariat and U.S. TAG to SAE International. The secretariat and U.S. TAG was previously held by ITSA and the transfer is supported by the U.S. TAG.

ISO/TC 204 operates under the following scope:

Standardization of information, communication and control systems in the field of urban and rural surface transportation, including intermodal and multimodal aspects thereof, traveller information, traffic management, public transport, commercial transport, emergency services and commercial services in the intelligent transport systems (ITS) field.

Excluded:

- in-vehicle transport information and control systems (ISO / TC 22).

#### NOTE:

ISO/TC 204 is responsible for the overall system aspects and infrastructure aspects of intelligent transport systems (ITS), as well as the coordination of the overall ISO work programme in this field including the schedule for standards development, taking into account the work of existing international standardization bodies.

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



BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 90.4-2016

# **Public Review Draft**

# **Proposed Addendum a to**

# Standard 90.4-2016, Energy Standard

# for Data Centers

# First Public Review (August 2017) (Draft Shows Proposed Changes to Current Standard)

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BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 90.4-2016, *Energy Standard for Data Centers* First Public Review Draft

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# FOREWORD

This addendum deletes the definition of alteration from Section 3 of Standard 90.4, thereby reverting to the definition of alteration in Standard 90.1 (which is reproduced in Standard 90.4 Annex 1). Specific requirements for alterations to data centers are addressed through existing language in Section 4.2.1.3 on a general basis and in Section 6.1.1.3 for mechanical systems. Criteria for alterations to electrical systems are added to Section 8.1.4.

Section 3: The term "alteration" is widely used in codes. It is important to have consistency in terminology for understanding and ease of use of codes and standards by designers, contractors, and enforcement agencies. The definition of alteration in Standard 90.1 aligns with the definition of alteration in codes. Use of the same definition for alteration in Standard 90.4 would then align with the definition of alteration in codes.

Section 4.2.1.3: In Section 4 Administration and Enforcement, the general requirements for alterations to existing data centers remain unchanged. These requirements are reproduced here to provide context for reviewers.

Section 6.1.1.3: In Section 6 Heating, Ventilating, and Air Conditioning, the requirements for alterations to mechanical systems for existing data centers remain unchanged. These requirements are reproduced here to provide context for reviewers.

Section 8.1.4: In Section 8 Electrical, alterations to electrical systems for existing data centers were not specifically addressed. The proposed requirements match the requirements in the parallel Section 8 Power in Standard 90.1.

Note that this addendum only addresses alterations to existing data centers. The issue of additions to existing data centers is addressed in a separate addendum.

[Note to Reviewers: 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 a to 90.4-2016

Modify the standard as follows (IP and SI Units)

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### **3 DEFINITIONS**

**3.1 General.** Certain terms, abbreviations, and acronyms are defined in this section for the purposes of this standard. These definitions are applicable to all sections of this standard.

**3.1.1 Coordination.** Where terms are not defined in this standard but are defined in ASHRAE/IES Standard 90.1, those terms shall have the meanings as assigned to them in ANSI/ASHRAE/IES Standard 90.1. Where terms are not defined in either document, they shall have their ordinary accepted meanings within the context in which they are used. Ordinarily accepted meanings shall be based on standard American English language usage as documented in an unabridged dictionary accepted by the adopting authority.

#### Informative Note:

- 1. See Annex 1 for ASHRAE/IES Standard 90.1 definitions.
- 2. Only terms that appear in Section 3 of this standard are italicized throughout the document. Terms that appear Annex 1 are not italicized.

#### 3.2 Definitions

*alteration:* a replacement not in kind or addition to a building or its *systems* and *equipment*. Routine maintenance, repair, replacement in kind, and service, or a change in the building's use classification or category shall not constitute an *alteration*. *Alterations* exclude *ITE adds, moves, and changes*.

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#### **4 ADMINISTRATION AND ENFORCEMENT**

#### 4.1 General

#### 4.2 Compliance

**4.2.1 Compliance Paths** 

4.2.1.1 New Data Centers.

#### 4.2.1.2 Additions to Existing Data Centers.

**4.2.1.3 Alterations to Existing** *Data Centers*. Alterations to existing *data centers* shall comply with the provisions of Sections 5, 7, <u>8</u> <u>9</u>, and 10 and with either Sections 6 and 8 or Section 11, provided such compliance will not result in the increase of energy consumption of the building.

#### **Exceptions:**

- 1. ITE adds, moves, and changes are excluded.
- 2. ITE enclosures are excluded.
- 3. A *data center* that has been specifically designated as historically significant by the adopting authority, is listed in The National Register of Historic Places, or has been determined to be eligible for listing by the U.S. Secretary of the Interior, need not comply with these requirements.
- 4. Where one or more components or portions of an existing *data center* mechanical, electrical, or lighting *system* is being replaced without changing capacities, the annual energy consumption of the *system* in which replacements are made shall not be greater than the annual energy consumption of the existing *system*. Compliance can be demonstrated using manufacturer's published *efficiency* data for the new and existing devices or by comparative calculations of the annual energy consumptions of the existing and revised *systems* performed by a design professional using calculation methods commonly accepted in the industry.

Component or *system* replacements or modifications that result in changes in either capacity or type of technology require compliance with the applicable sections and versions of this standard in accordance with Section 4.2.2.4.

Informative Note: Refer to Figures C-3, C-4, and C-5 for guidance on applicability.

### 6 HEATING, VENTILATING, AND AIR CONDITIONING

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#### 6.1.1 Scope

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### 6.1.1.3 Alterations to Heating, Ventilating, Air Conditioning, and Refrigeration (HVACR) in Existing Data Centers

**6.1.1.3.1** Replacing existing HVAC *equipment* with new HVAC *equipment* shall comply with the specific minimum *efficiency* requirements applicable to that *equipment* in ASHRAE/IES Standard 90. 1.

#### **Exceptions:**

- 1. For *equipment* that is being modified or repaired but not replaced, provided that such modifications and/or repairs will not result in an increase in the annual energy consumption of the *equipment* using the same energy type.
- 2. Where a replacement or alteration of equipment requires extensive revisions to other *systems*, *equipment*, or elements of a building, and such replaced or altered *equipment* is a like-for-like replacement.
- 3. For a refrigerant change of existing *equipment*.
- 4. For the relocation of existing *equipment*.

**6.1.1.3.2** New cooling *systems* installed to serve previously uncooled spaces shall comply with this section as described in Section 6.2.

### **8 ELECTRICAL**

### 8.1General

**8.1.1 Scope.** This section applies to the building electrical *systems* delivering power to the *data center* IT load, and to *equipment* described below.

**8.1.2 New Buildings.** *Equipment* installed in new *buildings* shall comply with the requirements of this section.

**<u>8.1.3 Additions to Existing Buildings.</u>** [Note to reviewers: to be addressed in a separate addendum]

### 8.1.4 Alterations to Existing Buildings

**Exceptions:** 

- 1. <u>Compliance shall not be required for the relocation or reuse of *existing equipment* at the same site.</u>
- 2. Where a replacement or alteration of equipment requires extensive revisions to other *systems*, *equipment*, or elements of a building, and such replaced or altered *equipment* is a like-for-like replacement.

**8.1.4.1** Alterations to building service equipment or systems shall comply with the requirements of this section applicable to those specific portions of the building and its systems that are being altered.

**8.1.4.2** Any new equipment subject to the requirements of this section that is installed in conjunction with the alterations as a direct replacement of existing equipment shall comply with the specific requirements applicable to that equipment.

[Note to editor: remove italics from the word "alterations" in other sections of the Standard that are not reproduced here.]



BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 90.4-2016

## **Public Review Draft**

# **Proposed Addendum b to**

# Standard 90.4-2016, Energy Standard

## for Data Centers

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### FOREWORD

This addendum cleans up redundant wording in Section 4.1.1.2 and creates a more-level planning field in Section 4.2.1.2 while eliminating inappropriate text. This addendum clarifies the exception in Section 6.1.1.2 that addresses the case where existing HVAC systems and equipment serve an addition, and adds parallel criteria to Section 8.1.3 for electrical equipment.

Section 4.1.1.2: The term "addition" is defined (as shown in Annex 1) as "an extension or increase in floor area or height of a building outside of the existing building envelope." Consequently, the first portion of Section 4.1.1.2 is redundant and can be deleted. Also, note that the term "addition" is limited to increases in the floor area of a building; it does not include increases in equipment size or capacity.

Section 4.2.1.2: The exception is proposed to be deleted. The exception addresses increases in floor area and increases in connected load. In terms of the first aspect, providing an exemption for an increase in area is inequitable: there is no exemption for 10% of the floor area in a new building, and some additions to existing buildings can be as large as a stand-alone new building. All new floor area should be treated the same. Further, codes in general require compliance for new construction, and this change would better align Standard 90.4 with codes. In terms of the second aspect, this is the wrong location to address most increases in connected load. A build-out or expansion of ITE within the shell of an existing building envelope is considered an alteration, not an addition. Consequently, increases in connected load are most-appropriately addressed in the alterations section.

Section 6.1.1.2: In Section 6 Heating, Ventilating, and Air Conditioning, the base requirements for additions to existing data centers remain unchanged. The exception is revised to clarify the distinctions between the use of existing HVAC systems and equipment to serve a new addition versus the installation of new HVAC systems and equipment. The language parallels the requirements in Section 6 Heating Ventilating, and Air Conditioning in Standard 90.1.

Section 8.1.3: Section 8 Electrical in Standard 90.4 did not specifically address additions to existing data centers. The proposed base requirements match the requirements in the parallel Section 8 Power in Standard 90.1. The proposed exception in Section 8 is written to parallel the exception in Section 6 above. (Section 8 Power in Standard 90.1 does not contain such an exception.)

Note that this addendum only addresses additions to existing data centers. The issue of alterations to existing data centers is addressed in a separate addendum.

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#### Addendum b to 90.4-2016

Modify the standard as follows (IP and SI Units)

#### **4 ADMINISTRATION AND ENFORCEMENT**

#### 4.1 General

4.1.1 Scope

4.1.1.1 New Data Centers.

**4.1.1.2** Additions to Existing *Data Centers*. An extension or increase in the floor area or height of a *data center* outside of the existing *data center* envelope shall be considered an addition to an existing *data center* and shall comply with the standard as described in Section 4.2.

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#### 4.2 Compliance

#### 4.2.1 Compliance Paths

#### 4.2.1.1 New Data Centers.

**4.2.1.2** Additions to Existing *Data Centers*. Additions to existing *data centers* shall comply with the provisions of Sections 5, 7, 9, and 10 and one of the following:

- a. Sections 6 and 8 or
- b. Section 11.

Exception to Section 4.2.1.2: Additions that result in less than a 10% increase in area or less than a 10% increase in connected load (*kW*) are excluded.

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#### **6 HEATING, VENTILATING, AND AIR CONDITIONING**

#### 6.1 General

#### 6.1.1 Scope

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**6.1.1.2** Additions to Existing *Data Centers*. Mechanical *equipment* and *systems* serving installed to serve the heating, cooling, or ventilating needs of additions to existing *data centers* shall comply with the requirements of this section as described in Section 6.2 or Section 11.

**Exception to Section 6.1.1.2:** Where conditioned air <u>HVAC</u> is provided to a *data center* addition by using the <u>existing</u> HVAC systems and equipment, such <u>existing</u> systems and equipment shall not be required to comply with this standard.

#### 8 ELECTRICAL

8.1General

**8.1.3** Additions to Existing *Data Centers*. Electrical *equipment* and *systems* installed to serve the power needs of additions to existing *data centers* shall comply with the requirements of this section as described in Section 8.2 or Section 11.

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**Exception to Section 8.1.3:** Where electrical power is provided to a *data center* addition by using the existing electrical *systems* and *equipment*, such *existing systems* and *equipment* shall not be required to comply with this standard.

#### Tracking number 61i137r2 © 2017 NSF

Revision to NSF/ANSI 61 – 2016 Issue 137 Revision 2 (August 2017)

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[Note – the changes are seen below using strikeout for removal of old text and gray highlights to show the suggested text. ONLY the highlighted text is within the scope of this ballot.]

## NSF/ANSI Standard for Drinking Water System Components – Health Effects

#### 3 General requirements

#### 3.5 Restriction on use of lead containing materials

There shall be no lead added as an intentional ingredient in any product, component, or material submitted for evaluation to this standard, with the following exceptions:

Brass or bronze used in products meeting the definition of "lead free" under the specific provisions
of the Safe Drinking Water Act of the United States.

 Solders and flux meeting the definition of "lead free" under the specific provisions of the Safe Drinking Water Act of the United States.

 Brass or bronze used in products specifically identified as exemptions within section (a)(4)(B) of the Safe Drinking Water Act of the United States.

— Fire sprinklers (head).

 Trace amounts required for operation of products used to monitor the characteristics of drinking water, such as the glass membranes used with some selective ion or pH electrodes.

 Materials or components exempted from formulation information requirements as allowed per Section 3.2, Note 1.

NOTE — To the maximum extent possible, lead should not be added as an intentional ingredient in any product covered by the scope of this standard. The exception above relative to materials and components exempt from formulation information requirements has only been included in recognition that the use of lead as an intentional additive is unable to be identified in cases where formulation information information is not obtained.

#### 3.6 Weighted average lead Lead content of products

With the exception of those exempted in the Safe Drinking Water Act of the United States, the wetted surfaces of products shall have a weighted average lead content less than or equal to 0.25 percent Products being evaluated for weighted average lead content shall be when evaluated in accordance with NSF/ANSI 372 – Drinking water system components – Lead content. For the purpose of this section, product shall refer to anything individually evaluated for compliance under the standard, including materials and components. Solders and fluxes shall have a lead content no more than 0.2 percent.

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#### 3.6.1 Exceptions to the requirement for lead content verification testing

High flow devices that are used exclusively at public water treatment facilities are exempt from the requirement for lead content verification testing. For the purposes of this section high flow devices are limited to chemical feeders, disinfectant generators (e.g. chlorine dioxide, hypochlorite, ozone and ultraviolet), electrodialysis technologies, microfiltration technologies, nanofiltration technologies, reverse osmosis, and ultrafiltration technologies.

Reason: Revision requires all products to have a weighted average lead content < 0.25% and ensures that lead content verification is performed on all products (unless specifically exempted by US SDWA) as a means of an additionally verifying the intent of Section 3.5. Additionally, the change would provide additional assurance that products comply with the US SDWA.

Revision 2: Removed proposal under 3.6.1 to exempt high flow devices from the lead content verification testing per comments received on revision 1 draft. Also corrected the statement under 3.6 to clarify that <u>the wetted surfaces</u> of products shall have a weighted average lead content of less than or equal to 0.25 percent.

BSR/UL 60947-4-1, Standard for Safety for Low-Voltage Switchgear and Controlgear – Part 4-1: Contactors and Motor-Starters – Electromechanical **Contactors and Motor-Starters** 

1. Harmonization of endurance test cycle rates for contactors, starters, manual ission from UL. motor controllers, manual motor controllers used as a disconnecting means and manual motor controllers used as tap conductor protection as a U.S. only national difference.

#### PROPOSAL

9.3.3.6DV.2 The equipment shall close and open a test circuit having the applicable current and power factor. The number of test cycles and the test cycle times shall be as specified in Table 8.2.4.2DV.1.1 or Table 8, as appropriate. The closed circuit test voltage shall be 100 to 110 percent of the required test voltage specified in Table 28DV of Part 1. In Canada, the number of test cycles and the test cycle times shall be as specified in Table 8.2.4.2DV.1.1 or Table 8, as appropriate. In the United States, the number of test cycles and the test cycle times shall be as specified in 8.2.4.2DV.

#### Table DVC.5.1.3.1.1 - Endurance test cycles for manual motor controllers used as a disconnecting means

	400	Number of cycles of operation			
Controller rating in amperes <sup>a</sup>	Number of cycles of operation per minute <sup>b</sup>	With current <sup>c</sup>	Without current	Total	
100 or less	60	6 000	4 000	10 000	
101 - 200	5	6 000	2 000	8 000	
201 - 400	<b>4</b>	1 000	5 000	6 000	
401 - 600	3	1 000	4 000	5 000	

<sup>a</sup> The controller rating is the larger of the ampere rating marked on the product or the maximum ampere rating equivalent to the marked horsepower ratings on the product as determined from Annex G.

<sup>b</sup> The indicated number of cycles of operation per minute applies only to that part of the test performed with current. When no current is used, the manual motor controller shall be operated at any convenient speed.

<sup>c</sup> In Canada, t∓he first 1 000 cycles tested with test current, power factor, and cycle rate as in Table 8.2.4.2DV.1.1 for AC motor starting; the remaining cycles "with Current" tested at cycle rate indicated in this table, at 0,75 - 0,80 power factor, and at Nated full load current. In the United States, the first 1 000 cycles tested with test current, power factor, and cycle rate as in 8.2.4.2DV for horsepower rated equipment; the remaining cycles "with current" tested at cycle rate indicated in this table, at 0,75 -0,80 power factor, and at rated full load current.

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2. Harmonization of endurance test cycle rates for manual motor controller and manual self-protected combination motor controller as a U.S. only national difference.

#### PROPOSAL

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#### Table DVC.5.1.4.1.1 - Endurance test for self-protected combination motor controllers

Test current,	Power	Number of cycles			Test cycle times, Seconds <sup>a, e</sup>	
amperes fa	factor	Conventional Test sequence No 4 and 5 Or 4A and 5A	Operational Test sequence 4B and 5B	On is	Off	
Twice Full- Load Current <sup>c</sup>	0,4 - 0,5	1 000	500 pilo	0,5	0,5	
Full-Load Current <sup>c</sup>	0,75 - 0,80	5 000	2,500	1	9	
No Load <sup>d</sup>	-	4 000	0	b	b	

Note: For an electrical control that operates load switching contacts, the tests as noted in Table 8.2.4.2DV.1.1 shall also be used.

<sup>a</sup> For test currents 200 amperes or more, the test on time shall be 1 second, and the maximum off time shall be 1 second for test currents of 200 - 499 amperes, and 120 seconds for test currents of 500 - 1 499 amperes.

<sup>b</sup> Any convenient rate but not to exceed 20 operations per minute.

<sup>c</sup> To be conducted on the load witching contacts by any convenient means of actuation.

<sup>d</sup> To be conducted on the manual disconnect actuator when the actuator is used to operate the load switching contacts. When other means are used to operate the load switching contacts, then the number of cycles on the manual actuator shall be 10 000 cycles.

<sup>e</sup>In the United States, manual self-protected combination controllers test cycle times for twice full-load current shall be as specified in Clause 8.2.4.2DV.

#### BSR/UL 486E, Standard for Safety for Equipment Wiring Terminals for Use with Aluminum and/or **Copper Conductors**

#### **1.** Representative Testing with Range of Wire Stranding

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#### BSR/UL 943, Standard for Safety for Ground-Fault Circuit- Interrupters

#### 1. Expansion of Auto-Monitoring and End of Life Requirements to All Types of GFCIs

5.15.5 When the reset is operated, a permanently connected ground-fault circuit-interrupter that has reached its end of life shall comply with Clause 6.26.

5.16.1 In addition to the Supervisory Circuit specified in 5.15, a permanently connected ground-fault circuit interrupter shall be provided with an auto-monitoring function that will allow the periodic, automatic testing of the ability of the device to reacted shall be done without aparts. periodic, automatic testing of the ability of the device to respond to a ground fault. This testing shall be done without opening the circuit interrupter contacts. Table 6.4 Representative device test program<sup>a</sup>

			Representative device number		
TestVisual inspectionHumidityLeakage currentBall impactDrop impactVoltage surgeHigh resistance ground faultOpen neutralMost adverseTrip thresholdTrip timesGrounded neutratFalse trippingOverload	Clause	Portable GFCI	Permanently connected GFCI		
Visual inspection	6.22	1 <sup>b</sup>	1 <sup>b</sup>		
Humidity	6.5.7	00	1		
Leakage current	6.5	1	1		
Ball impact	6.3.10	-	1 <sup>d</sup>		
Drop impact	635	1	-		
Voltage surge	6.6	1	1		
High resistance ground fault	6.7	1	1		
Open neutral	6.7.2.1(c)	1 <sup>b</sup>	-		
Most adverse	6.7.3.4	1 <sup>b</sup>	1 <sup>b</sup>		
Trip threshold	6.7	1	1		
Trip times	6.7	1	1		
Grounded neutra	6.7.4	1	1		
False trippin	6.8	1 <sup>b</sup>	1 <sup>b</sup>		
Dielectric	6.11	1	1		
Overload	6.12	2	2		
Low resistance ground fault	6.13	3	3		
Endurance	6.14	4	4		
Dielectric	6.11	4	4		
Abnormal	6.15	С	C		
Extra low resistance ground fault	6.18	5, 6	5, 6		
Short circuit	6.19	7	7		

Dielectric	6.11	5 - 7	5 - 7
Normal temperature	6.10	8	8
Immunity to conducted disturbances, induced by RF fields	6.9	9	9
Surge current	6.16	10 - 12	10 - 12
Abnormal overvoltage	6.17	13 - 17	13 - 17
Corrosion	6.21	18	$ \begin{array}{c} 13 - 17 \\ 18 \\ 19^{e} \\ 19^{b, e} \\ 20^{b} \\ 21 \\ \end{array} $
Reverse line-load miswire	6.23	-	19 <sup>e</sup>
Reverse line-load miswire — repeated	6.24	-	19 <sup>b, e</sup>
Supplemental voltage surge immunity	6.25	19 <sup>b</sup>	20 <sup>b</sup>
Operating mechanism	6.26	20	21
Permanently connectedGFCI end of life	6.27	<u>21</u>	2201
GFCI receptacle temperature	6.28	-	23 <sup>e</sup>
Auto-monitoring function	6.31	- with	24 - 30 <sup>c</sup>
Mechanical endurance	6.29		31 <sup>f</sup>
Spill	6.30	- 1101	32 - 37 <sup>f</sup>

<sup>a</sup> This table does not include construction requirements of enclosure tests. With the agreement of all concerned, fewer representative devices may be used, except where tests are required to be performed on a previously untested representative device.

<sup>b</sup> Separate representative devices may be used for these tests

<sup>c</sup> As many representative devices as necessary

<sup>d</sup> Receptacle type ground-fault circuit interrupters are subjected only to the drop impact test per 6.3.2

<sup>e</sup> Receptacle type ground-fault cocuit interrupters only

Countertop type retractable round-fault circuit interrupters only

6.27 Permanently connected GFCI end of life test

6.27.1 Gener

6.270.1 A permanently connected ground-fault circuit-interrupter that has reached its end of life shall meet the requirements of 5.15.5.

◆ 6.27.2 Permanently connected GFCI end of life simulation

#### 2. Addition of Requirements for Programmable Components

<u>3.13A **MICROELECTRONICS**</u> - Monolithic, hybrid, or module circuits, where the internal circuit connections are not accessible exclusive of provided external connection pins or pads. The circuits are capable of functioning in the analogue mode, digital mode, or a combination of the

two modes. Examples of microelectronics include: ASICs, ROMs, RAMs, PROMs, EPROMs, PALs, and PLDs. See 3.16A.

3.16A PROGRAMMABLE COMPONENT - Any microelectronic hardware that can be programmed in the design center, the factory, or in the field. Here the term "programmable" is taken to be "any manner in which one can alter the software wherein the behavior of the onfromul component can be altered". The microelectronics defined in 3.13A are examples of programmable components.

5.17 Programmable circuit components

5.17.1 If a programmable circuit component such as a microprocessor is employed in Providevice. that portion of the device shall be investigated in accordance with the requirements Annex A. Ref. No. 15 as defined in 5.17.2. Discrete components such as resistors, capacitors, and transistors, including simple integrated circuits that are not programmable such as logic gates and operational amplifiers, do not fall within the scope of the requirements of Annex A, Ref. No. 15.

5.17.2 The risks to be considered in the investigation mentioned in the investigation mention shall include the duction following scenarios as applicable:

- a) Unwanted tripping;
- Failure to trip under conditions where tripping should b)
- Tripping at the wrong trip threshold value c)
- d) Failure of supervisory circuit to complete evaluation:
- Failure of the end of life function e)
- **f**) Failure of the auto-monitoring function; and
- Failure of the line load miswire function. a)

## A1 Reference

A1.1 These Standards shall be considered to refer to the latest edition and all amendments published to that edition.

(Table abbreviated for ease of review)

Ref No.		UL	CSA	ANCE
14	Degrees of Protection Provided by Enclosures (IP Code)	Protection Provided by	C22.2 No. 60529 Degrees of Protection Provided by Enclosures (IP Code)	NMX-J- 529- ANCE

<u>15</u>	Programmable Components	UL 1998 Software in Programmable	C22.2 No. 0.8 Safety Functions Incorporating	<u>a</u>
		Components	Electronic Technology (Note: Software related requirements	
a To	address Maxias's as	rtification needs III and CC	only)	

# 3. Improving the Auto-Monitoring Function of Permanently Connected Ground-Fault from Circuit Interrupters permissio

#### 6.31 Auto-monitoring function tests

6.31.2 In order to determine compliance with the provisions of Clause 5.16, separate samples shall be modified to represent those single component failure modes that can cause the GFCI to become unable to respond to a ground fault per this standard. Welded sower contacts need not be considered. Except as noted in 6.31.3, each sample shall be altered with a single modification that represents either an open or a shorted component unless otherwise specified) as described in 6.31.2 (a) - (g) below.

Open circuit or short circuit the ground fault sensing component (transformer); a)

b) Alter the integrated circuit responsible for the ground fault detection by one of the following modifications selected by the manufacturer and agreeable to all parties concerned:

- Disconnect the power supply pin of the 1)
- 2) Disable the "clock" circuit;
- Open the signal path at the subject IC pin; 3)
- Short the signal path pioto one of the adjacent pins one at a time. 4)

Open circuit the current limiter (for example, dropping resistor) of the power supply of the c) ground fault detection n circuit.

.2(d)(1), o Open-circuit the trip solenoid. See 6.31.8. d)

Sircuit breaker types are excepted from 6.31.2(d).

ept as specified in 6.31.2(e)(1), o Open the switching semiconductor supplying the trip noid. See 6.31.8

GFCI circuit breaker types are excepted from 6.31.2(e).

f) Short circuit the switching semiconductor supplying the trip solenoid.

Open circuit or short circuit a single rectifier diode in the ground fault detection power **g**) supply circuit. Short circuit a single diode in the case of a bridge rectifier package.

#### BSR/UL 1581, Standard for Safety for Reference Standard for Electrical Wires, Cables, and Flexible Cords

#### PROPOSALS

For brevity, only the affected portion of Table 47.1 is shown.

Table 47.1           Index to insulation and jacket material	als
Material	Applicable table(s) or for paragraphs in this standard
PFA	"Inte
Insulation from Type PFA and PFAH wires, jacket from CATV cables, and insulation and jacket from other wires and cables	Table 50.137
300°C insulations and jackets	Table 50.138
	N. C.

(NEW TABLE)

Table 50.138 officition Physical properties of 300°C PFA<sup>a</sup> insulations and jackets

Condition of specimens at time of measurement	Minimum ultimate elongation [1-inch (25-mm) bench marks] <sup>b</sup>	Minimum tensile strength <sup>b</sup>
Unaged	325 percent	3500 lbf/in <sup>2</sup> (24.1 MPa)
Alle	[3.25 inches (53 mm)]	
Aged in a full-draft circulating-air oven for 30 days at 311 ±2.0°C (592 ±3.6°F)	120 percent of the result with unaged specimens	100 percent of the result with unaged specimens
<sup>a</sup> PFA designates a thermoplastic mat fluoropolymer resin perfluoroalkoxy. T amount of pigment lubricant or both is	he material is uncompounded f	
<sup>b</sup> PFA is to be tested at a speed of 20	<u>±1 in/min (500 ±25 mm/min).</u>	
opyright		

## BSR/UL 2034, Standard for Safety for Single and Multiple Station Carbon Monoxide Alarms

#### PROPOSALS

#### 1. Revisions to End-of-Life Test

40.1.6 The unitUnits powered by electrical (AC) mains, or primary and/or secondary battery power source shall indicate end-of-life, based on the manufacturer's specified lifetime, with an end-of-life signal (see 5.12). It is permitted for the audible component of the signal to be of the same format as a trouble signal, provided a visual indicator is employed to differentiate between the end-of-life and other trouble conditions. The end-of-life signal shall repeat once every 30 - 60 seconds ±10 percent. This signal shall be triggered either by an internal timer or by a self-diagnostic test(s).

a) For a unit that employs a signal generated by an internal timer, once maximum specified lifetime is reached the end-of-life signal shall be initiated. The timer can be reset repeatedly, for a period not exceeding 72 hours for each period of reset, if self-diagnostic test(s) indicate that the unit still meets the requirements of this standard. The timer shall not be able to be reset after 30 days following the initial end-of-life signal. The manufacturer shall provide detailed documentation of the timer operation that includes a description of how the timer data is affected by either short or long term removal of power to the alarm.

b) For a unit that employs a signal generated by a self-diagnostic test, once this test has determined the device no longer meets the requirements of this standard, the end-of-life signal shall be initiated.

c) If the sensor is automatically and periodically tested for response to CO (or an equivalent gas), then the unit's specified lifetime calculations can exclude the sensor component.

40.1.7 In addition to the requirements outlined in 40.1.6 (a), (b) and (c), two alarms employing a replaceable battery or batteries shall be subject to the following requirements in the following order:

a) The end-of-life signal on an alarm shall be reset only once, as based on the manufacturer's recommendations.

b) If powered by AC mains or DC mains (Recreational Vehicle and/or Marine Use) the primary power shall first be disconnected prior to removing and installing the replacement battery.

c) The installed battery (original) shall be replaced with a new battery.

d The new battery shall not be replaced within 15 minutes from removing the original battery. Manufacturer must provide detailed information that outlines the minimum amount of time needed to ensure that the residual power on the alarm has been depleted.

e) After replacing the battery, the timer for the end-of-life signal shall not reset and the timer must continue from the cumulated end-of-life time which the battery was removed. The timer shall not be able to be reset after 30 days from the original battery end-of-life signal.

f) 40.1.7 (a), (b) and (c) shall be re-conducted but with the battery replaced one day prior to the maximum end-of-life time period. A second alarm may be used for this requirement.

IIL COD

Infromul

40.1.8 In addition to the requirements outlined in 40.1.6 (a), for an alarm that employs a replaceable battery but does not employ an end-of-life timer reset, the tests specified in clauses 40.1.7 (b), (c), (d), (e) and (f) shall be conducted with the battery being replaced on the first day that the end-of-life signal is generated and the last day following the time period that the unit is not reset as defined in 40.1.6 (a).

#### 2. Section 6.5 Clarification

6.5 <u>The carbon monoxide sensor, or a sensing component supervision system, of a CO alarming device</u> shall be either be reliable as required by 6.6 or supervised as required by 6.7. <u>A sensor, or a sensing</u> component supervision system, of a CO alarming device shall be provided with the following:

a) Reliability data developed using the Military Standardization Handbook, MIL.217-F or equivalent demonstrating a predicted failure rate of not more than 2.5 failures per million hours operation (see 6.4) or

b) Supervision of the predicted failure modes other than for loss of electrical continuity.

Documentation of the failure modes resulting from aging for the sensor or the sensing components and identification of failure modes addressed by the supervision system shall be provided. The manufacturer shall submit a test method to render the CO sensor unresponsive to the CO concentrations given in Table 41.1 if the documentation submitted for the sensor or the sensing components indicates drift in the less sensitive direction. This method shall be used when conducting the Electrical Supervision Test, Section 40. All predicted failure modes shall result in a trouble signal.

<u>6.6 If the CO sensor is to be considered reliable, reliability data shall be developed using the Military</u> <u>Standardization Handbook, MIL.217-F or equivalent. The data must indicate a failure rate of not more</u> <u>than 2.5 failures per million hours of operation.</u>

<u>6.7 If the CO sensor is to be considered supervised, failure modes with a likelihood of more than 2.5 failures per million hours of operation, including, but not limited to shorts, opens, and uncompensated sensitivity drift outside of the limits of Table 39.1, must result in a trouble signal as required in Section 40.</u>

6.8 Documentation of the sensor failure modes shall be provided.

6.9 Documentation of the failure modes shall include a description of each failure mode and the circumstances under which it may occur.

6.10 The manufacturer shall submit a test method to render the CO sensor unresponsive to the CO concentrations given in Table 41.1 if the documentation submitted for the sensor or the sensing components indicates drift in the less sensitive direction. This method shall be used when conducting the Electrical Supervision Test, Section 40.

BSR/UL 2775, Standard for Safety for Fixed Condensed Aerosol Extinguishing System Units

### 1. Revisions to Aging Test

### PROPOSAL

55.2 The aging duration as a function of the aging temperature and useful life is given in the by the following formula.  $t = A \cdot e^{-k \cdot T}$ where:  $t = Aging duration in days; t \ge 25 days$   $T = Aging temperature in C; T \ge 70^{\circ}C$   $k = 0.1 \ln(2) \approx 0.069315$  A = Constant and is a function of the use t.t. it

$$t = A \cdot e^{-k \cdot 7}$$

A = Constant and is a function of the useful life as specified in Table 55.1.

	Useful life, years	Constant, A
10	Allo	40,895
15	at fur	59,325
20	.dfo	77,755
25	of the	96,175

### Table 55.1

Following are selected values based on the above equation.

Aging temperature,	as a function of	of useful life		
Т (С)	10 years	15 years	20 years	25 years
70 0 1	320	<u>464</u> -	<u>608</u> -	<u>752</u> -
75	<u>226</u> <del>225</del>	328	<u>430</u> -	<u>532</u> -
80 85	160	232	304	375
85	113	164	215	266
90	80	116	152	188
95	56	82	107	133
100	40	58	76	94
105	28	41	54	66

110 115	[a] [a]	29 [a]	38 27	47 33
[a] Aging durat days	ion for the indicated a	aging temperat	ure is less than p	ermitted; $t \ge 25$
	erial Not authorited	of further repr	otuctionwithout	ermitted; t ≥ 25