# ANSI STANDARDS ACTION

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## **American National Standards**

Call for comment on proposals listed

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

Ordering Instructions for "Call-for-Comment" Listings

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

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. Fax: 212-840-2298; e-mail: psa@ansi.org

\* Standard for consumer products

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## Comment Deadline: August 13, 2017

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

#### Addenda

BSR/ASHRAE Addendum 55h-201x, Thermal Environmental Conditions for Human Occupancy (addenda to ANSI/ASHRAE Standard 55-2013)

This proposed addendum adds a new method for the avoidance of the draft risk at the ankle region. Currently, the standard does not provide guidance to assess ankle draft. The new method applies to occupants with clothing insulation less than 0.7 clo and metabolic rate less than 1.3 met, complying with the entire Section 5.3.4, "Local Thermal Discomfort." The addendum was added using mandatory language in the body of the Standard. Informative Appendix I has been updated to take into account the new method.

#### 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-reviewdrafts

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

#### Addenda

BSR/ASHRAE Addendum c to BSR/ASHRAE Standard 34-201x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum adds the single component refrigerant R-1224yd(Z) in Table 4-1 and Table D-1.

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

Send comments (with copy to psa@ansi.org) to: https://osr.ashrae. org/default.aspx

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

#### Addenda

BSR/ASHRAE Addendum F to BSR/ASHRAE Standard 34-201x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum makes several changes with the intent to make 2L a separate classification of refrigerants.

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

Send comments (with copy to psa@ansi.org) to: https://osr.ashrae. org/default.aspx

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

#### Addenda

BSR/ASHRAE Addendum g to BSR/ASHRAE Standard 34-201x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2013)

This addendum makes several changes with the intent to make 2L a separate classification of refrigerants.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: https://osr.ashrae. org/default.aspx

#### RESNET (Residential Energy Services Network, Inc.) Addenda

## BSR/RESNET/ICC 301-201x Addendum G-201x, Solid State Lighting (addenda to ANSI/RESNET/ICC 301-2014)

The addendum adds a means of accounting for very high efficacy lighting, such as solid-state lighting, in the Standard ANSI/RESNET/ICC 301-2014 calculation of the Energy Rating Index.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Comments are submitted via RESNET's online comment form. See the links from webpage: http://www.resnet.us/blog/resnet-consensus-standards/

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

#### New National Adoption

BSR/UL 62841-2-9-201x, Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 2-9: Particular Requirements for Hand-Held Tappers and Threaders (identical national adoption of IEC 62841-2-9 and revision of ANSI/UL 62841-2-9-2016)

(1) Proposed revision to Table 4, Required Performance Levels, in Clause 18 and Clause K.18 to align with changes in IEC Corrigendum 1 of IEC 62841-2-9.

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

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

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

#### Revision

BSR/UL 66-201X, Standard for Safety for Fixture Wire (revision of ANSI/UL 66-2011 (R2016))

Mandrel Size, Revised 19.1.

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 558-201x, Standard for Safety for Industrial Trucks, Internal Combustion Engine-Powered (Proposal dated 07-14-2017) (revision of ANSI/UL 558-2016a)

This Recirculation proposal provides revisions to the UL 558 proposal dated 2017-01-20.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Wilbert Fletcher, Wilbert. fletcher@ul.com

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

#### Revision

BSR/UL 746A-201x, Standard for Safety for Polymeric Materials - Short Term Property Evaluations (revision of ANSI/UL 746A-2017)

This proposal covers a revision to the ISO Standard reference for the test located in Section 11 of UL 746A.

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

Send comments (with copy to psa@ansi.org) to: Derrick Martin, (510) 319 -4271, Derrick.L.Martin@ul.com

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

#### Revision

BSR/UL 778-201x, Standard for Safety for Motor-Operated Water Pumps (revision of ANSI/UL 778-2016)

(1) Proposal to add the option of grease type seals of parts not subject to flexing; (2) Proposal to clarify button or coin cell batteries of lithium technologies requirements.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

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

#### Revision

BSR/UL 924-201x, Standard for Safety for Emergency Lighting and Power Equipment (revision of ANSI/UL 924-2017)

The following is proposed: (1) Update emergency luminaires with flexible cord supply connections; (2) Restrict replacement of individual batteries and cells; (3) Exempt certain equipment from the Normal Operation Test extended ambient test conditions; and (4) Revise to use the battery discharge test using current measurement rather than light output.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Grace Roh, (919) 549 -1389, Grace.Roh@ul.com

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

#### Revision

BSR/UL 1081-201x, Standard for Safety for Swimming Pool Pumps, Filters, and Chlorinators (revision of ANSI/UL 1081-2017)

Proposal to clarify button or coin cell batteries of lithium technologies requirements.

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

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

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

#### Revision

BSR/UL 1261-201x, Standard for Safety for Electric Water Heaters for Pools and Tubs (revision of ANSI/UL 1261-2016a)

Proposal to clarify button or coin cell batteries of lithium technologies requirements.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

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

#### Revision

BSR/UL 1563-201x, Standard for Safety for Electric Spas, Equipment Assemblies, and Associated Equipment (revision of ANSI/UL 1563-2016) Proposal to clarify button or coin cell batteries of lithium technologies requirements.

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

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 1951-201x, Standard for Safety for Electric Plumbing Accessories (revision of ANSI/UL 1951-2016)

Proposal to clarify button or coin cell batteries of lithium technologies requirements.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664 -1292, megan.monsen@ul.com

### Comment Deadline: August 28, 2017

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

#### Revision

BSR/ASABE S279.18 MONYEAR-201x, Lighting and Marking of Agricultural Equipment on Highways (revision and redesignation of ANSI/ASAE S279.17 -2013)

This Standard provides specifications for lighting and marking of agricultural equipment whenever such equipment is operating or is traveling on a highway.

Single copy price: \$61.00

Obtain an electronic copy from: vangilder@asabe.org

Order from: Carla VanGilder, (269) 932-7015, vangilder@asabe.org

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

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

#### Withdrawal

ANSI/ASAE EP502-1992 (R2012), Adjusting Forage Harvester Test Data for Varying Crop Moisture (withdrawal of ANSI/ASAE EP502-1992 (R2012))

Provides empirical equations to adjust forage harvester feed rates and specific energy measurements to a common crop moisture level of 65% wet basis.

Single copy price: \$61.00

Obtain an electronic copy from: vangilder@asabe.org

Order from: Carla VanGilder, (269) 932-7015, vangilder@asabe.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ATIS 0600005-201x, Acoustic Measurement (revision of ANSI/ATIS 0600005-2006 (R2011))

Acoustic noise from telecom equipment adds to regulated environmental noise. This standard provides measurement methods for acoustic noise that are accurate and repeatable. Emission limits are set in units of sound power for equipment installed in temperature-controlled environments.

#### 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

#### ECIA (Electronic Components Industry Association)

#### New National Adoption

BSR/EIA 60050-192 Ed.1.0-201x, International electrotechnical vocabulary -Part 192: Dependability (identical national adoption of IEC 60050-192: 2015 Ed.1.0)

The IEV (IEC 60050 series) is a general purpose multilingual vocabulary covering the field of electrotechnology, electronics, and telecommunication (available at www.electropedia.org). It comprises about 20,000

terminological entries, each corresponding to a concept. These entries are distributed among about 80 parts, each part corresponding to a given field. Single copy price: \$378.00

Obtain an electronic copy from: https://global.ihs.com/

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

Send comments (with copy to psa@ansi.org) to: Ed Mikoski, emikoski@ecianow.org

#### ECIA (Electronic Components Industry Association)

#### New National Adoption

BSR/EIA 61703 Ed.2.0-201x, Mathematical expressions for realiability, availability, maintainability and maintenance support terms (identical national adoption of IEC 61703:2016)

This International Standard provides mathematical expressions for selected reliability, availability, maintainability and maintenance support measures defined in IEC 60050-192:2015. In addition, it introduces some terms not covered in IEC 60050-192:2015. They are related to aspects of the system of item classes (see the text of the standard). According to IEC 60050 -192:2015, dependability [192-01-22] is the ability of an item to perform as and when required, and an item [192-01-01] can be an individual part, component, device, functional unit, equipment, subsystem, or system.

Single copy price: \$375.00

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

Send comments (with copy to psa@ansi.org) to: Ed Mikoski, emikoski@ecianow.org

#### ECIA (Electronic Components Industry Association)

#### Reaffirmation

BSR/EIA 468-C-2008 (R201x), Lead Taping of Components in the Radial Configuration for Automatic Handling (reaffirmation of ANSI/EIA 468-C-2008 (R2013))

This standard was formulated to provide dimensions and tolerances necessary to lead tape components in the radial format (unidirectional leads) such that they may be automatically handled. Automatic handling includes insertion, preforming, and other operations. The emphasis of this standard is on the requirements for high-speed automatic insertion. This standard covers the lead taping requirements for components having two or more radial configured leads, provided these components may be taped in accordance with the requirements of this document.

Single copy price: \$78.00

Obtain an electronic copy from: https://global.ihs.com/

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

Send comments (with copy to psa@ansi.org) to: Ed Mikoski, emikoski@ecianow.org

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

#### Revision

BSR/ASSE 1062-201x, Performance Requirements for Temperature Actuated, Flow Reduction (TAFR) Valves for Individual Supply Fittings (revision of ANSI/ASSE 1062-2006)

These valves are intended for use in-line with or integrated into individual plumbing supply fittings such as shower heads, bath and utility faucets, and sink and lavatory faucets. These devices shall automatically reduce flow in response to outlet temperatures greater than 120.0°F (48.9°C) so as to limit exposure to high temperature water discharged from an individual supply fitting.

Single copy price: Free

Obtain an electronic copy from: staffengineer@asse-plumbing.org

Order from: Conrad Jahrling, (708) 995-3017, conrad.jahrling@asseplumbing.org

Send comments (with copy to psa@ansi.org) to: Same (When sending comments, please write "PR1062" in the message subject.)

#### **IES (Illuminating Engineering Society)**

#### Addenda

BSR/IES RP-1-2013 Addendum A-201x, Recommended Practice for Office Lighting (addenda to ANSI/IES RP-1-2013)

Revision to Sections 3.5.1.2 Color Rendering Index, 4.2.1.1.3 TM-30-15, 4.2.1.2.1 Flicker, 4.2.1.2.2 Dim level, Table 2, Section 4.2.2.2 Linear Fluorescent.

Single copy price: \$25.00

Obtain an electronic copy from: pmcgillicuddy@ies.org

Order from: Patricia McGillicuddy, (212) 248-5000, pmcgillicuddy@ies.org

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

#### IES (Illuminating Engineering Society)

#### New Standard

BSR/IES RP-38-201x, A Lighting Standard for Videoconferencing (new standard)

This Standard provides lighting parameters and performance criteria for small- to medium-sized single-axis videoconferencing spaces (with 3 to 25 primary seating locations), defined as one set of video displays and cameras oriented toward a group of seated participants. The Standard provides guidance to professionals involved in the design, construction, assessment, and support of videoconferencing environments by establishing performance criteria for the design and testing of room lighting and finishes that will provide appropriate picture quality.

#### Single copy price: \$25.00

Obtain an electronic copy from: pmcgillicuddy@ies.org

Order from: Patricia McGillicuddy, (212) 248-5000, pmcgillicuddy@ies.org Send comments (with copy to psa@ansi.org) to: Same

#### **IES (Illuminating Engineering Society)**

#### New Standard

BSR/IES TM-23-201x, Lighting Control Protocols (new standard)

The purpose of this Technical Memorandum is to address the need for increased knowledge of, and unbiased information about, the capabilities and shortcomings of control and interoperability technologies - primarily open protocols - available for use in lighting systems. More knowledge within the lighting community will encourage coordination between the various disciplines that create smarter, more comfortable, and more energy efficient buildings.

Single copy price: \$25.00

Obtain an electronic copy from: pmcgillicuddy@ies.org

Order from: Patricia McGillicuddy, (212) 248-5000, pmcgillicuddy@ies.org Send comments (with copy to psa@ansi.org) to: Same

#### **NECA (National Electrical Contractors Association)**

#### New Standard

BSR/NECA 781-201X, Recommended Practice for Installing and Maintaining Lightning Protection Systems (new standard)

This standard covers quality and performance criteria and best practices for lightning protection system design and installation for both new construction and existing structures. The basic components of lighting protection systems are covered as well as basic information related to lightning protection system design and system maintenance.

Single copy price: \$40.00

Obtain an electronic copy from: neis@necanet.org

Order from: neis@necanet.org

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

#### NECA (National Electrical Contractors Association)

#### Revision

BSR/NECA 305-201X, Standard for Fire Alarm System Job Practices (revision of ANSI/NECA 305-2010)

This standard describes practices for installing, testing, and maintaining fire alarm systems. These job practices represent a minimum level of quality for fire alarm system installations.

Single copy price: \$40.00

Obtain an electronic copy from: neis@necanet.org

Order from: neis@necanet.org

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

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

#### Withdrawal

BSR/NSF 36 (i7r1), Dinnerware (withdrawal of ANSI/NSF 36-2012 (i6), ANSI/NSF 36-2009 (i5), ANSI/NSF 36-2007 (i4))

This Standard contains requirements for dinnerware intended for use in food establishments. The requirements in this standard are applicable to plates, bowls, saucers, cups, tumblers, compartmentalized trays, dinnerware covers, and similar items, regardless of size or configuration, from which food is consumed or served.

Single copy price: \$TBD

Order from: Allan Rose, (734) 827-3817, arose@nsf.org

Send comments (with copy to psa@ansi.org) to: Allan Rose, (734) 827 -3817, arose@nsf.org

### OPEI (Outdoor Power Equipment Institute)

#### New Standard

BSR/OPEI B175.6-201x, Standard for Outdoor Power Equipment - Internal Combustion Engine-Powered Hand-Held Hedge Trimmers - Safety and Environmental Requirements (new standard)

The purpose of this standard is to establish safety and environmental requirements for internal combustion engine-powered, hand-held, hedge trimmers. The requirements of this standard apply to: (a) Internal combustion engine - powered, hand-held, hedge trimmers; (b) Internal combustion engine - powered, hand-held, extended-reach hedge trimmers; and (c) Internal combustion engine - powered, hand-held, multi-purpose machines when configured as a hedge trimmer.

Single copy price: \$180.00

Obtain an electronic copy from: gknott@opei.org

Order from: Greg Knott, (703) 549-7600, gknott@opei.org

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

### SPRI (Single Ply Roofing Institute)

#### Reaffirmation

BSR/SPRI/RCI NT-1-2012 (R201x), Detection and Location of Latent Moisture in Building Roofing Systems by Nuclear Radioisotopic Thermalization (reaffirmation of ANSI/SPRI/RCI NT-1 2012)

Radioisotopic thermalization can effectively be used in the roofing industry to: locate and quantify latent moisture contained in the roofing material and/or roof deck materials; locate hidden sources of moisture entry by tracing subsurface paths of moisture migration, and to provide a basis for measuring roofing material and/or roof deck material degradation over a period of years when used as part of a preventive maintenance program. This standard shall apply to all roofing moisture surveys conducted using nuclear moisture gauges. It shall address:

- the effect of roof construction, material differences and roof conditions on the performance of the nuclear gauge;

- limitations in the use of radioisotopic inspection;

- the governmental control of the equipment used to conduct nuclear moisture surveys; and

- operating procedures, operator qualifications, verification, and reporting procedures.

Single copy price: \$5.00

Obtain an electronic copy from: info@spri.org

Order from: Linda King, info@spri.org

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

#### TIA (Telecommunications Industry Association)

#### Revision

BSR/TIA 568.2-D-201x, Balanced Twisted-Pair Telecommunications Cabling and Components Standard (revision and redesignation of ANSI/TIA 568-C.2 -2009)

This Standard will supersede ANSI/TIA 568-C.2 and its addenda C.2-1 and C.2-2. It is intended to incorporate and revise as necessary the content of those Standards.

Single copy price: \$377.00

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.)

#### Revision

BSR/UL 486D-201x, Standard for Safety for Sealed Wire Connector Systems (revision of ANSI/UL 486D-2015)

(1) Sealed wire connector systems rated 601 - 1500 V; (2) Standard scope clarification; (3) Sunlight resistance / salt water immersion.

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: Mitchell Gold, (847) 664 -2850, Mitchell.Gold@ul.com

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

#### Revision

BSR/UL 588-201X, Standard for Safety for Seasonal and Holiday Decorative Products (revision of ANSI/UL 588-2015a)

This covers: (a) Overcurrent protection for products without a load fitting; (b) Revision to requirements for flexible cord with a decorative covering; and (c) String lights for all-year use.

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: Megan Sepper, (847) 664 -3411, Megan.M.Sepper@ul.com

### Comment Deadline: September 12, 2017

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

BSR/ASME A17.6-201x, Standard for Elevator Suspension, Compensation and Governor Systems (revision of ANSI/ASME A17.6-2010)

This Standard covers the means and members of suspension, compensation, and governor systems for elevators within the scope of ASME A17.1/CSA B44. This Standard includes the material properties, design, testing, inspection, and replacement criteria for these means. It includes the requirements for steel wire rope, aramid fiber rope, and noncircular elastomeric coated steel suspension members, and provides direction for future constructions as new technology develops.

Single copy price: Free

Order from: Mayra Santiago, ASME; ansibox@asme.org

Send comments (with copy to psa@ansi.org) to: Nicole Gomez, (212) 591 -8720, ansibox@asme.org

#### IEEE (Institute of Electrical and Electronics Engineers) New Standard

BSR/IEEE 430-201x, Standard Procedures for the Measurement of Radio Noise from Overhead Power Lines and Substations (new standard)

This standard establishes uniform procedures for the measurement of radio noise generated by corona from overhead power lines and substations. Measurement procedures in this standard are also valid for other power-line noise sources such as gaps and harmonics; however, most of the precautionary information, analysis, and data plotting techniques were written and developed primarily for corona discharges. The procedures are not valid for measuring transient radio noise sources that occur during breaker or disconnect switching operations.

Single copy price: \$58.00 (pdf); \$73.00 (print)

Order from: online: http://standards.ieee.org/store

Send comments (with copy to psa@ansi.org) to: Karen Evangelista, (732) 562-3854, k.evangelista@ieee.org

#### IEEE (Institute of Electrical and Electronics Engineers)

#### New Standard

BSR/IEEE 1591.2-201x, Standard for Testing and Performance of Hardware for All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable (new standard)

This standard covers the construction, mechanical and electrical performance, test requirements, environmental considerations, and acceptance criteria for qualifying hardware for use with all-dielectric self-supporting (ADSS) fiber optic cable.

Single copy price: \$74.00 (pdf)

Order from: online: http://standards.ieee.org/store

Send comments (with copy to psa@ansi.org) to: Karen Evangelista, (732) 562-3854, k.evangelista@ieee.org

#### IEEE (Institute of Electrical and Electronics Engineers) New Standard

BSR/IEEE 1829-201x, Guide for Conducting Corona Tests on Hardware for Overhead Transmission Lines and Substations (new standard)

This guide establishes uniform procedures for the testing of transmission line and station bus hardware in high-voltage laboratories. Two tests are described. The first one is a corona performance test. The second is a radio interference voltage (RIV) test. The first test uses visible techniques to determine the onset of positive corona. The second test is a measurement of the RIV voltage according to ANSI C63.2 or CISPR 16-1-1 and CISPR 18-2.

Single copy price: \$58.00 (pdf); \$73.00 (print)

Order from: online: http://standards.ieee.org/store

Send comments (with copy to psa@ansi.org) to: Karen Evangelista, (732) 562-3854, k.evangelista@ieee.org

#### IEEE (Institute of Electrical and Electronics Engineers)

#### New Standard

BSR/IEEE 1887-201x, Guide for Wayside Energy Storage Systems for DC Traction Applications (new standard)

This guide is intended to be a performance-based guide to assist engineers involved in the design, specification, and technical evaluation of traction wayside energy storage systems.

Single copy price: \$58.00 (pdf); \$73.00 (print)

Order from: online: http://standards.ieee.org/store

Send comments (with copy to psa@ansi.org) to: Karen Evangelista, (732) 562-3854, k.evangelista@ieee.org

#### **IEEE (Institute of Electrical and Electronics Engineers)**

#### New Standard

BSR/IEEE 1899-201x, Guide for Establishing Basic Requirements for High-Voltage Direct-Current Transmission Protection and Control Equipment (new standard)

This guide specifies the basic norms for protection and control equipment of High-Voltage Direct Current (HVDC) transmission systems that have the voltage range up to and including 800kV. It also defines and specifies requirements for control and protection equipment used in the design, manufacturing, research and testing of HVDC control and protection equipment.

Single copy price: \$60.00 (pdf)

Order from: online: http://standards.ieee.org/store

Send comments (with copy to psa@ansi.org) to: Karen Evangelista, (732) 562-3854, k.evangelista@ieee.org

### IEEE (Institute of Electrical and Electronics Engineers)

#### New Standard

BSR/IEEE 2402-201x, Standard Design Criteria of Complex Virtual Instruments for Ocean Observation (new standard)

This standard defines the framework of building distributed ocean observing software systems based on complex virtual instruments (CVIs) which are used for processing and displaying the collected data from ocean instruments and the related metadata. This framework provides the guidelines for CVI-based development process, in which CVI structure design covers management of observed data and metadata,virtual instrument engine based on geospatial information and service interfaces for CVI interactions; CVI mapping schemes describe the correspondence from observed objects to CVIs; CVI relations define the relationships between CVIs and describe the methods of extending and compositing multiple CVIs.

Single copy price: \$74.00 (pdf); \$93.00 (print)

Order from: online: http://standards.ieee.org/store

Send comments (with copy to psa@ansi.org) to: Karen Evangelista, (732) 562-3854, k.evangelista@ieee.org

## **Technical Reports Registered with ANSI**

Technical Reports Registered with ANSI are not consensus documents. Rather, all material contained in Technical Reports Registered with ANSI is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject.

Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to the PSA Center, American National Standards Institute, 25 West 43rd Street, New York, NY 10036 or E-Mail to psa@ansi.org.

#### **ARMA (ARMA International)**

ARMA International TR 30-2017, Implementing the Generally Accepted Recordkeeping Principles® (Technical Report) (technical report)

This technical report is an informative publication to aid users in the understanding and implementation of the ARMA International Generally Accepted Recordkeeping Principles®. The Principles' applicability is not limited to a specific situation, industry, country, or organization, nor are they intended to set forth legal rules requiring strict adherence by every organization in every circumstance.

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

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.

#### ACCA (Air Conditioning Contractors of America)

Office:	2800 Shirlington Road
	Suite 300
	Arlington, VA 22206
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*Contact: Danny Halel* **Phone:** (703) 824-8868

- E-mail: danny.halel@acca.org
- BSR/ACCA 10 Manual SPS-2010 (R201x), HVAC Design for Swimming Pools and Spas (reaffirmation of ANSI/ACCA 10 Manual SPS-2010)

#### AIAA (American Institute of Aeronautics and Astronautics)

- Office: 12700 Sunrise Valley Drive, Suite 200 Reston, VA 20191-5807
- Contact: Hillary Woehrle
- **Phone:** (703) 264-7546
- E-mail: hillaryw@aiaa.org
- BSR/AIAA G-043A-201x, Guide for the Preparation of Operational Concept Documents (revision of ANSI/AIAA G-043A-2012)
- BSR/AIAA S-102.1.4-201x, Performance-Based Failure Reporting, Analysis & Corrective Action Systems (FRACAS) Requirements (revision of ANSI/AIAA S-102.1.4-2008)
- BSR/AIAA S-102.1.5-201x, Performance Based Failure Board Requirements (revision of ANSI/AIAA S-102.1.5-2008)
- BSR/AIAA S-102.2.2-201x, System Reliability Modeling Requirements (revision of ANSI/AIAA S-102.2.2-2008)
- BSR/AIAA S-102.2.11-201x, Anomaly, Detection, and Response Analysis (revision of ANSI/AIAA S-102.2.11-2008)
- BSR/AIAA S-102.2.18-201x, Performance-Based Fault Tree Analysis Requirements (revision of ANSI/AIAA S-102.2.18-2008)

#### ASA (ASC S12) (Acoustical Society of America)

- Office: 1305 Walt Whitman Rd Suite 300 Melville, NY 11747
- Contact: Neil Stremmel
- Phone: (631) 390-0215
- **Fax:** (631) 923-2875
- E-mail: nstremmel@acousticalsociety.org
- BSR ASA S12.55-2012, ISO 3745:2012 (R201x), Acoustics -Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for anechoic rooms and hemi-anechoic rooms (a nationally adopted international standard) (reaffirmation of ANSI ASA S12.55-2012, ISO 3745:2012)

- BSR ASA S12.55 Amd.1-201x/ISO 3745-201x Amd.1-201x, Acoustics -Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for anechoic rooms and hemi-anechoic rooms - Amendment 1 (a nationally adopted international standard amendment) (identical national adoption of ISO 3745 Amd.1:2017)
- BSR ASA S12.58-2012 (R201x), Sound Power Level Determination for Sources Using a Single-Source Position (reaffirmation of ANSI ASA S12.58-2012)

#### ASA (ASC S2) (Acoustical Society of America)

Office:	1305 Walt Whitman Road Suite 300 Melville, NY 11747
Contact:	Neil Stremmel

- Phone: (631) 390-0215
- Fax: (631) 923-2875
- E-mail: nstremmel@acousticalsociety.org
- BSR ASA S2.21-1998 (R201x), Method for Preparation of a Standard Material for Dynamic Mechanical Measurements (reaffirmation of ANSI ASA S2.21-1998 (R2012))
- BSR ASA S2.22-1998 (R201x), Resonance Method for Measuring the Dynamic Mechanical Properties of Viscoelastic Materials (reaffirmation of ANSI ASA S2.22-1998 (R2012))
- BSR ASA S2.23-1998 (R201x), Single Cantilever Beam Method for Measuring the Dynamic Mechanical Properties of Viscoelastic Materials (reaffirmation of ANSI ASA S2.23-1998 (R2012))

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

Office:	Two Park Avenue
	New York, NY 10016
Contact:	Mayra Santiago
Phone:	(212) 591-8521
Fax:	(212) 591-8501
E-mail:	ansibox@asme.org

BSR/ASME MUS-1-201x, Application of Mobile Unmanned Systems (MUS) for inspections, monitoring, and maintenance of industrial facilities and power plants as well as equipment, transmission lines, and pipelines (new standard)

## BIFMA (Business and Institutional Furniture Manufacturers Association)

Office: 678 Front Ave. NW Grand Rapids, MI 49504

Contact: David Panning

Phone: (616) 980-9798

Fax: (616) 285-3765

E-mail: dpanning@bifma.org

BSR/BIFMA ISO 24496-201X, Office furniture - Office chairs - Methods for the determination of dimensions (identical national adoption of ISO 24496:2017)

#### **CTA (Consumer Technology Association)**

Office:	1919 South Eads Street Arlington, VA 22202
Contact:	Veronica Lancaster
Phone:	(703) 907-7697
Fax:	(703) 907-4197

E-mail: vlancaster@cta.tech

BSR/CTA 2041-A-201x, Standard for Round Tactile Feedback Feature (revision and redesignation of ANSI/CTA 2041-2012)

#### ECIA (Electronic Components Industry Association)

Office:	2214 Rock Hill Road	
	Suite 265	
	Herndon, VA 20170-4212	
Contact:	Laura Donohoe	
Phone:	(571) 323-0294	
Fax:	(571) 323-0245	

E-mail: Idonohoe@ecianow.org

- BSR/EIA 60384-18 Ed.3-201x, Fixed capacitors for use in electronic equipment Part 18: Sectional specification Fixed aluminium electrolytic surface mount capacitors with solid (MnO2) and non-solid electrolyte (identical national adoption of IEC 60384-18:2016 and revision of ANSI/EIA 60384-18-2014)
- BSR/EIA 60384-19 Ed.3-201x, Fixed capacitors for use in electronic equipment Part 19: Sectional specification: Fixed metallized polyethylene-terephthalate film dielectric surface mount d.c. capacitors (identical national adoption of IEC 60384-19:2015 and revision of ANSI/EIA 60384-19-2014)
- BSR/EIA 60384-1 Ed.5-201x, Fixed capacitors for use in electronic equipment Part 1: Generic specification (identical national adoption of IEC 60384-1:2016 and revision of ANSI/EIA 60384-1-2014)
- BSR/EIA 60384-23 Ed.2-201x, Fixed capacitors for use in electronic equipment Part 23: Sectional specification Fixed metallized polyethylene naphthalate film dielectric surface mount d.c. capacitors (identical national adoption of IEC 60384-23:2015 and revision of ANSI/EIA 60384-23-2014)

BSR/EIA 60384-4 Ed.5-201x, Fixed capacitors for use in electronic equipment - Part 4: Sectional specification - Fixed aluminium electrolytic capacitors with solid (MnO2) and non-solid electrolyte (identical national adoption of IEC 60384-4:2016 and revision of ANSI/EIA 60384-4-2014)

- BSR/EIA 60384-8 Ed.4-201x, Fixed capacitors for use in electronic equipment Part 8: Sectional specification: Fixed capacitors of ceramic dielectric, Class 1 (identical national adoption of IEC 60384 -8:2015 and revision of ANSI/EIA 60384-8-2014)
- BSR/EIA 60384-9 Ed.4-201x, Fixed capacitors for use in electronic equipment Part 9: Sectional specification: Fixed capacitors of ceramic dielectric, Class 2 (identical national adoption of IEC 60384 -9:2015 and revision of ANSI/EIA 60384-9-2015)

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

- Office: 1101 K Street NW Suite 610 Washington, DC 20005-3922
- Contact: Deborah Spittle
- Phone: (202) 626-5737
- Fax: (202) 638-4922
- E-mail: comments@itic.org
- INCITS/ISO/IEC 9075-1:2011 [201x], Information technology Database languages - SQL - Part 1: Framework (SQL/Framework) (identical national adoption of ISO/IEC 9075-1:2016 and revision of INCITS/ISO/IEC 9075-1:2011 [2012] and INCITS/ISO/IEC 9075 -1:2011/Cor 1:2013 [2014])
- INCITS/ISO/IEC 9075-2:2016 [201x], Information technology Database languages - SQL - Part 2: Foundation (SQL/Foundation) (identical national adoption of ISO/IEC 9075-2:2016 and revision of INCITS/ISO/IEC 9075-2:2011 [2012])
- INCITS/ISO/IEC 9075-4:2016 [201x], Information technology Database languages - SQL - Part 4: Persistent stored modules (SQL/PSM) (identical national adoption of ISO/IEC 9075-4:2016] and revision of INCITS/ISO/IEC 9075-4:2011 [2012])
- INCITS/ISO/IEC 9075-9:2016 [201x], Information technology Database languages - SQL - Part 9: Management of External Data (SQL/MED) (identical national adoption of ISO/IEC 9075-9:2016 and revision of INCITS/ISO/IEC 9075-9:2008 [R2013])
- INCITS/ISO/IEC 9075-10:2016 [201x], Information technology -Database languages - SQL - Part 10: Object language bindings (SQL/OLB) (identical national adoption of ISO/IEC 9075-10:2016 and revision of INCITS/ISO/IEC 9075-10:2008 [R2013] and INCITS/ISO/IEC 9075-10-2008/Cor 1-2012)
- INCITS/ISO/IEC 9075-11:2016 [201x], Information technology -Database languages - SQL - Part 11: Information and definition schemas (SQL/Schemata) (identical national adoption of ISO/IEC 9075-11:2016 and revision of INCITS/ISO/IEC 9075-11:2011 [2012])
- INCITS/ISO/IEC 9075-13:2016 [201x], Information technology -Database languages - SQL - Part 13: SQL Routines and types using the Java TM programming language (SQL/JRT) (identical national adoption of ISO/IEC 9075-13:2016 and revision of INCITS/ISO/IEC 9075-13:2008 [R2013])
- INCITS/ISO/IEC 9075-14:2016 [201x], Information technology -Database languages - SQL - Part 14: XML-Related Specifications (SQL/XML) (identical national adoption of ISO/IEC 9075-14:2016 and revision of INCITS/ISO 9075-14:2011 [2012] and INCITS/ISO/IEC 9075-14:2011/Cor 1:2013[2014])
- INCITS/ISO/IEC 10373-5:2014 [201x], Identification cards Test methods - Part 5: Optical memory cards (identical national adoption of ISO/IEC 10373-5:2014 and revision of INCITS/ISO/IEC 10373-5:2006 [R2012])

- INCITS/ISO/IEC 13249-1:2016 [201x], Information technology -Database languages - SQL multimedia and application packages -Part 1: Framework (identical national adoption of ISO/IEC 13249 -1:2016 and revision of INCITS/ISO/IEC 13249-1:2007 [R2012])
- INCITS/ISO/IEC 13249-3:2016 [201x], Information technology -Database languages - SQL multimedia and application packages -Part 3: Spatial (identical national adoption of ISO/IEC 13249-3:2016 and revision of INCITS/ISO/IEC 13249-3:2011 [2012])
- INCITS/ISO/IEC 18033-1:2015 [201x], Information technology Security techniques Encryption algorithms Part 1: General (identical national adoption of ISO/IEC 18033-1:2015 and revision of INCITS/ISO/IEC 18033-1:2005 [R2014] and INCITS/ISO/IEC 18033 1:2005/AM 1:2011 [2012])
- INCITS/ISO/IEC 19763-1:2015 [201x], Information technology -Metamodel framework for interoperability (MFI) - Part 1: Framework (identical national adoption of ISO/IEC 19763-1:2015 and revision of INCITS/ISO/IEC 19763-1:2007 [R2012])
- INCITS/ISO/IEC 19776-1:2015 [201x], Information technology -Computer graphics, image processing and environmental data representation - Extensible 3D (X3D) encodings - Part 1: Extensible Markup Language (XML) encoding (identical national adoption of ISO/IEC 19776-1:2015 and revision of INCITS/ISO/IEC 19776-1:2009 [2012])
- INCITS/ISO/IEC 19776-3:2015 [201x], Information technology -Computer graphics, image processing and environmental data representation - Extensible 3D (X3D) encodings - Part 3: Compressed binary encoding (identical national adoption of ISO/IEC 19776-3:2015 and revision of INCITS/ISO/IEC 19776-3:2011 [2012])
- INCITS/ISO/IEC 27033-1:2015 [201x], Information technology Security techniques Network security Part 1: Overview and concepts (identical national adoption of ISO/IEC 27033-1:2015 and revision of INCITS/ISO/IEC 27033-1:2009 [2012])
- INCITS/ISO/IEC 10646:2014 [201x], Information technology Universal Coded Character Set (UCS) (identical national adoption of ISO/IEC 10646:2014 and revision of INCITS/ISO/IEC 10646:2012 [2012] and INCITS/ISO/IEC 10646:2012/Amd 1:2013)
- INCITS/ISO/IEC 14651:2016 [201x], Information technology -International string ordering and comparison - Method for comparing character strings and description of the common template tailorable ordering (identical national adoption of ISO/IEC 14651:2016 and revision of INCITS/ISO/IEC 14651:2011 [2012] and INCITS/ISO/IEC 14651:2011/Amd 1:2013)
- INCITS/ISO/IEC 24790:2017 [201x], Information technology Office equipment - Measurement of image quality attributes for hardcopy output - Monochrome text and graphic images (identical national adoption of ISO/IEC 24790:2017 and revision of INCITS/ISO/IEC 13660:2001 [R2012])
- INCITS/ISO/IEC 27003:2017 [201x], Information technology Security techniques Information security management systems Guidance (identical national adoption of ISO/IEC 27003:2017 and revision of INCITS/ISO/IEC 27003:2010 [2012])
- INCITS/ISO/IEC 27006:2015 [201x], Information technology Security techniques Requirements for bodies providing audit and certification of information security management systems (identical national adoption of ISO/IEC 27006:2015 and revision of INCITS/ISO/IEC 27006:2011 [2012])

#### NECA (National Electrical Contractors Association)

Office:	3 Bethesda Metro Center	
	Suite 1100	
	Bethesda, MD 20814	
Contact:	Agnieszka Golriz	
Phone:	(301) 215-4549	

E-mail: Aga.golriz@necanet.org

BSR/NECA 305-201X, Standard for Fire Alarm System Job Practices (revision of ANSI/NECA 305-2010)

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

Office: 1300 North 17th Street Suite 900 Rosslyn, VA 22209 Contact: Karen Willis

Comaci.	
Phone:	(703) 841-3277

- **Fax:** (703) 841-3378
- E-mail: Karen.Willis@nema.org
- BSR C136.2-201x, Standard for Roadway and Area Lighting Equipment - Dielectric Withstand and Electrical Transient Immunity Requirements (revision of ANSI C136.2-2015)
- BSR C136.20-201x, Standard for Roadway and Area Lighting Equipment - Fiber-Reinforced Composite (FRC) Lighting Poles (revision of ANSI C136.20-2012)

#### NEMA (ASC C137) (National Electrical Manufacturers Association)

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

Contact: Karen Willis

Phone: (703) 841-3277

E-mail: Karen.willis@nema.org

BSR C137.0-201x, Standard for Lighting Systems Terms and Definitions (new standard)

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

Office:	789 N. Dixboro Road Ann Arbor, MI 48105-9723
Contact:	Allan Rose
Phono:	(734) 827-3817

Phone:	(134) 021-3011
Fax:	(734) 827-7875
E-mail:	arose@nsf.org

- BSR/NSF 29-201x (i5r2), Detergent and Chemical Feeders for Commercial Spray-Type Disbwashing Machines (revision of
- Commercial Spray-Type Dishwashing Machines (revision of ANSI/NSF 29-2012)
- BSR/NSF 61-201x (i137r1), Drinking Water System Components -Health Effects (revision of ANSI/NSF 61-2016)
- BSR/NSF 62-201x (i33r1), Drinking Water Distillation Systems (revision of ANSI/NSF 62-2016)
- BSR/NSF 173-201x (i64r2), Dietary Supplements (revision of ANSI/NSF 173-2016)
- BSR/NSF 350-201x (i18r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2017)

BSR/NSF 350-201x (i19r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2017)

BSR/NSF 350-201x (i20r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2017)

BSR/NSF 350-201x (i21r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2017)

BSR/NSF 350-201x (i22r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2017)

#### TIA (Telecommunications Industry Association)

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

Contact: Teesha Jenkins

Phone: (703) 907-7706

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

BSR/TIA 102.AABB-C-201x, Project 25 - Trunking Control Channel

Formats - Digital Radio Technical Standards (new standard)

BSR/TIA 102.AABC-D-2-201x, Trunking Control Channel Messages -Addendum 2: Vehicle Sensed Emergency (addenda to ANSI/TIA 102. AABC-D-1-2016)

BSR/TIA 222-H-201x, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures (revision and redesignation of ANSI/TIA 222-G-2005)

BSR/TIA 455-95-B-201x, Absolute Optical Power Test for Optical Fibers and Cables (new standard)

BSR/TIA 568.1-D-1-201x, Commercial Building Telecommunications Infrastructure Standard, Addendum 1: Updated References, Accommodation of New Media Types (addenda to ANSI/TIA 568.1-D -2015)

BSR/TIA 568-D.3-1-201x, Optical Fiber Cabling Component Standard -Addendum 1: General Updates (addenda to ANSI/TIA 568-D.3-2016)

BSR/TIA 598-D-2-201x, Optical Fiber Cable Color Coding - Addendum 2, Jacket Color for Wideband Laser-Optimized 50/125 micormeter Multimode Fiber Cables (OM5) (addenda to ANSI/TIA 598-D-2014)

BSR/TIA 862-B-1-201x, Structured Cabling Infrastructure Standard for Intelligent Building Systems, Addendum 1: Updated References, Accommodation of New Media Types (addenda to ANSI/TIA 862-B -2016)

BSR/TIA 4966-1-201x, Telecommunications Infrastructure Standard for Educational Facilities, Addendum 1: Updated References, Accommodation of New Media Types (addenda to ANSI/TIA 4966 -2014)

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

Office: 333 Pfingsten Road Northbrook, IL 60062

Contact: Megan Monsen

Phone: (847) 664-1292

- E-mail: megan.monsen@ul.com
- BSR/UL 778-201x, Standard for Safety for Motor-Operated Water Pumps (revision of ANSI/UL 778-2016)

### **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.

## **ASTM International Committee F33 on Detention and Correctional Facilities**

ASTM International Committee F33 on Detention and Correctional Facilities (https://www.astm.org/COMMITTEE/F33.htm) is welcoming new members (in all interest groups) interested in contributing to the development of standards on:

- Test Method for Physical Assault on Lighting Fixtures for Detention and Correctional Facilities
- Test Methods for Woven Rod Doors and Barriers Used in Detention and Correctional Facilities
- · Guide for Selection of Security Control Systems

If you are interested in joining Committee F33, please contact ASTM Staff Manager Joe Hugo at jhugo@astm.org, or visit the Membership area of the ASTM website (https://www.astm.org/MEMBERSHIP/index.html).

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

Office: 12 Laboratory Drive Research Triangle Park, NC 27709 Contact: Ross Wilson Phone: 919-549-1511 E-mail: ross.wilson@ul.com

Standards Technical Panel for Drinking-Water Coolers (STP 399) Covers UL 399, Drinking Water Coolers

## **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/IEC 60601-2-2-2017, Medical electrical equipment - Part 2 -2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories (identical national adoption of IEC 60601-2-2 and revision of ANSI/AAMI/IEC 60601-2-2-2009 (R2014)): 6/30/2017

#### ABYC (American Boat and Yacht Council)

#### Revision

\* ANSI/ABYC H-24-2017, Gasoline Fuel Systems (revision of ANSI/ABYC H-24-2012): 6/30/2017

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

\* ANSI/ASHRAE Standard 103-2017, Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers (revision of ANSI/ASHRAE Standard 103-2007): 7/3/2017

#### ASQ (ASC Z1) (American Society for Quality)

#### New National Adoption

ANSI/ASQ/ISO/TS 9002:2016, Quality management systems -Guidelines for the application of ISO 9001:2015 (identical national adoption of ISO/TS 9002:2016): 7/6/2017

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

#### Revision

ANSI/ASSE Z390.1-2017, Accepted Practices for Hydrogen Sulfide (H2S) Training Programs (revision of ANSI/ASSE Z390.1-2006 (R2010)): 6/30/2017

#### ECIA (Electronic Components Industry Association) New National Adoption

- ANSI/EIA 60384-3-2017, Fixed capacitors for use in electronic equipment Part 3: Sectional specification: Surface mount fixed tantalum electrolytic capacitors with manganese dioxide solid electrolyte (identical national adoption of IEC 60384-3:2015 and revision of ANSI/EIA 60384-3-2014): 6/30/2017
- ANSI/EIA 60384-20-2017, Fixed capacitors for use in electronic equipment Part 20: Sectional specification Fixed metallized polyphenylene sulfide film dielectric surface mount d.c. capacitors (identical national adoption of IEC 60384-20:2015 and revision of ANSI/EIA 60384-20-2014): 6/30/2017
- ANSI/EIA 60384-24-2017, Fixed capacitors for use in electronic equipment - Part 24: Sectional specification - Fixed tantalum electrolytic surface mount capacitors with conductive polymer solid electrolyte (identical national adoption of IEC 60384-24:2015 and revision of ANSI/EIA 60384-24-2014): 6/30/2017
- ANSI/EIA 60384-25-2017, Fixed capacitors for use in electronic equipment - Part 25: Sectional specification: Fixed aluminium electrolytic surface mount capacitors with conductive polymer solid electrolyte (identical national adoption of IEC 60384-25:2015 and revision of ANSI/EIA 60384-25-2014): 6/30/2017

#### IIAR (International Institute of Ammonia Refrigeration)

#### Revision

- ANSI/IIAR 1-2017, Definitions and Terminology Used in IIAR Standards (revision of ANSI/IIAR 1-2012): 6/30/2017
- ANSI/IIAR 3-2017, Ammonia Refrigeration Valves (revision of ANSI/IIAR 3-2012): 6/30/2017

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

#### Revision

\* ANSI/NSF 12-2017 (i11r1), Automatic Ice Making Equipment (revision of ANSI/NSF 12-2012): 6/28/2017

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

#### Reaffirmation

ANSI/UL 120202-2014 (R2017), Standard for Safety for Recommendations for the Preparation, Content, and Organization of Intrinsic Safety Control Drawings (Proposal dated 04-28-17) (reaffirmation and redesignation of ANSI/ISA 12.02.02-2014): 6/30/2017

#### Revision

- ANSI/UL 330-2017, Standard for Safety for Hose and Hose Assemblies for Dispensing Flammable Liquids (revision of ANSI/UL 330-2013a): 6/29/2017
- \* ANSI/UL 1180-2017, Standard for Fully Inflatable Recreational Personal Flotation Devices (revision of ANSI/UL 1180-2012): 6/30/2017
- \* ANSI/UL 1180-2017a, Standard for Fully Inflatable Recreational Personal Flotation Devices (revision of ANSI/UL 1180-2012): 6/30/2017

## Corrections

#### **Premature Approvals**

#### ANSI/AWC NDS-2018

ANSI/AWC NDS-2018 was accidentally included in the Final Actions section of the July 7, 2017 issue of Standards Action. At the time it was listed, the standard was still under public review. It is not an approved standard and has been removed from our Final Actions listings.

#### ANSI/BHMA A156.10-2017

ANSI/BHMA A156.10-2017 was accidentally included in the Final Actions section of the June 30, 2017 issue of Standards Action. At the time it was listed, the standard was still under public review. It is not an approved standard and has been removed from our Final Actions listings.

#### **Incorrect Project Intent**

#### ANSI/CTA 803-B-2012 (R2017)

ANSI/CTA 803-B-2012 (R2017) was listed in the Final Actions section of the June 30, 2017 issue with incorrect information in the Project Intent statement. The correct listing is as follows:

ANSI/CTA 803-B-2012 (R2017) (reaffirmation of ANSI/CTA 802-B -2012)

## **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.

#### AAFS (American Academy of Forensic Sciences)

Office:	4200 Wisconsin Ave, NW Suite 106-310
	Washington, DC 20016
Contact:	Teresa Ambrosius

E-mail: tambrosius@aafs.org

BSR/ASB Std 038-201x, Standards for Internal Validation of Forensic DNA Testing Methods (new standard)

Stakeholders: Forensic DNA analysts and laboratories.

Project Need: Internal validation is an integral step in the development and implementation of DNA methodologies for use in forensic testing. Internal validation provides opportunity to characterize the strengths and limitations of a methodology prior to laboratory implementation, preventing unnecessary loss of valuable evidence. The purpose of this document it to provide general standards for the internal validation of all forensic DNA testing methods.

This document details general requirements for performing an internal validation of all forensic DNA testing methods within a forensic DNA laboratory.

BSR/ASB Std 039-201x, Standards for Internal Validation of Human Short Tandem Repeat Profiling on Capillary Electrophoresis

Platforms (new standard)

Stakeholders: Forensic DNA professionals.

Project Need: This document identifies standards for the internal validation of human short tandem repeat DNA profiling on capillary electrophoresis platforms utilized in forensic laboratories. This standard will provide consistency across laboratories.

This document details requirements for performing an internal validation of a human short tandem repeat (STR) multiplex kit using capillary electrophoresis (CE).

BSR/ASB Std 040-201x, Standards for Forensic DNA Interpretation and Comparison Protocols (new standard)

Stakeholders: Forensic DNA professionals and laboratories.

Project Need: Detailed and comprehensive DNA interpretation and comparison protocols are needed to ensure reliable and consistent interpretation and comparison of DNA data from single-source and mixed DNA samples regardless of the possible variables affecting the DNA data. Specific requirements for a laboratory's protocol for the interpretation and comparison of DNA data are provided.

This document describes requirements for a laboratory's DNA interpretation and comparison protocol and provides direction for its development in order to consistently produce reliable, repeatable, and reproducible interpretations and conclusions that are supported by internal validation data.

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

Office:	2121 Wilson Blvd		
	Suite 500		
	Arlington, VA 22201		
Contact:	Ladan Bulookbashi		

E-mail: lbulookbashi@ahrinet.org

BSR/AHRI Standard 1250 (I-P and SI)-201x, Performance Rating of Walk-in Coolers and Freezers (revision, redesignation and consolidation of ANSI/AHRI Standard 1250 (I-P)-2014 and ANSI/AHRI Standard 1251 (SI)-2014)

Stakeholders: This standard is intended for the guidance of the industry, including manufacturers, designers, installers, contractors, and users.

Project Need: The purpose of this standard is to establish, for walk-in coolers and freezers: definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data and conformance conditions.

This standard applies to mechanical refrigeration equipment consisting of an integrated single-package refrigeration unit, or separate Unit Cooler and condensing unit sections, where the condensing section can be located either outdoor or indoor. Controls may be integral, or can be provided by a separate party as long as performance is tested and certified with the listed mechanical equipment accordingly.

BSR/AHRI Standard 540 (I-P and SI)-201x, Performance Rating of Modulating Positive Displacement Refrigerant Compressors (revision of ANSI/AHRI Standard 540 (I-P and SI)-2016)

Stakeholders: This standard is intended for the guidance of the industry, including manufacturers, engineers, installers, contractors, and users.

Project Need: The purpose of this standard is to establish for Positive Displacement Compressors: definitions, test requirements, rating requirements, minimum data requirements for Published Ratings, operating requirements, marking and nameplate data, and conformance conditions. The standard defines the minimum amount of information, in a standard form to enable the evaluation and comparison of different Positive Displacement Compressors for use in an application.

This standard applies to Positive Displacement Compressors and their presentation of performance in heating, ventilation, air-conditioning, and refrigeration applications. The manufacturer is solely responsible for the determination of values to be used in published product information. This standard stipulates the minimum amount of information to be provided and suggests a method to be used to verify the accuracy of that information.

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

Office: 1791 Tullie Circle, NE Atlanta, GA 30329 Contact: Stephanie Reiniche

Fax: (678) 539-2159

E-mail: sreiniche@ashrae.org

BSR/ASHRAE Standard 224-201x, Standard for the Application of Building Information Modeling (new standard)

Stakeholders: Building owners, designers, contractors, operators, equipment manufacturers, and BIM software developers.

Project Need: This standard provides minimum requirements for the application of Building Information Modeling (BIM) to the planning, design, construction and operation of buildings and defines how to include these requirements in design, construction and operations services contracts.

This standard provides minimum requirements for the application of Building Information Modeling (BIM) to the planning, design, construction, and operation of buildings. This standard defines how to include BIM requirements in design, construction, and operations services contracts.

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

Office: Two Park Avenue New York, NY 10016

Contact: Mayra Santiago

 Fax:
 (212) 591-8501

 E-mail:
 ansibox@asme.org

BSR/API 579-1/ASME FFS-1-201x, Fitness-for-Service (revision of ANSI/API 579-1/ASME FFS-1-2016)

Stakeholders: Refining and petrochemical, fossil electric power, pulp and paper, and nuclear.

Project Need: Update standard to reflect current practices.

This Standard provides guidance for conducting FFS assessments using methodologies specifically prepared for pressurized equipment. The Fitness-For-Service guidelines provided in this Standard can be used to make run-repair-replace decisions to help determine if components in pressurized equipment containing flaws that have been identified by inspection can continue to operate safely for some period of time.

BSR/ASME B18.8.2-201x, Taper Pins, Dowel Pins, Straight Pins,

Grooved Pins and Spring Pins (Inch Series) (revision of ANSI/ASME B18.8.2-2000 (R2010))

Stakeholders: Users and manufacturers.

Project Need: There is a need to update the groove pin section particularly with regard to the pin diameters and expanded diameters. There is some confusion regarding how and when it is appropriate to measure these attributes. This will provide an opportunity to bring the standard up to date with the latest quality requirements (B18.18) and general formatting.

This Standard is intended to cover the complete dimensional and general data for taper pins, dowel pins, straight pins, grooved pins, and spring pins. Also included are appendices providing supplementary information for the drilling of holes for taper pins and the testing of pins in double shear.

#### CGA (Compressed Gas Association)

Office: 14501 George Carter Way Suite 103 Chantilly, VA 20151 Contact: Kristy Mastromichalis

Fax: (703) 961-1831

E-mail: kmastromichalis@cganet.com

BSR/CGA H-5-201x, Installation Standards for Bulk Hydrogen Supply Systems (revision of ANSI/CGA H-5-2014)

Stakeholders: Producers: Producers and distributors of gas and liquid hydrogen; User: Industrial customers and others who use hydrogen in its varied applications; General interest: DOE, universities, national laboratories; Other: Standards development organizations such as NFPA and ICC; Equipment supplier: Manufacturers of equipment used in hydrogen storage and dispensing.

Project Need: To update CGA H-5.

This standard contains minimum requirements for locating/siting, selecting equipment, installing, starting up, maintaining, and removing bulk hydrogen supply systems.

#### DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

Office:	1350 SW Alsbury Blvd		
	#514		
	Burleson, TX 76028-9219		

Contact: Bailey Squier

Fax: (682) 224-6201

E-mail: bsquier@dmis.org

BSR/DMIS 105.4-201x, Dimensional Measuring Interface Standard (DMIS Rev. 5.4) (revision and redesignation of ANSI/DMIS 105.3 -2015 Part 1)

Stakeholders: Every manufacturing industry that uses computer-driven inspection machines (CMMs, etc.) for Quality Assurance inspection purposes - especially all machined parts manufacturers.

Project Need: Continuous improvement: fixes, enhancements for widely adopted inspection interface standard, continued harmonization with QIF standard required.

FEAT/SYMPLN needs to be fixed, and a one-sided "high-points" algorithm for planes and lines is needed. There is also a need to harmonize DMIS and QIF more closely. For example, only TOL/DISTB has the concept of limit specifications, e.g., 9.98-10.02 instead of 10+/-0.02, but QIF supports that concept for all bidirectional tolerances. QIF also supports high-only, low-only, and no-tolerance (basic) that should also be moved into DMIS. All of these changes will be additive so old programs will remain backwards compatible.

#### ECIA (Electronic Components Industry Association)

Office: 2214 Rock Hill Road Suite 265 Herndon, VA 20170-4212

Contact: Laura Donohoe

 Fax:
 (571) 323-0245

 E-mail:
 Idonohoe@ecianow.org

BSR/EIA 61078-201x, Reliability Block Diagrams (identical national adoption of IEC 61078)

Stakeholders: Electronics, electrical, and telecommunications industries.

Project Need: National adoption of IEC standard.

This International Standard describes:

- the requirements to apply when reliability block diagrams (RBDs) are used in dependability analysis;

- the procedures for modeling the dependability of a system with reliability block diagrams;

- how to use RBDs for qualitative and quantitative analysis;

- the procedures for using the RBD model to calculate availability, failure frequency and reliability measures for different types of systems with constant (or time-dependent) probabilities of blocks success/failure, and for non-repaired blocks or repaired blocks:

- some theoretical aspects and limitations in performing calculations for availability, failure frequency and reliability measures; and

- the relationships with fault tree analysis (see IEC 61025) and Markov techniques (see IEC 61165).

#### **NECA (National Electrical Contractors Association)**

Office: 3 Bethesda Metro Center Suite 1100 Bethesda, MD 20814 Contact: Agnieszka Golriz

E-mail: Aga.golriz@necanet.org

\* BSR/NECA 505-201x, Standard for Installing and Maintaining High Mast, Roadway and Area Lighting (revision of ANSI/NECA 505 -2010)

Stakeholders: Electrical contractors, specifiers, electrical workers, inspectors, building owners, maintenance engineers, specifying government agencies such as Department of Energy (DOE).

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a "neat and workmanlike" manner.

This standard describes the installation and maintenance procedures for high-mast, roadway-area, and sport lighting systems installed outdoors for commercial, institutional, and industrial applications.

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

Office:	140 Philips Rd	
	Exton, PA 19341	
Contact:	Kim Cooney	
Fax:	(800) 542-5040	

E-mail: kcooney@scte.org

BSR/SCTE 83-1-201x, HMS Inside Plant Management Information Base (MIB) Part 1: SCTE-HMS-HE-OPTICS-MIB (revision of ANSI/SCTE 83-1-2012)

Stakeholders: Cable Telecommunications industry.

Project Need: Update to current technology.

The MIB module provides the branch object identifiers for the headend optics MIBs within the SCTE HMS Headend subtree.

## 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.

#### AAFS

American Academy of Forensic Sciences

4200 Wisconsin Ave, NW Suite 106-310 Washington, DC 20016 Phone: (719) 453-1036 Web: www.aafs.org

#### AAMI

Association for the Advancement of Medical Instrumentation

4301 N Fairfax Drive Suite 301 Arlington, VA 22203-1633 Phone: (703) 253-8268 Fax: (703) 276-0793 Web: www.aami.org

#### ABYC

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

#### AHRI

Air-Conditioning, Heating, and Refrigeration Institute

2121 Wilson Blvd Suite 500 Arlington, VA 22201 Phone: (703) 600-0327 Web: www.ahrinet.org

#### ARMA

ARMA International 11880 College Boulevard Suite 450 Overland Park, KS 66210 Phone: (913) 312-5565 Fax: (913) 341-3742 Web: www.arma.org

#### ASABE

American Society of Agricultural and Biological Engineers 2950 Niles Road St Joseph, MI 49085 Phone: (269) 932-7015 Fax: (269) 429-3852 Web: www.asabe.org

#### ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle. NE

Atlanta, GA 30329 Phone: (678) 539-1143 Fax: (678) 539-2159 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

#### ASQ (ASC Z1)

American Society for Quality 600 N Plankinton Ave

Milwaukee, WI 53203 Phone: (414) 272-8575 Web: www.asq.org

#### ASSE (Safety)

American Society of Safety Engineers 520 N. Northwest Highway Park Ridge, IL 60068 Phone: (847) 232-2012 Fax: (847) 699-2929 Web: www.asse.org

#### ATIS

Alliance for Telecommunications Industry Solutions 1200 G Street NW Suite 500 Washington, DC 20005

Phone: (202) 434-8840 Web: www.atis.org

#### CGA

Compressed Gas Association 14501 George Carter Way Suite 103 Chantilly, VA 20151 Phone: (703) 788-2728 Fax: (703) 961-1831 Web: www.cganet.com

#### DMSC, Inc.

Dimensional Metrology Standards Consortium, Inc.

1350 SW Alsbury Blvd #514 Burleson, TX 76028-9219 Phone: (817) 461-1092

Fax: (682) 224-6201

#### Web: www.dmis.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

#### IAPMO (ASSE Chapter)

ASSE International Chapter of IAPMO 18927 Hickory Creek Dr Suite 220 Mokena, IL 60448 Phone: (708) 995-3017 Fax: (708) 479-6139 Web: www.asse-plumbing.org

#### IEEE

Institute of Electrical and Electronics Engineers (IEEE) 445 Hoes Lane Piscataway, NJ 08854 Phone: (732) 562-3854 Fax: (732) 796-6966

#### IFS

Web: www.ieee.org

Illuminating Engineering Society 120 Wall St. 17th Floor New York, NY 10005 Phone: (212) 248-5000 Web: www.ies.org

#### IIAR

International Institute of Ammonia Refrigeration

1001 North Fairfax Street Alexandria, VA 22314 Phone: (703) 312-4200 Fax: (703) 312-0065 Web: www.iiar.org

#### NECA

National Electrical Contractors Association

3 Bethesda Metro Center Suite 1100 Bethesda, MD 20814 Phone: (301) 215-4549 Web: www.neca-neis.org

#### NSF

NSF International 789 N. Dixboro Road

Ann Arbor, MI 48105-9723 Phone: (734) 827-3817 Fax: (734) 827-7875 Web: www.nsf.org

#### OPEI

Outdoor Power Equipment Institute 341 South Patrick Street

Alexandria, VA 22314 Phone: (703) 549-7600 Fax: (703) 549-7604 Web: www.opei.org

#### RESNET

Residential Energy Services Network, Inc. 4867 Patina Court Oceanside, CA 92057 Phone: (760) 408-5860 Fax: (760) 806-9449 Web: www.resnet.us.com

#### SCTE

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

#### SPRI

Single Ply Roofing Institute 465 Waverley Oaks Road Suite 421 Waltham, MA 02452 Phone: (781) 647-7026 Fax: (781) 647-7222 Web: www.spri.org

#### TIA

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) 664-3198 Fax: (847) 664-3198 Web: www.ul.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.

#### <u>Comments</u>

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.



#### 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 16283-2, Acoustics - Field measurement of sound insulation in buildings and of building elements - Part 2: Impact sound insulation - 9/20/2017, \$112.00

#### AIR QUALITY (TC 146)

ISO/DIS 19926-1, Meteorology - Weather radar - Part 1: System performance and operation - 9/23/2017, \$155.00

#### ANAESTHETIC AND RESPIRATORY EQUIPMENT (TC 121)

IEC/DIS 60601-2-26, Medical electrical equipment - Part 2-26: Particular requirements for the basic safety and essential performance of electroencephalographs, \$53.00

#### **BUILDING CONSTRUCTION (TC 59)**

- ISO/DIS 16739-1, Industry Foundation Classes (IFC) for data sharing in the construction and facility management industries - Part 1: Data schema using EXPRESS schema definitions - 7/22/2017, \$380.00
- ISO/DIS 21931-2, Sustainability in buildings and civil engineering works - Framework for methods of assessment of the sustainability performance of construction works - Part 2: Civil engineering works -7/22/2017, \$93.00

#### CAST IRON AND PIG IRON (TC 25)

- ISO/DIS 185, Grey cast irons Classification and specification 7/20/2017, \$82.00
- ISO/DIS 1083, Spheroidal graphite cast irons Classification 7/21/2017, \$112.00

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

- ISO/DIS 14993, Corrosion of metals and alloys Accelerated testing involving cyclic exposure to salt mist, dry and wet conditions 9/24/2017, \$71.00
- ISO/DIS 16151, Corrosion of metals and alloys Accelerated cyclic test with exposure to acidified salt spray, dry and wet conditions 9/22/2017, \$82.00

#### ENERGY MANAGEMENT AND ENERGY SAVINGS (TC 301)

ISO/DIS 50046, General quantification methods for ex ante or expected energy savings - 9/16/2017, \$107.00

#### ENVIRONMENTAL MANAGEMENT (TC 207)

- ISO/DIS 14064-1, Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals 7/22/2017, \$119.00
- ISO/DIS 14064-2, Greenhouse gases Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements 7/22/2017, \$93.00

#### ERGONOMICS (TC 159)

ISO/DIS 27501, The human-centred organization - Guidance for managers - 7/23/2017, \$98.00

#### FERTILIZERS AND SOIL CONDITIONERS (TC 134)

ISO/DIS 19822, Fertilizers and soil conditioners - Determination of humic and hydrophobic fulvic acids concentrations in fertilizer materials - 9/23/2017, \$93.00

#### FLOOR COVERINGS (TC 219)

ISO/DIS 23999, Resilient floor coverings - Determination of dimensional stability and curling after exposure to heat - 7/22/2017, \$53.00

#### GAS CYLINDERS (TC 58)

ISO/DIS 10460, Gas cylinders - Welded aluminium-alloy, carbon and stainless steel gas cylinders - Periodic inspection and testing -9/16/2017, \$82.00

#### **GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)**

- ISO/DIS 19107, Geographic information Spatial schema 9/15/2017, \$203.00
- ISO/DIS 19146, Geographic information Cross-domain vocabularies 9/21/2017, \$125.00

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

ISO/DIS 11238, Health informatics - Identification of medicinal products - Data elements and structures for the unique identification and exchange of regulated information on substances - 7/20/2017, \$125.00

#### HYDROGEN ENERGY TECHNOLOGIES (TC 197)

ISO/DIS 19881, Gaseous hydrogen - Land vehicle fuel containers -7/22/2017, \$125.00

- ISO/DIS 19882, Gaseous hydrogen Thermally activated pressure relief devices for compressed hydrogen vehicle fuel containers -7/22/2017, \$98.00
- ISO/DIS 19880-2, Gaseous hydrogen Fueling stations Part 2: Dispensers - 7/23/2017, \$93.00

#### **INDUSTRIAL TRUCKS (TC 110)**

ISO/DIS 5053-2, Industrial trucks - Terminology and classification -Part 2: Fork arms and attachments - 7/30/2017, \$134.00

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

- ISO/DIS 11961, Petroleum and natural gas industries Steel drill pipe 9/21/2017, \$165.00
- ISO/DIS 19277, Petroleum, petrochemical and natural gas industries -Qualification testing and acceptance criteria for protective coating systems under insulation - 9/16/2017, \$93.00
- ISO/DIS 20321, Petroleum, petrochemical and natural gas industries -Safety of machineries - Powered elevators - 7/29/2017, \$93.00

#### **MECHANICAL VIBRATION AND SHOCK (TC 108)**

ISO 10819/DAmd1, Mechanical vibration and shock - Hand-arm vibration - Measurement and evaluation of the vibration transmissibility of gloves at the palm of the hand - Amendment 1 - 9/20/2017, \$33.00

#### **MEDICAL DEVICES FOR INJECTIONS (TC 84)**

ISO/DIS 20695, Enteral feeding systems - Design and testing -7/22/2017, \$119.00

#### **MICROBEAM ANALYSIS (TC 202)**

ISO/DIS 20720, Microbeam analysis - Methods of the specimen preparation for analysis of general powders using WDS and EDS -9/24/2017, \$58.00

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

- ISO/DIS 11145, Optics and photonics Lasers and laser-related equipment Vocabulary and symbols 7/29/2017, \$88.00
- ISO/DIS 13694, Optics and photonics Lasers and laser-related equipment Test methods for laser beam power (energy) density distribution 7/22/2017, \$67.00
- ISO/DIS 19979, Ophthalmic optics Contact lenses Hygienic management of multipatient use trial contact lenses - 9/24/2017, \$53.00

#### PAINTS AND VARNISHES (TC 35)

- ISO/DIS 21545, Paints and varnishes Determination of settling 9/28/2017, \$33.00
- ISO/DIS 2812-5, Paints and varnishes Determination of resistance to liquids Part 5: Temperature-gradient oven method 9/28/2017, \$46.00
- ISO/DIS 4623-1, Paints and varnishes Determination of resistance to filiform corrosion Part 1: Steel substrates 9/28/2017, \$40.00

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

ISO/DIS 18639-4, PPE ensembles for firefighters undertaking specialist rescue activities - Part 4: Gloves - 7/21/2017, \$71.00

#### **PHOTOGRAPHY (TC 42)**

- ISO/DIS 18944, Imaging materials Reflection colour photographic prints Test print construction and measurement 9/21/2017, \$82.00
- ISO/DIS 19093, Photography Digital cameras Measuring low light performance 7/29/2017, \$71.00

#### **REFRIGERATION (TC 86)**

ISO/DIS 18326, Single-duct portable airconditioners and heat pumps -Testing and rating for performance - 7/30/2017, \$119.00

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

- ISO 17949/DAmd2, Impact test procedures for road vehicles Seating and positioning procedures for anthropomorphic test devices -Procedure for the WorldSID 50th percentile male side-impact dummy in front outboard seating positions - Amendment 2 -9/20/2017, \$40.00
- ISO/DIS 20762, Electrically propelled road vehicles Determination of power for propulsion of hybrid electric vehicle 9/14/2017, \$62.00

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

ISO/DIS 19843, Rolling bearings - Ceramic bearings balls -Determination of the strength by notched ball test - 9/24/2017, \$98.00

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

- ISO/DIS 8384, Ships and marine technology Dredgers Vocabulary 9/22/2017, \$71.00
- ISO/DIS 8385, Ships and marine technology Dredgers -Classification - 9/22/2017, \$46.00
- ISO/DIS 19847, Ships and marine technology Shipboard data servers to share field data at sea 7/20/2017, \$125.00
- ISO/DIS 19848, Ships and marine technology Standard data for shipboard machinery and equipment - 7/20/2017, \$134.00

#### STEEL (TC 17)

ISO/DIS 643, Steels - Micrographic determination of the apparent grain size - 9/21/2017, \$82.00

#### **STEEL WIRE ROPES (TC 105)**

ISO/DIS 19427, Steel wire ropes - Pre-fabricated parallel wire strands for suspension bridge main cable - Specifications - 7/20/2017, \$62.00

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

- ISO 11137-1/DAmd2, Sterilization of health care products Radiation -Part 1: Requirements for development, validation and routine control of a sterilization process for medical devices - Amendment 2 -9/23/2017, \$33.00
- ISO/DIS 11138-7, Sterilization of health care products Biological indicators Guidance for the selection, use and interpretation of results Part 7: Self-contained biological indicators for moist heat sterilization 9/23/2017, \$134.00

## TECHNICAL DRAWINGS, PRODUCT DEFINITION AND RELATED DOCUMENTATION (TC 10)

ISO/DIS 14617, Graphical symbols for diagrams - 9/30/2017, \$194.00

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

ISO/DIS 20158, Textiles - Determination of water absorbency of textile fabrics - 9/22/2017, \$40.00

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

- ISO/DIS 9644, Agricultural irrigation equipment Pressure losses in irrigation valves Test method 7/21/2017, \$82.00
- ISO/DIS 4254-16, Agricultural machinery Safety Part 16: Portable agricultural grain augers 9/16/2017, \$71.00

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

ISO/DIS 21317, Traditional Chinese medicine - Lonicera japonica flower - 9/23/2017, \$71.00

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

ISO/DIS 15747, Plastic containers for intravenous injections -7/30/2017, \$71.00

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

ISO/DIS 8664, Tyres for agricultural tractors and machines - Codedesignated and service-description marked radial drive-wheel tyres -7/30/2017, \$71.00

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

- ISO/DIS 17660-1, Welding Welding of reinforcing steel Part 1: Load-bearing welded joints - 9/20/2017, \$112.00
- ISO/DIS 17660-2, Welding Welding of reinforcing steel Part 2: Non load-bearing welded joints - 9/20/2017, \$82.00

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

- ISO/IEC 14763-3/DAmd1, Information technology Implementation and operation of customer premises cabling - Part 3: Testing of optical fibre cabling - Amendment 1 - 7/30/2017, \$134.00
- ISO/IEC DIS 14443-2, Identification cards Contactless integrated circuit cards Proximity cards Part 2: Radio frequency power and signal interface 7/19/2017, \$119.00
- ISO/IEC DIS 19896-1, Information technology IT Security techniques - Competence requirements for information security testers and evaluators - Part 1: Introduction, concepts and general requirements - 7/30/2017, \$62.00
- ISO/IEC DIS 14543-5-12, Information technology Home electronic systems (HES) architecture Part 5-12: Intelligent grouping and resource sharing Remote access test and verification 7/30/2017, \$77.00
- ISO/DIS 14776-263, Information technology Small computer system interface (SCSI) - Part 263: SAS protocol layer - 3 (SPL-3) -7/31/2017, \$311.00
- ISO/IEC DIS 14776-454, Information technology Small computer system interface (SCSI) - Part 454: SCSI Primary Commands - 4 (SPC-4) - 7/30/2017, \$323.00
- ISO/IEC DIS 14543-5-101, Information technology Home electronic systems (HES) architecture Part 5-101: Intelligent grouping and resource sharing remote AV access profile 7/30/2017, \$71.00

### **IEC Standards**

- 9/2299/DC, Proposal of a technical corrigendum to IEC 60310:2016, Railway applications - Traction transformers and inductors on board rolling stock, 017/9/1/
- 14/908/CDV, IEC 60076-22-1 ED1: Power transformer and reactor fittings Part 22-1: Protective devices, 2017/9/29
- 17A/1146/CDV, IEC 62271-102 ED2: High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches, 2017/9/29
- 22E/184/CD, IEC 62909-2 ED1: Bi-directional grid connected power converters - Part 2: Interface of GCPC and distributed energy resources and additional requirements to Part 1, 2017/9/29
- 23B/1249/CD, IEC 60884-1/FRAG2 ED4: Plugs and socket-outlets for household and similar purposes - Part 1: General requirements, 017/9/1/

- 26/626A/FDIS, IEC 62822-3 ED1: Electric welding equipment -Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 Hz) - Part 3: Resistance welding equipment, 2017/8/18
- 27/1018/DC, Review of IEC 60680:2008 Ed.1: Test methods of plasma equipment for electroheat and electrochemical applications, 2017/8/18
- 27/1017/DC, Review of IEC 62076:2006 Ed.1: Industrial electroheating installations Test methods for induction channel and induction crucible furnaces, 2017/8/18
- 27/1020/DC, Review of IEC 61308:2005 Ed.2: High-frequency dielectric heating installations Test methods for the determination of power output., 2017/8/18
- 27/1016/DC, Review of IEC 60676:2011 Ed.3: Industrial electroheating equipment - Test methods for direct arc furnaces and IEC 60683:2011 Ed.2: Industrial electroheating equipment - Test methods for submerged-arc furnaces, 2017/8/18
- 27/1019/DC, Review of IEC 60703:2008 Ed.2: Test methods for electroheating installations with electron guns, 2017/8/18
- 34A/2021/FDIS, IEC 60810 ED5: Lamps, light sources and LED packages for road vehicles Performance requirements, 2017/8/18
- 34C/1354/FDIS, IEC 61347-2-7/AMD1 ED3: Amendment 1 Lamp controlgear - Part 2-7: Particular requirements for battery supplied electronic controlgear for emergency lighting (self-contained), 2017/8/18
- 34D/1296/FDIS, IEC 60598-2-22/AMD1 ED4: Amendment 1 -Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting, 2017/8/18
- 45A/1167/FDIS, IEC 63147 ED1: Nuclear power plants -Instrumentation, control and electrical power systems - Criteria for accident monitoring instrumentation for nuclear power generating stations, 2017/8/18
- 46C/1078/FDIS, IEC 62807-1 ED1: Hybrid telecommunication cables -Part 1: Generic specification, 2017/8/18
- 47A/1018/CDV, IEC 62228-1 ED1: Integrated circuits EMC evaluation of transceivers Part 1: General conditions and definitions, 2017/9/29
- 47F/282/CD, IEC 62047-33 ED1: Semiconductor devices Microelectromechanical devices - Part 33: MEMS piezoresistive pressuresensitive device, 017/9/1/
- 47F/281/CD, IEC 62047-36 ED1: Semiconductor devices Microelectromechanical devices - Part 36: Environmental and dielectric withstand test methods for MEMS piezoelectric thin films, 017/9/1/
- 47F/283/CD, IEC 62047-34 ED1: Semiconductor devices Microelectromechanical devices - Part 34: Test method for MEMS piezoresistive pressure-sensitive device on wafer, 017/9/1/
- 62D/1501/FDIS, IEC 80601-2-59 ED2: Medical electrical equipment -Part 2-59: Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening, 2017/8/18
- 62D/1488/CDV, IEC 60601-2-26 ED4: Medical electrical equipment -Part 2-26: Particular requirements for the basic safety and essential performance of electroencephalograph, 2017/9/29
- 64/2217/CD, IEC 60050-826/AMD1 ED2: International Electrotechnical Vocabulary - Part 826: Electrical installations, 2017/9/29
- 65B/1093/NP, PNW TS 65B-1093: Performance Expression of Industrial Water Quality Analyzers - Photometry, 017/9/1/
- 66/638/CD, IEC 61010-2-032 ED4: Safety requirements for electrical equipment for measurement, control and laboratory use Part 2 -032: Particular requirements for hand-held and hand-manipulated current sensors for electrical test and measurement, 2017/9/29

- 66/639/CD, IEC 61010-2-033 ED2: Safety requirements for electrical equipment for measurement, control, and laboratory use Part 2 -033: Particular requirements for hand-held multimeters and other meters, for domestic and professional use, capable of measuring mains voltage, 2017/9/29
- 69/522/CD, IEC 61851-24 ED2: Electric vehicle conductive charging system - Part 24: Digital communication between a d.c. EV charging station and an electric vehicle for control of d.c. charging, 2017/9/29
- 69/523/CD, IEC 61851-23 ED2: Electric vehicle conductive charging system Part 23: DC electric vehicle charging station, 2017/9/29
- 80/853/NP, PNW 80-853: Maritime navigation and radiocommunication equipment and systems - Cybersecurity -General requirements, methods of testing and required test results, 2017/9/29
- 85/612A/CD, IEC 61557-6 ED3: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. Equipment for testing, measuring or monitoring of protective measures Part 6: Effectiveness of residual current devices (RCD) in TT, TN and IT systems, 2017/9/22
- 86B/4085/CDV, IEC 61300-3-21 ED3: Fibre optic interconnecting devices and passive components Basic test and measurement procedures Part 3-21: Examinations and measurements Switching time, 2017/9/29
- 86C/1462/CDV, IEC 61290-4-3 ED2: Optical amplifiers Test methods - Part 4-3: Power transient parameters - Single channel optical amplifiers in output power control, 2017/9/29
- 91/1453/CD, IEC 61189-2-630 ED1: Test methods for electrical materials, printed board and other interconnection structures and assemblies Part 2-630: Test methods for base materials for rigid printed boards Moisture Absorption after pressure vessel conditioning, 017/9/1/
- 100/2964/CD, IEC TS 62312-1-1 ED2: Guideline for synchronization of audio and video Part 1-1: Measurement methods for synchronization of audio and video equipment and systems General, 2017/9/29
- 100/2963/CD, IEC 62574 ED2: Audio, video and multimedia systems -General channel assignment of multichannel audio, 2017/9/29
- 100/2965/CD, IEC TS 62312-2 ED2: Guideline for synchronization of audio and video Part 2: Methods for synchronization of audio and video systems, 2017/9/29
- 103/166/NP, PNW 103-166: Transmitting equipment for radiocommunication - Radio-Over-Fibre Technologies and Their Performance Standard - Part 3: Foreign object and debris (FOD) detection radar system, 2017/9/29
- 104/743/CD, IEC TS 63141 ED1: Damp heat, steady state (unsaturated pressurized vapour with air), 017/9/1/
- 110/886/FDIS, IEC 62908-1-2 ED1: Touch and interactive displays -Part 1-2: Generic - Terminology and letter symbols, 2017/8/18
- 110/887/NP, PNW 110-887: Laser display devices Part 5-6: Measuring methods for optical performance of screens, 017/9/1/
- 110/888/CD, IEC 62977-2-1 ED1: Electronic display devices Part 2-1: Measurements of optical characteristics - Fundamental measurements, 2017/9/29
- 115/162/CD, IEC TR 62672 ED1: Reliability and availability evaluation of HVDC systems, 2017/9/29
- 121A/161/CD, IEC 60947-4-2 ED4: Low-voltage switchgear and controlgear - Part 4-2: Contactors and motor-starters - AC semiconductor motor controllers and starters, 2017/9/29
- 121A/162/CD, IEC 60947-1 ED6: Low-voltage switchgear and controlgear Part 1: General rules, 017/9/1/
- 121B/62/FDIS, IEC 61439-1 ED3: Low-voltage switchgear and controlgear assemblies - Part 1: General rules, 2017/8/18

## **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**

#### **ISO/IEC JTC 1 Technical Reports**

<u>ISO/IEC TR 11801-9902:2017</u>, Information technology - Generic cabling for customer premises - Part 9902: Specifications for end-toend link configurations, \$138.00

#### **CUSTOMER CONTACT CENTRES (TC 273)**

- ISO 18295-1:2017, Customer contact centres Part 1: Requirements for customer contact centres, \$103.00
- ISO 18295-2:2017, Customer contact centres Part 2: Requirements for clients using the services of customer contact centres, \$45.00

#### EARTH-MOVING MACHINERY (TC 127)

- <u>ISO 20474-1:2017.</u> Earth-moving machinery Safety Part 1: General requirements, \$185.00
- <u>ISO 20474-2:2017</u>, Earth-moving machinery Safety Part 2: Requirements for dozers, \$45.00
- ISO 20474-3:2017, Earth-moving machinery Safety Part 3: Requirements for loaders, \$68.00
- ISO 20474-4:2017, Earth-moving machinery Safety Part 4: Requirements for backhoe loaders, \$103.00
- <u>ISO 20474-5:2017.</u> Earth-moving machinery Safety Part 5: Requirements for hydraulic excavators, \$103.00
- ISO 20474-6:2017, Earth-moving machinery Safety Part 6: Requirements for dumpers, \$68.00
- <u>ISO 20474-7:2017</u>, Earth-moving machinery Safety Part 7: Requirements for scrapers, \$45.00
- <u>ISO 20474-8:2017</u>, Earth-moving machinery Safety Part 8: Requirements for graders, \$45.00
- <u>ISO 20474-9:2017.</u> Earth-moving machinery Safety Part 9: Requirements for pipelayers, \$68.00
- <u>ISO 20474-10:2017.</u> Earth-moving machinery Safety Part 10: Requirements for trenchers, \$68.00
- <u>ISO 20474-11:2017</u>, Earth-moving machinery Safety Part 11: Requirements for landfill compactors, \$45.00
- <u>ISO 20474-12:2017.</u> Earth-moving machinery Safety Part 12: Requirements for cable excavators, \$103.00

<u>ISO 20474-13:2017</u>, Earth-moving machinery - Safety - Part 13: Requirements for rollers, \$138.00

#### **ENERGY MANAGEMENT AND ENERGY SAVINGS (TC 301)**

ISO 50007:2017, Energy services - Guidelines for the assessment and improvement of the energy service to users, \$185.00

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

<u>ISO 29943-1:2017</u>, Condoms - Guidance on clinical studies - Part 1: Male condoms, clinical function studies based on self-reports, \$185.00

<u>ISO 29943-2:2017</u>, Condoms - Guidance on clinical studies - Part 2: Female condoms, clinical function studies based on self-reports, \$185.00

#### **IEC Technical Reports**

#### **ROBOTS AND ROBOTIC DEVICES (TC 299)**

<u>IEC/TR 60601-4-1:2017</u>, Medical electrical equipment - Part 4-1: Guidance and interpretation - Medical electrical equipment and medical electrical systems employing a degree of autonomy, \$285.00

## **IEC Standards**

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

- IEC 60601-2-63 Ed. 1.1 b:2017, Medical electrical equipment Part 2 -63: Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment, \$410.00
- IEC 60601-2-63 Amd.1 Ed. 1.0 b:2017, Amendment 1 Medical electrical equipment - Part 2-63: Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment, \$23.00

#### **ULTRASONICS (TC 87)**

- IEC 61391-1 Ed. 1.1 en:2017, Ultrasonics Pulse-echo scanners -Part 1: Techniques for calibrating spatial measurement systems and measurement of point-spread function response, \$586.00
- IEC 61391-1 Amd.1 Ed. 1.0 en:2017, Amendment 1 Ultrasonics -Pulse-echo scanners - Part 1: Techniques for calibrating spatial measurement systems and measurement of point-spread function response, \$164.00

## **Proposed Foreign Government Regulations**

## **Call for Comment**

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

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

The USA WTO TBT Inquiry Point is the official channel for distributing U.S. comments to the network of WTO TBT Enquiry Points around the world. U.S. business contacts interested in commenting on the notifications are asked to review the comment guidance available on Notify U.S. at

https://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm prior to submitting comments.

For further information about the USA TBT Inquiry Point, please visit:

https://www.nist.gov/standardsgov/what-we-do/trade-regulatoryprograms/usa-wto-tbt-inquiry-point

Contact the USA TBT Inquiry Point at:(301) 975-2918; Fax: (301) 926-1559; E-mail: 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.

## ANSI Accredited Standards Developers

#### Approval of Reaccreditation

#### InfoComm International

The reaccreditation of InfoComm International, an ANSI member and Accredited Standards Developer (ASD) has been approved at the direction of ANSI's Executive Standards Council under its recently revised operating procedures for documenting consensus on InfoComm-sponsored American National Standards, effective July 7, 2017. For additional information, please contact: Ms. Ann Brigida, Director of Standards, InfoComm International, 11242 Waples Mill Road, Suite 200, Fairfax, VA 22030; phone: 703.277.2007; e-mail: abrigida@infocomm.org.

## International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

#### ISO/TC 256 – Pigments, dyestuffs and extenders

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 256 and therefore ANSI is not a member of this committee. The Secretariat for the committee is held by Germany (DIN).

ISO/TC 256 operates under the following scope:

Standardization in the field of colouring materials, i.e. pigments, extenders and dyestuffs, including terminology, product specifications and test methods.

Organizations interested in serving as the U.S. TAG Administrator or participating on a U.S. TAG should contact ANSI's ISO Team (<u>isot@ansi.org</u>).

#### **Establishment of ISO Project Committee**

#### ISO/PC 311 – Vulnerable consumers

A new ISO Project Committee, ISO/PC 311 – Vulnerable consumers, has been formed. The Secretariat has been assigned to the United Kingdom (BSI).

ISO/PC 311 operates under the following scope:

Standardization in the field of vulnerable consumers

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (isot@ansi.org).

#### Establishment of ISO Subcommittee

#### ISO/TC 61/SC 14 – Plastics and Environment

ISO/TC 61 – Plastics has created a new ISO Subcommittee on Plastics and environment (ISO/TC 61/SC 14). The Secretariat has been assigned to Germany (DIN).

ISO/TC 61/SC 14 operates under the following scope:

Standardization in the field of plastics relating to biodegradability, biobased plastics, carbon and environmental footprint, microplastics and ocean/terrestrial environments, recycling, waste management, and circular economy.

Organizations interested in serving as the U.S. TAG Administrator or participating on the U.S. TAG should contact ANSI's ISO Team (<u>isot@ansi.org</u>).

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

#### Green Finance – Assessment of Green Financial Products

#### Comment Deadline: August 4, 2017

SAC, the ISO member body for China, has submitted to ISO a new work item proposal for the development of an ISO standard on Green finance – Assessment of green financial products, with the following scope statement:

This International Standard specifies the classification of green financial projects. This International Standard also specifies a framework for assessing green financial projects, including principles, scope, methodologies, procedure, reporting, and assessment bodies.

This International Standard helps users to identify and assess green financial projects.

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, August 4, 2017.

## U.S. Technical Advisory Groups

**Approval of Reaccreditation** 

#### U.S. TAG to ISO TC 304 – Healthcare Administration

ANSI's Executive Standards Council has approved the reaccreditation of the U.S. Technical Advisory Group to ISO TC 304, Healthcare Administration, under its recently revised operating procedures, effective July 11, 2017. For additional information, please contact the TAG Administrator of the U.S. TAG to ISO TC 304: Mr. Lee S. Webster, Director, Employee Relations, University of Texas Medical Branch at Galveston, 2200 Market Street, Galveston, TX 77573; phone: 409.747.4867; e-mail: <a href="mailto:lswebste@utmb.edu">lswebste@utmb.edu</a>.

## **Information Concerning**

## International Organization for Standardization (ISO)

### **Call for International (ISO) Secretariat**

#### ISO/TC 190 - Soil quality

### Reply Deadline: August 4, 2017

ANSI has been informed by the ISO Technical Management Board (ISO/TMB) that Netherlands (NEN), the ISO delegated Secretariat of ISO/TC 190, wishes to relinquish the role of the Secretariat.

ISO/TC 190 operates under the following scope:

Standardization in the field of soil quality

- Soils in situ;
- Soil materials intended for reuse in or on soils, including dredged sub-aquatic soil materials (= excavated sediments).

Excluded:

- Threshold or limit values for the assessment of soil quality;
- Civil engineering aspects (are dealt with by ISO/ TC 182 "Geotechnics");
- In situ sediments (are dealt with by ISO/TC 147 "Water quality").

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of the U.S. delegated Secretariat for ISO/TC 190. Alternatively, ANSI may be assigned the responsibility for administering an ISO Secretariat. Any request that ANSI accept the direct administration of an ISO Secretariat shall demonstrate that:

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

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



BSR/ASHRAE Addendum h to ANSI/ASHRAE Standard 55-2013

## **Public Review Draft**

## Proposed Addendum h to Standard 55-2013, Thermal Environmental Conditions for Human Occupancy

First Public Review (July 2017) (Draft shows Proposed Changes to Current Standard)

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

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

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

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

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

#### FOREWORD

This proposed addendum adds a new method for the avoidance of the draft risk at the ankle region. Currently, the standard does not provide guidance to assess ankle draft. The new method applies to occupants with clothing insulation less than 0.7 clo and metabolic rate less than 1.3 met, complying with the entire Section 5.3.4, "Local Thermal Discomfort." The addendum was added using mandatory language in the body of the Standard. Informative Appendix I has been updated to take into account the new method. The new method is based on the work described in:

Liu, S., S. Schiavon, A. Kabanshi, W. Nazaroff. 2016. Predicted percentage of dissatisfied with ankle draft. Indoor Air. <u>https://doi.org/10.1111/ina.12364 http://www.escholarship.org/uc/item/9076254n</u>

Schiavon, S., D. Rim, W. Pasut, W. Nazaroff. 2016. Sensation of draft at uncovered ankles for women exposed to displacement ventilation and underfloor air distribution systems. Building and Environment, 96, 228–236. http://dx.doi.org/10.1016/j.buildenv.2015.11.009 http://escholarship.org/uc/item/4p692575

[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 h to 55-2013

Modify Section 5.3.4 Local Thermal Discomfort as shown below. Note that Addenda a, d, and g to Standard 55-2013 also made changes to Section 5.3.4 that are included in this addendum. Published addenda to Standard 55-2013 are available for free on the ASHRAE website at <u>https://www.ashrae.org/standards-research--technology/standards-addenda</u>.

#### 5.3.4 Local Thermal Discomfort

**5.3.4.1 Applicability.** The requirements specified in this section are required to be met only when representative occupants meet both of the following criteria:

- a. Have clothing insulation  $(I_{cl})$  less than 0.7 clo
- b. Are engaged in physical activity with metabolic rates below 1.3 met

For the purpose of compliance with this section, representative occupants' ankle level is 0.1 m (4 in.) above the floor and head level is 1.1 m (43 in.) for seated occupants and 1.7 m (67 in.) for standing occupants.

*Note:* The Standard does not contain requirements for standing occupants when all the representative occupants are seated. Many standing occupants have met rates greater than 1.3 (see Section 5.2.1), and by criterion (b) above, the requirements of Section 5.3.4 do not apply to them.

**5.3.4.2 Radiant Temperature Asymmetry.** Radiant temperature asymmetry shall not exceed the values in Table 5.3.4.2. The radiant temperature asymmetry is quantified in its definition in Section 3.

When direct beam solar radiation falls on a representative occupant the radiant temperature asymmetry shall include the solar contribution as follows. The short wave mean radiant temperature  $(t_{rsw})$  as determined in Normative Appendix C shall be multiplied by two and added to the plane radiant temperature  $(t_{pr})$  for each horizontal or vertical direction in which the plane receives direct sunlight.

## TABLE 5.3.4.2 Allowable Radiant Temperature Asymmetry

Radiant Temperature Asymmetry °C (°F)			
Ceiling Warmer than floor	Ceiling Cooler than floor	Wall warmer than air	Wall Cooler than air
<5 (9.0)	<14 (25.2)	<23 (41.4)	<10 (18.0)

**5.3.4.3** Ankle Air Speed. Air speed at 0.1 m (4 in.) above the floor shall be less than the value resulting from the following formula or in the shaded region of Figure 5.3.4.

$V_{ankle} < 0.35TS + 0.39$	(V <sub>ankle</sub> in m/s)
<u>Vankle &lt; 70.7TS + 79.6</u>	<u>(V<sub>ankle</sub> in fpm)</u>

where

 $V_{ankle}$  = air speed at 0.1 m (4 in.) above the floor;

TS = whole body thermal sensation. This is equal to PMV calculated using the input air temperature and speed averaged over two heights: 0.6 m (24 in.) and 1.1 m (43 in.) for seated occupants and 1.1 m (43 in.) and 1.7 m (67 in.) for standing occupants.

**Exception to 5.3.4.3:** The requirement in this section does not apply when using elevated air speed in Section 5.3.3.



FIGURE 5.3.4 Air speed limits at 0.1 m (4 in.) above the floor as a function of whole body thermal sensation.

**5.3.4.3** <u>5.3.4.4</u> Vertical Air Temperature Difference. Air temperature difference between head level and ankle level shall not exceed  $3^{\circ}C$  (5.4°F) for seated occupants or  $4^{\circ}C$  (7.2°F) for standing occupants (see note in Section 5.3.4.1).

**5.3.4.4 5.3.4.5 Floor Surface Temperature.** When representative occupants are seated with feet in contact with the floor, floor surface temperatures within the occupied zone shall be 19°C to 29°C (66.2°F to 84.2°F).

#### Revise Informative Appendix I as shown below.

#### I3. DRAFT

Draft is unwanted local cooling of the body caused by air movement. It is most prevalent when the whole body thermal sensation is cool (below neutral). Draft sensation depends on <u>whole body thermal sensation</u>, air speed, air temperature, activity, <u>turbulence intensity</u>, and clothing. Sensitivity to draft is greatest where the skin is not covered by clothing, especially the head region comprising the head, neck, and shoulders and the leg region comprising the ankles, feet, and legs.

Use of elevated air speed to extend the thermal comfort range is appropriate when, <u>otherwise</u>, occupants are slightly warm, as set forth in Section 5.3.3. When occupants are neutral or <u>cooler to slightly cool</u>, such as under certain combinations of met rate and clo value with operative temperatures ( $t_o$ ) below 23.0\_°C (73.4\_°F), average air speeds within the comfort envelope of ±0.5 PMV should not exceed 0.20 m/s (40 fpm). This limit applies to air movement caused by the building, its fenestration, and its HVAC system and not to air movement produced by office equipment or occupants. This standard allows average air speed to exceed this draft limit if it is under the occupants' local control and it is within the elevated air speed comfort envelope described in Section 5.3.3.

Draft at the lower leg region may occur in the buildings conditioned by thermally stratified systems, such as displacement ventilation and underfloor air distribution, or with cold-dropping airflow along external walls and/or windows. This problem could also occur in vehicles when the air is supplied at the floor level. Manufacturers of air diffusers intended for the stratified systems often provide diffuser performance data that can assist designers in predicting  $V_{ankle}$ . There are various approaches used by different manufacturers to derive the performance data and there is not yet a standard method of test.

The maximum air speed at the ankle is deduced from the predicted percentage of dissatisfied with ankle draft ( $PPD_{AD}$ ).  $PPD_{AD}$  is an index that establishes a quantitative prediction of the percentage of thermally dissatisfied people with the draft at ankles.  $PPD_{AD}$  is calculated according to the following formula or deduced from Figure I1.

$exp(-2.58 + 3.05V_{ankle} - 1.06TS)$	$(V_{ankle} \text{ in } m/s)$
$PPD_{AD} = \frac{1}{1 + exp(-2.58 + 3.05V_{ankle} - 1.06TS)}$	<u> </u>

$$PPD_{AD} = \frac{exp(-2.58 + 0.015V_{ankle} - 1.06TS)}{1 + exp(-2.58 + 0.015V_{ankle} - 1.06TS)}$$
(V<sub>ankle</sub> in fpm)

<u>TS</u> = whole body thermal sensation. This is equal to PMV calculated using the input air temperature and speed averaged over two heights: 0.6 m (24 in.) and 1.1 m (43 in.) for seated occupants and 1.1 m (43 in.) and 1.7 m (67 in.) for standing occupants; <u> $V_{inv}$ </u> = air speed at the 0.1 m (4 in.) above the floor

 $V_{ankle}$  = air speed at the 0.1 m (4 in.) above the floor.

The air speed limits at 0.1 m (4 in.) in section 5.3.4.3 are derived by setting PPD<sub>AD</sub> equal to 20%.



#### FIGURE I1 Air speed limits at 0.1 m (4 in.) above the floor as a function of whole body thermal sensation and the predicted percentage of dissatisfied with ankle draft (*PPD<sub>AD</sub>*).

The *PPD<sub>AD</sub>* provides a simple tool to estimate the draft at ankles and lower legs. In this model, the whole body thermal sensation can be approximated using the PMV with the input air temperature and speed averaged over two heights, not three as in the rest of the standard. The two heights are 0.6 m (24 in.) and 1.1 m (43 in.) for seated occupants, and 1.1 m (43 in.) and 1.7 m (67 in.) for standing occupants.



BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 34-2016

## **First Public Review Draft**

## **Proposed Addendum c to**

## Standard 34-2016, Designation and

## **Safety Classification of Refrigerants**

#### First Public Review (July 2017) (Draft shows Proposed Changes to Current Standard)

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

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BSR/ASHRAE Addendum c to ANSI/ASHRAE Standard 34-2016, Designation and Safety Classification of Refrigerants

First Public Review Draft

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#### FOREWORD

This addendum adds the single component refrigerant R-1224yd(Z) in Table 4-1 and Table D-1.

[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 strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

#### Addendum c to 34-2016

Add the following underlined data to Table 4-2 and Table D-2 in the columns indicated.

#### TABLE 4-1 Refrigerant Data and Safety Classifications

Refrigerant Number = <u>R-1224yd(Z)</u> Chemical Name = <u>cis-1-chloro-2,3,3,3-tetrafluoropropene</u> Chemical Formula = <u>CF<sub>3</sub>CF=CHCl</u> OEL = <u>1000</u> ppm v/v Safety Group = <u>A1</u> RCL = <u>60,000</u> ppm v/v; <u>23</u> lb/Mcf; <u>360</u> g/m3 Highly Toxic or Toxic Under Code Classification = <u>Neither</u>

#### **TABLE D-1** Refrigerant Data

 $\begin{array}{l} \mbox{Refrigerant Number} = \underline{R-1224yd(Z)} \\ \mbox{Chemical Name} = \underline{cis-1-chloro-2,3,3,3-tetrafluoropropene} \\ \mbox{Chemical Formula} = \underline{CF_3CF=CHCl} \\ \mbox{Molecular Mass} = \underline{148.5} \ \mbox{g/mol} \\ \mbox{Normal Boiling Point (°C)} \quad \underline{14.5} \\ \mbox{Normal Boiling Point (°F)} \quad \underline{58.1} \end{array}$ 

## TABLE E-1 Toxicity Table for Standard 34-ATEL, ODL, FCL, and RCL Values for Single-Compound Refrigerants (ppm v/v)

Refrigerant Number =  $\underline{R-1224yd(Z)}$ Chemical Name =  $\underline{cis-1}$ -chloro-2,3,3,3-tetrafluoropropene Mortality Limit =  $\underline{60,300}$  ppm Cardiac Limit =  $\underline{75,000}$  ppm Anesthetic Limit =  $\underline{120,000}$  ppm



BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 34-2016

## **First Public Review Draft**

## **Proposed Addendum f to**

## Standard 34-2016, Designation and

## **Safety Classification of Refrigerants**

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BSR/ASHRAE Addendum f to ANSI/ASHRAE Standard 34-2016, Designation and Safety Classification of Refrigerants

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#### FOREWORD

This addendum adds the single component refrigerant R-1132a in Table 4-1, Table D-1, and Table E-1.

[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 <u>strikethrough</u> (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

#### Addendum f to 34-2016

Add the following underlined data to Table 4-1, Table D-1, and Table E-1 in the columns indicated.

#### **TABLE 4-1 Refrigerant Data and Safety Classifications**

Refrigerant Number =  $\underline{R-1132a}$ Chemical Name =  $\underline{1,1-difluoroethylene}$ Chemical Formula =  $\underline{CF2 = CH2}$ OEL =  $\underline{500}$  ppm v/v Safety Group =  $\underline{A2}$ RCL =  $\underline{13,000}$  ppm v/v;  $\underline{2.0}$  lb/Mcf;  $\underline{33}$  g/m3 Highly Toxic or Toxic Under Code Classification = <u>Neither</u>

#### **TABLE D-1** Refrigerant Data

Refrigerant Number =  $\underline{R-1132a}$ Chemical Name =  $\underline{1,1-difluoroethylene}$ Chemical Formula =  $\underline{CF2=CH2}$ Molecular Mass =  $\underline{64.0}$  g/mol Normal Boiling Point (°C)  $\underline{-86.7}$ Normal Boiling Point (°F)  $\underline{-122.5}$ 

#### TABLE E-1 Toxicity Table for Standard 34-ATEL, ODL, FCL, and RCL Values for Single-Compound Refrigerants (ppm v/v)

Refrigerant Number =  $\underline{R-1132a}$ Chemical Name =  $\underline{1,1-difluoroethylene}$ ATEL =  $\underline{28,000}$  ppm, ATEL source =  $\underline{28.3\% \text{ LC50}}$ FCL =  $\underline{13,000}$  ppm LFL =  $\underline{50,000}$  ppm Cardiac Sensitization LOEL =  $\underline{50,000}$  ppm Anesthesia, NOEL =  $\underline{200,000}$  ppm RCL =  $\underline{13,000}$ RCL source =  $\underline{25\% \text{ LFL}}$ 



BSR/ASHRAE Addendum g to ANSI/ASHRAE Standard 34-2016

## First Public Review Draft

## **Proposed Addendum g to**

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BSR/ASHRAE Addendum g to ANSI/ASHRAE Standard 34-2016, Designation and Safety Classification of Refrigerants

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#### FOREWORD

This addendum makes several changes with the intent to make 2L a separate classification of refrigerants.

[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 <u>strikethrough</u> (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 g to 34-2016

#### 6. SAFETY GROUP CLASSIFICATIONS

6.1 Refrigerants shall be classified into safety groups according to the following criteria.
6.1.1 Classification. The safety group classification shall consist of two or three alphanumeric characters (e.g., "A2B1" or "B1A2L"). The capital letter first character indicates the toxicity as determined by Section 6.1.2; the Arabic numeral with or without suffix letter denotes the flammability as determined by Section 6.1.3.

**6.1.3 Flammability Classification.** Refrigerants shall be assigned to one of three four classes (1, 2L, 2, or 3) and one optional subclass (2L) based on lower flammability limit testing, heat of combustion, and the optional burning velocity measurement. Flammability tests shall be conducted in accordance with ASTM E681, *Standard Test Method for Concentration Limits of Flammability of Chemicals (Vapors and Gases)*<sup>7</sup> using a spark ignition source. Testing of all halocarbon refrigerants shall be in accordance with the Annex of ASTM E681. Single-compound refrigerants shall be assigned a single flammability classification. Refrigerant blends shall be assigned flammability classification based on their WCF and WCFF, as determined from a fractionation analysis (see Normative Appendix B, Section B2). A fractionation analysis for flammability is not required if the components of the blend are all in one class; the blend shall be assigned the same class (see Table 6.1.3).

#### 6.1.3.1 Class 1 (No Flame Propagation)

#### 6.1.3.2 Class 2L (Lower Flammability)

a. A single-compound refrigerant shall be classified as Class 2L if the refrigerant meets all four of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa).

2. Has an LFL >0.0062 lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.5 if the refrigerant has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]).

3. Has a heat of combustion <8169 Btu/lb (19,000 kJ/kg) (see Section 6.1.3.6).

b. The WCF of a refrigerant blend shall be classified as Class 2L if it meets all three of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa).

<u>2. Has an LFL >0.0062 lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.5 if the WCF of the blend has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]).</u>

3. Has a heat of combustion <8169 Btu/lb (19,000 kJ/kg) (see Section 6.1.3.6).

c. The WCFF of a refrigerant blend shall be classified as Class 2L if it meets all three of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60.0°C) and 14.7 psia (101.3 kPa). 2. Has an LFL >0.0062 lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.5 if the WCFF of the blend has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]).

#### 3. Has a heat of combustion <8169 Btu/lb (19,000 kJ/kg) (see Section 6.1.3.6).

#### 6.1.3.26.1.3.3 Class 2 (Flammable)

a. A single-compound refrigerant shall be classified as Class 2 if the refrigerant meets all three of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa).

2. Has an LFL >0.0062 lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.4 6.1.3.5 if the refrigerant has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]).

3. Has a heat of combustion <8169 Btu/lb (19,000 kJ/kg) (see Section 6.1.3.5 6.1.3.6).

b. The WCF of a refrigerant blend shall be classified as Class 2 if it meets all three of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa).

2. Has an LFL >0.0062 lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section  $\frac{6.1.3.4}{6.1.3.5}$  if the WCF of the blend has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]).

3. Has a heat of combustion <8169 Btu/lb (19,000 kJ/kg) (see Section 6.1.3.5 6.1.3.6).

c. The WCFF of a refrigerant blend shall be classified as

Class 2 if it meets all three of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60.0°C) and 14.7 psia (101.3 kPa).

2. Has an LFL >0.0062 lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.4 6.1.3.5 if the WCFF of the blend has

no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]).

3. Has a heat of combustion <8169 Btu/lb (19,000 kJ/kg) (see Section 6.1.3.5 6.1.3.6).

**6.1.3.2.1** Subclass 2L (Optional). Refrigerants that meet the following additional condition: have a maximum burning velocity of  $\leq$ 3.9 in./s (10 cm/s) when tested at 73.4°F (23.0°C) and 14.7 psia (101.3 kPa).

#### 6.1.3.3 6.1.3.4 Class 3 (Higher Flammability)

a. A single-compound refrigerant shall be classified as Class 3 if the refrigerant meets both of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60°C) and 101.3 kPa (14.7 psia).

2. Has an LFL  $\leq 0.0062$  lb/ft3 (0.10 kg/m3) (see Section  $\frac{6.1.3.4}{6.1.3.5}$  if the refrigerant has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]) or it has a heat of combustion that is  $\geq 8169$  Btu/lb (19,000 kJ/kg).

b. The WCF of a refrigerant blend shall be classified as Class 3 if it meets both of the following conditions:

1. Exhibits flame propagation when tested at 140°F (60°C) and 101.3 kPa (14.7 psia).

2. Has an LFL  $\leq 0.0062 \text{ lb/ft}^3$  (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.4 6.1.3.5 if the refrigerant has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]) or it has a heat of combustion that is  $\geq 8169 \text{ Btu/lb}$  (19,000 kJ/kg).

c. The WCFF of a refrigerant blend shall be classified as Class 3 if it meets both of the following conditions:

1. Exhibits flame propagation when tested at 60.0°C (140°F) and 101.3 kPa (14.7 psia).

2. Has an LFL  $\leq 0.0062$  lb/ft<sup>3</sup> (0.10 kg/m<sup>3</sup>) (see Section 6.1.3.4 6.1.3.5 if the refrigerant has no LFL at 73.4°F [23.0°C] and 14.7 psia [101.3 kPa]) or it has a heat of combustion that is  $\geq 8169$  Btu/lb (19,000 kJ/kg).

**6.1.3.4 6.1.3.5** For <u>Class 2L</u>, Class 2 or Class 3 refrigerants or refrigerant blends, the LFL shall be determined. For those <u>Class 2L</u>, Class 2 or Class 3 refrigerants or refrigerant blends that show no flame propagation when tested at 73.4°F (23.0°C) and 14.7 psia (101.3 kPa) (i.e., no LFL), an elevated temperature flame limit at 140°F (60°C) (ETFL<sub>60</sub>) shall be used in lieu of the LFL for determining their flammability classifications.

**6.1.3.5** <u>6.1.3.6</u> The heat of combustion shall be calculated for conditions of  $77^{\circ}F(25^{\circ}C)$  and 14.7 psia (101.3 kPa).

Class	Single-Component Refrigerant	WCF of a Refrigerant Blend	WCFF of a Refrigerant Blend
1	No flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	No flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	No flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)
<u>2L</u>	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)
	and	and	and
	$LFL^a > 0.0062 \ lb/ft^3 \ (0.10 \ kg/m^3)$	$LFL^{a} > 0.0062 \text{ lb/ft}^{3} (0.10 \text{ kg/m}^{3})$	$LFL^{a} > 0.0062 \text{ lb/ft}^{3} (0.10 \text{ kg/m}^{3})$
	and	and	and
	heat of combustion <8169 Btu/lb (19,000 kJ/kg)	heat of combustion <8169 Btu/lb (19,000 kJ/kg)	heat of combustion <8169 Btu/lb (19,000 kJ/kg)
	and	and	and
_	$\frac{\text{burning velocity} \le 3.9 \text{ in/s (10 cm/s) when}}{\text{tested at } 73.4^{\circ}\text{F} (23^{\circ}\text{C}), 14.7 \text{ psia (101.3}}{\text{kPa) in dry air}}$	burning velocity $\leq 3.9$ in/s (10 cm/s) when tested at 73.4°F (23°C) and 14.7 psia (101.3 kPa) in dry air	$\frac{\text{burning velocity} \le 3.9 \text{ in/s (10 cm/s)}}{\text{when tested at 73.4°F (23°C) and 14.7}}$ $\frac{101.3 \text{ kPa}}{\text{psia (101.3 kPa) in dry air}}$
2	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)
	and	and	and
	$LFL^a > 0.0062 \ lb/ft^3 \ (0.10 \ kg/m^3)$	$LFL^a > 0.0062 \ lb/ft^3 \ (0.10 \ kg/m^3)$	$LFL^a > 0.0062 \ lb/ft^3 \ (0.10 \ kg/m^3)$
	and	and	and
	heat of combustion <8169 Btu/lb (19,000 kJ/kg)	heat of combustion <8169 Btu/lb (19,000 kJ/kg)	heat of combustion <8169 Btu/lb (19,000 kJ/kg)
3	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)	Flame propagation when tested at 140°F (60°C) and 14.7 psia (101.3 kPa)
	and	and	and
	$LFL^a \! \le \! 0.0062 \ lb/ft^3 \ (0.10 \ kg/m^3)$	$LFL^{a} \leq 0.0062 \ lb/ft^{3} \ (0.10 \ kg/m^{3})$	$LFL^a \le 0.0062 \ lb/ft^3 \ (0.10 \ kg/m^3)$
	or	or	or
	heat of combustion $\geq$ 8169 Btu/lb (19,000 kJ/kg)	heat of combustion $\ge 8169$ Btu/lb (19,000 kJ/kg)	heat of combustion $\geq$ 8169 Btu/lb (19,000 kJ/kg)

a. Lower flammability limit (LFL) is determined at ambient temperature and pressure. If an LFL does not exist at 73.4°F (23.0°C) and 14.7 psia (101.3 kPa), refer to Section 6.1.3.4 6.1.3.5.

**6.1.4 Matrix Diagram of Safety Group Classification System.** The toxicity and flammability classifications described in Sections 6.1.1, 6.1.2, and 6.1.3 yield sixeight separate safety group classifications (A1, <u>A2L</u>, A2,

A3, B1, <u>B2L</u>, B2, and B3)-and two subclasses (A2L and B2L) for refrigerants. These safety group classifications are represented by the matrix shown in Figure 6.1.4.



\* A2L and B2L are lower flammability refrigerants with a maximum burning velocity of ≤3.9 in./s (10 cm/s).

				$\rightarrow$
			Lower Toxicity	Higher Toxicity
≤⊣	I	No Flame Propagation	A1	B1
		Lower Flammability	A2L	B2L
ASIN( ABILI		Flammable	A2	B2
տ Է	↑	Higher Flammability	A3	B3

#### SAFETY GROUP

#### **INCREASING TOXICITY**

Figure 6.1.4 Refrigerant safety group Safety Group classification.

**6.1.5 Safety Classification of Refrigerant Blends.** Blends, whether zeotropic or azeotropic, whose flammability and/or toxicity characteristics may change as the composition changes during fractionation, shall be assigned a safety group classification based on the worst case of fractionation. This classification shall be determined according to the same criteria as that for a single-compound refrigerant.

**6.2 Other Standards.** This The safety group classification in accordance with Section 6.1 is to be used in conjunction with other relevant safety standards, such as ANSI/ASHRAE Standard 15, Safety Standard for Refrigeration Systems.

#### 8. REFRIGERANT CLASSIFICATIONS

Refrigerants are assigned the <u>safety group</u> classifications indicated in Tables 4-1 and 4-2. Toxicity and flammability data used to determine RCL values are summarized in Informative Appendix E.

#### 9. APPLICATION INSTRUCTIONS

This section identifies requirements to apply for designations and safety group classifications for refrigerants, including blends, in addenda or revisions to the standard.

#### 9.1 Eligibility

**9.1.1 Applicants.** Any interested party may request designations and safety group classifications for refrigerants. Applicants may be individuals, organizations, businesses, or government agencies. A primary contact shall be identified for groups of individuals, organizations, businesses, or agencies. Neither the individuals nor primary contacts need be members of ASHRAE.

#### 9.1.6 Blends

**9.1.6.1 Components.** The components of refrigerant blends must be individually classified before safety group classifications will be assigned to blends containing them. Applications for designation and classification of blends, therefore, shall be accompanied or preceded by applications for all components not yet classified in this standard.

**9.1.6.2 Single Application.** Designations, formulation tolerances, and safety group classifications (both as formulated and for the worst case of fractionation) shall be requested in a single application for blends. None of these will be assigned separately. Revisions of these items may be requested separately.

**9.3 Cover.** The cover shall identify the applicant and primary contact, the refrigerant in accordance with Section 9.5.1, and the requested action. Requested actions may include assignment or revision of a designation, safety group classification, or—for blends—formulation tolerance. Commercial and trade names for refrigerants shall not be used on the cover.

**9.7.2 Burning Velocity Information (optional).** Applications seeking an assignment of <u>Class</u> 2L shall include the following:

a. A full description of the test method employed

b. Results of standards testing with the specified test approach to ensure agreement with accepted values:

1. Burning velocity for R-32 (acceptable range is  $6.7 \pm 0.7$  cm/s) and burning velocity for R-152a (acceptable range is  $23.0 \pm 2.3$  cm/s)

2. Other evidence supporting the accuracy of the method against accepted burning velocity values for other Class 2 and Class 2L refrigerants above and below 10 cm/s

c. Duplicate test results from the LFL to at least 125% of the stoichiometric concentration

#### NORMATIVE APPENDIX B DETAILS OF TESTING—FLAMMABILITY B1. FLAMMABILITY TESTING

Flammability tests shall be conducted in accordance with ASTM E681<sup>6</sup>. For classification of Class 2, <u>Class 2L</u>, or Class 1 materials, testing shall be in a nominal 0.424 ft<sup>3</sup> (12 L) spherical glass flask (see Figure B1-1).

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## DRAFT

#### BSR/RESNET/ICC 301-2014 Addendum G-201x, Solid State Lighting

Modify the following Sections:

#### **3.2 Definitions**

**Qualifying** <u>Tier II</u> Light Fixture – A light fixture located in a Qualifying Light Fixture Location that contains lamps/light bulbs with an average luminous efficacy equal to or greater than  $\frac{50}{80}$  lumens/watt or an outdoor light fixture that is controlled by a photocell or an indoor fixture controlled by a motion sensor.

*Qualifying Tier I Light Fixture* – A light fixture located in a Qualifying Light Fixture Location that contains lamps/light bulbs with an average luminous efficacy equal to or greater than 50 lumens/watt and less than 80 lumens/watt.

*Qualifying Light Fixture Locations* – For the purposes of rating, those light fixtures located in kitchens, dining rooms, living rooms, family rooms/dens, bathrooms, hallways, stairways, entrances, bedrooms, garage, utility rooms, home offices, and all outdoor fixtures mounted on a building or pole. This excludes plug-in lamps, closets, unfinished basements, and landscape lighting.

#### 4.2 Energy Rating Reference Home and Rated Home Configuration

**4.2.2.5.2.2. Interior Lighting.** Interior lighting annual energy use in the Rated Home shall be determined in accordance with Equation 4.2-2:

<del>kWh/y = 0.8*[(4 - 3*qFF<sub>IL</sub>)/3.7]*(455 + 0.8*CFA)</del>	
+ 0.2*(455 + 0.8*CFA)	<del>(Eq 4.2-2)</del>
$\underline{\mathbf{kWh/y}} = \mathbf{0.9/0.925} * (455 + 0.8 * \mathbf{CFA})$	
$ + [(1 - FFII_{IL} - FFI_{IL}) + FFI_{IL} + 15/60 + FFII_{IL} + 15/90] $	
+ 0.1*(455 + 0.8*CFA)	<u>(Eq 4.2-2)<sup>±</sup></u>

where:

CFA = Conditioned Floor Area

 $qFFI_{IL}$  = The ratio of the interior <u>Tier I</u> Qualifying Light Fixtures to all interior light fixtures in Qualifying Light Fixture Locations.

<sup>&</sup>lt;sup>+</sup><u>(Informative note) When FFI<sub>IL</sub> = 0.10 (10%) and FFII<sub>IL</sub> = 0, the equation reduces to the standard interior lighting equation of: kWh/y = 455 + 0.8\*CFA.</u>

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 $\frac{\text{FFII}_{\text{IL}} = \text{The ratio of the interior Tier II Qualifying Light Fixtures to all interior light}}{\text{fixtures in Qualifying Light Fixture Locations.}}$ 

For rating purposes, the Rated Home shall not have  $qFF_{IL}$  less than 0.10 (10%).<sup>2</sup>

For the purpose of adjusting the annual interior lighting energy consumption for calculating the rating,  $EUL_{LA}$  shall be adjusted by  $\Delta EUL_{IL}$ , which shall be calculated as the annual interior lighting energy use derived by the procedures in this section minus the annual interior lighting energy use derived for the Energy Rating Reference Home in Section 4.2.2.5.1, converted to MBtu/y, where MBtu/y = (kWh/y)/293.

For interior lighting, internal gains in the Rated Home shall be modified by 100% of the interior lighting  $\Delta EUL_{IL}$  converted to Btu/day as follows:  $\Delta EUL_{IL} * 10^6 / 365$ .

**4.2.2.5.2.3. Exterior Lighting.** Exterior lighting annual energy use in the Rated Home shall be determined in accordance with Equation 4.2-3:

$kWh/y = (100 + 0.05 * CFA) * [(1 - FFI_{EL} - FFII_{EL})]$	
+ 0.25 <u>15/60</u> *(100 + 0 .05*CFA)*FF <u>I</u> <sub>EL</sub>	
<u>+ 15/90*(100 + 0.05*CFA)*FFII<sub>EL</sub>]</u>	(Eq 4.2-3)

where

CFA = Conditioned Floor Area

 $FFI_{EL}$  = Fraction of exterior fixtures that are <u>Tier I</u> Qualifying Light Fixtures <u>FFII<sub>EL</sub></u> = Fraction of exterior fixtures that are <u>Tier II</u> Qualifying Light Fixtures

For the purpose of adjusting the annual exterior lighting energy consumption for calculating the rating,  $EUL_{LA}$  shall be adjusted by  $\Delta EUL_{EL}$ , which shall be calculated as the annual exterior lighting energy use derived by the procedures in this section minus the annual exterior lighting energy use derived for the Energy Rating Reference Home in Section 4.2.2.5.1, converted to MBtu/y, where MBtu/y = (kWh/y)/293.

Internal gains in the Rated Home shall not be modified as a result of reductions in exterior lighting energy use.

**4.2.2.5.2.4. Garage Lighting.** For Rated Homes with garages, garage annual lighting energy use in the Rated Home shall be determined in accordance with Equation 4.2-4:

 $kWh = 100*[(1 - FFI_{GL} - FFII_{GL}) + 2515/60*FFI_{GL} + 15/90*FFII_{GL}](Eq 4.2-4)$ where:

 $FFI_{GL}$  = Fraction of garage fixtures that are <u>Tier I</u> Qualifying Light Fixtures <u>FFII<sub>GL</sub></u> = Fraction of garage fixtures that are Tier II Qualifying Light Fixtures

<sup>&</sup>lt;sup>2</sup> (Informative note) When  $qFFI_{IL} = 0.10 (10\%)$  and  $FFII_{IL} = 0$ , the above equation reduces to the standard interior lighting equation of: kWh/y = 455 + 0.8\*CFA.

For the purpose of adjusting the annual garage lighting energy consumption for calculating the rating,  $EUL_{LA}$  shall be adjusted by  $\Delta EUL_{GL}$ , which shall be calculated as the annual garage lighting energy use derived by the procedures in this section minus the annual garage lighting energy use derived for the Energy Rating Reference Home in Section 4.2.2.5.1, 100 kWh/y, converted to MBtu/y, where MBtu/y = (kWh/y)/293.

Internal gains in the Rated Home shall not be modified as a result of reductions in garage lighting energy use.

#### BSR/UL 62841-2-9, Standard for Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery – Safety – Part 2-9: Particular **Requirements For Hand-Held Tappers And Threaders**

#### 18.8 Replacement of Table 4:

2	ement of Table 4:		
	Table 4 – Required perform	ance levels	UL
	Type and purpose of SCF	Minimum Performance Level (PL)	om
	Power switch - prevent unwanted switch-on for tappers	а	
	Power switch - prevent unwanted switch-on for threaders	а	
	Power switch - provide desired switch-off for tappers	b	
	Power switch - provide desired switch-off for threaders	с	+55
	Provide desired direction of rotation	Not a SCF	m
	Any electronic control to pass the test of 18.3	Not a SCF	
	Any speed limiting device	Not a SCF	<b>Q</b>
	Prevent exceeding thermal limits as in Clause 18	а	l ► Ť
	Prevent self-resetting as required in 23.3 for tappers	a	

#### Table 4 – Required performance levels

K.18.8 Replacement of Table 4:



Table 4 – Required performance levels

Type and purpose of SCF	Minimum performance level (PL)
Power switch - prevent unwanted switch-on for tappers	a
Power switch - prevent unwanted switch-on for threaders	a
Power switch - provide desired switch-off for tappers	a
Power switch - provide desired switch-off for threaders	С
Provide desired direction of rotation	Not a SCF
Any electronic control to pass the test of 18.3	Not a SCF
Any speed limiting device	Not a SCF
Prevent exceeding thermal limits as in Clause 18	а
Prevent self resetting as required in 23.3 for tappers	a

ut convitanted material Not all

#### BSR/UL 66, Standard for Safety for Fixture Wire

#### PROPOSAL

19.1 Finished fixture wire Types TFN and TFFN shall be capable of having the nylon jacket not crack when specimens of the finished wire are aged and wound onto a mandrel as described in Cracking of Nylon Covering on Coaxial-Cable Members of Elevator Cables or of Nylon Jacket on Types TFN, TFFN, a steria s. a finished and SPT-1 and of Insulated Conductors in Service Cords, Test, Section 1540 of UL 1581. The temperature of the oven and duration of the aging are to be the same as for the insulation material over which the nylon is used. The mandrel size shall be the same as the outside diameter of the finished wire. BSR/UL 558, Standard for Industrial Trucks, Internal Combustion Engine-Powered

1. Revision to the clearance requirements for fuel lines and exhaust- and electricalsystem parts

#### PROPOSAL

11.2A.2.6 A fuel line shall be supported to reduce the likelihood of chafing and to

Exception: If it can be demonstrated that the fuel lines and wiring are sufficiently on the supported to prevent the clearance from being reduced to less than 1-1/2 inch are 2.7mm), the clearance between fuel lines and electrical success. J. cominant internation of the second second

<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header> Rubber Properties in and Thermoplastic Elastomers - Tension, ASTM D 412 (ISO 1798

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

#### 1. Proposal to add the option of grease type seals of parts not subject to flexing

#### 48 Test for Reliability of Parts Not Subject to Flexing

48.1 To determine acceptability in accordance with the Exception to 45.3, a material, used for a gasket, a diaphragm, a seal, or the like shall have the physical properties as specified in Table 48.1 before and after the accelerated aging specified in Table 48.2. The material shall not harden, deform, melt, or otherwise deteriorate to a degree that will adversely affect the sealing properties.

Exception No. 1: A material of a component not under compression need not be subjected to the compression set requirements.

Exception No. 2: A material that has been investigated in accordance with 48.5 may have physical properties other than as specified in 48.1.

Exception No. 3: A noncomposite material that has been found to comply with the requirements in Table 4.1 of the Standard for Gaskets and Seals, UL 157, and that complies with the minimum acceptable elongation, tensile strength, set, and compression set after aging as specified in Table 48.1 is considered in compliance with these requirements.

Exception No. 4: Gaskets and seals used only for the environmental rating of the pump that comply with the requirements for gaskets in the Standard for Enclosures for Electrical Equipment, Environmental Considerations, UL 50E are considered in compliance with this requirement.

Exception No. <u>5</u>: <u>Grease type gaskets and seals used only for the environmental rating</u> <u>of the pump that comply with the requirements in 48.6.</u>

48.6 Grease type seal materials used for environmental ratings of pumps shall have the following parameters:

a) National Lubricating Grease Institute (NLGI) Grade 2 or 3;

b) Dropping Point per the Standard Test Method for Dropping Point of Lubricating Grease Over Wide Temperature Range, ASTM D2265 50C higher than the maximum service temperature of the material:

c) The Standard Test Methods for Cone Penetration of Lubricating Grease, ASTM D217 percent change from 60 strokes to 100000, no more than 30%;

<u>d)</u> The Standard Test Method for Determination of Corrosion-Preventive Properties of Lubricating Greases Under Dynamic Wet Conditions (Emcor Test), ASTM D6138 (EMCOR Corrosion) rating 0, 1, or 2; and

The Standard Test Method for Determining the Water Washout Characteristics of e) Lubricating Greases, ASTM D1264 water washout rating less no more than 5%.

#### 2. Proposal to clarify button or coin cell batteries of lithium technologies requirements

35A.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies of a second sec Technologies, UL 4200A, if the appliance or any accessory:

Is intended for use with one or more single cell batteries having adiameter of 32 a) mm (1.25 in) maximum with a diameter greater than its height; and Withou

b) The appliance is intended for household use.

Landi dandi tandi Exception: UL 4200A is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and is not referenced in instructions

#### BSR/UL 924, Standard for Safety for Emergency Lighting and Power Equipment

#### PROPOSAL

#### 1. Updating Emergency Luminaires with Flexible Cord Supply Connections

18.1.3 Flexible cord for connection to the supply circuit is permitted on pendant, and high bay, or other luminaires where the intended application is specifically identified as a permitted use of flexible cord in accordance with Subsection 400.10 7(A)(1) or (A)(8) of NFPA 70 (2017). From

#### 2. Restricting replacement of individual batteries and cells

22.8 Battery packs shall not permit individual batteries or cells to be replaced, in order avoid mixing new and old batteries that can create voltage imbalances within the cells that contain individually replaceable batteries shall not utilize cells of standard sizes (specifically AAA, AA, Sub-C, C, D, and 9V transistor batteries). Standard cell sizes can be utilized in packs that cannot be interchanged with individual cells. Packs shall not connect using standard cell connections such as button/spring connections or 9V transistor.

22.11 Equipment with batteries shall be marked with battery replacement information per 73.1.20.

3. Exempting certain equipment from the Normal Operation Test extended ambient test conditions

47.5 Equipment that is rated for use below 2006(68 F) shall be subjected to testing per 47.2, 47.3, and 47.4 while maintained in an ambient 5°C (9°F) lower than that rating. Equipment that is rated for use above 30°C (86°F) shall be subject to testing per this section while maintained at an ambient 5°C higher than that rating. Equipment r ated for use in from 20 - 30°C (68 - 86°F) shall be tested in a 25℃ (77F) ambient.

Exception: Equipment operating below the risk of electric shock voltage limit (see 4.47) and not incorporating rechargeable batteries intended to supply emergency power need only be subjected to the extended ambient range testing of 47.5 when rated for use below 0 C (32 F) or above 55 C (131 F).

4. Revising to use the battery discharge test using current measurement rather than light output

48.1 Environment storage batteriesy terminals shall retain sufficient energy capacity at least 87.5 percent nominal voltage while supplying its rated load when tested in accordance with this section. The rated load shall be as marked per 71.1(b)(1) or 71.1(b)(2), as applicable. Compliance shall be determined per method (a) or (b):

a) Battery terminal voltage shall be no less than 87.5% of nominal after the sequence described in 48.6.

Lumen output shall be no less than 60% of the initial lumen output level after the sequence described in 48.6, as described in 48.3.

Exception: As an alternative to measuring battery terminal voltage, the lumen output level of emergency lighting equipment with integral batteries, or unit equipment, shall maintain at least 60 percent of the initial illumination level when tested in accordance with 48.3.

<text><text><text><text><text><text><text> 48.3 Where ILumen output measurements are to be made, in accordance with the Exception to 48.1, the tests are to be performed in a completely darkened room with dark colored walls. The light meter used is to be color and cosine corrected. The light meter is to be located in a plane that is perpendicular to the light source, and at the same distance from the light source for the 840M

Exception: For an LED luminaire or LED unit equipment, the current supplied to the LED array can be used as an alternative to the light output measurement of 48.6(i), as follows: prior permit

Using an adjustable current source, record the minimum current needed to achieve 60% light output (measuring at the same location and distance as in step (a) of this exception).

Measure the current supplied to the LEDs after step (48.6()). Current equal to or greater

BSR/UL 1081, Standard for Safety for Swimming Pool Pumps, Filters, and Chlorinators

1. Proposal to clarify button or coin cell batteries of lithium technologies requirements

#### 6.6 Button or coin cell batteries of lithium technologies

ontromut 6.6.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory:

a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height, and

b) The appliance is intended for household use.

Exception: UL 4200A is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and is not referenced in instructions and markings.

# 25.3 Button or coin cell batteries of lithium technologies

25.3.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory:

Is intended for use with one or more single cell batteries having a diameter of 32 a) mm (1.25 in) maximum with a diameter greater than its height; and

The appliance is intended for household use. UL COPYIE

BSR/UL 1261, Standard for Safety for Electric Water Heaters for Pools and Tubs

1. Proposal to clarify button or coin cell batteries of lithium technologies requirements

#### 4.12 Button or coin cell batteries of lithium technologies

FromUl 4.12.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory:

a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height; and

b) The appliance is intended for household use.

Exception: UL 4200A is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and s not referenced in instructions and markings.

# and markings. 5.7 Button or coin cell batteries of lithium technologies

5.7.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200April the appliance or any accessory:

Is intended for use with one or more single cell batteries having a diameter of 32 a) mm (1.25 in) maximum with a diameter greater than its height; and

The appliance is intended for household use. UL COPYIENTS

#### BSR/UL 1563, Standard for Safety for Electric Spas, Equipment Assemblies, and **Associated Equipment**

1. Proposal to clarify button or coin cell batteries of lithium technologies requirements

#### 7A.5 Button or coin cell batteries of lithium technologies

lon from UL 7A.5.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory:

a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height, and

b) The appliance is intended for household use.

Exception: UL 4200A is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and is not referenced in instructions and markings.

# 37.9 Button or coin cell batteries of lithium technologies

37.9.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200Å, if the appliance or any accessory:

Is intended for use with one or more single cell batteries having a diameter of 32 a) mm (1.25 in) maximum with a diameter greater than its height; and

The appliance is intended for household use. UL COPYTE

BSR/UL 1951, Standard for Safety for Electric Plumbing Accessories

1. Proposal to clarify button or coin cell batteries of lithium technologies requirements

#### 5.3A Button or coin cell batteries of lithium technologies

FromUt 5.3A.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200A, if the appliance or any accessory:

a) Is intended for use with one or more single cell batteries having a diameter of 32 mm (1.25 in) maximum with a diameter greater than its height; and

b) The appliance is intended for household use.

Exception: UL 4200A is not applicable to appliances and accessories intended for use where the battery is not intended to be replaced and s not referenced in instructions and markings.

# and markings. 6.8 Button or coin cell batteries of lithium technologies

6.8.1 The battery compartment of an appliance or any accessory, such as a wireless control, incorporating one or more coin cell batteries of lithium technologies shall comply with the Standard for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies, UL 4200April the appliance or any accessory:

Is intended for use with one or more single cell batteries having a diameter of 32 a) mm (1.25 in) maximum with a diameter greater than its height; and

The appliance is intended for household use. UL COPYTER C