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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: January 7, 2018

## IES (Illuminating Engineering Society)

## Revision

BSR/IES RP-8-201x, Roadway Lighting (revision of ANSI/IES RP-8-2014) Changes to Section 3.9 Mesopic considerations; various formula corrections.

Click here to view these changes in full

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

## **NSF (NSF International)**

## Revision

BSR/NSF 50-201x (i133r1), Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF 50-2016)

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

### Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Jason Snider, (734) 418 -6660, jsnider@nsf.org

## **NSF (NSF International)**

#### Revision

BSR/NSF 350-201x (i25r1), Onsite residential and commercial water reuse treatment systems (revision of ANSI/NSF 350-201x (i25r1))

This Standard contains minimum requirements for onsite residential and commercial water treatment systems.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Jason Snider, (734) 418 -6660, jsnider@nsf.org

## UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 197-201x, Standard for Commercial Electric Cooking Appliances (revision of ANSI/UL 197-2014)

(1) Electronic media instruction; (2) Countertop fryers.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Amy Walker, (847) 664 -2023, Amy.K.Walker@ul.com

## UL (Underwriters Laboratories, Inc.)

## Revision

BSR/UL 985-201x, Standard for Safety for Household Fire Warning System Units (revision of ANSI/UL 985-2017)

(1) Alarm verification labeling; (2) Revision to Charging Current Test.

Click here to view these changes in full

Send comments (with copy to psa@ansi.org) to: Griff Edwards, 919 549 -0956, griff.edwards@ul.com

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

BSR/UL 1449-201x, Standard for Safety for Surge Protective Devices (revision of ANSI/UL 1449-2017)

(1) Allowance for lower power factors during intermediate current testing; (2) Addition of hybrid-type SPD definition and testing.

Click here to view these changes in full

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

## Comment Deadline: January 22, 2018

## AAFS (American Academy of Forensic Sciences)

## New Standard

BSR/ASB Std 017-201x, Standard Practices for Measurement Traceability in Forensic Toxicology (new standard)

This document was developed to provide guidance on minimum requirements for establishing measurement traceability in Forensic Toxicology laboratories. The fundamental reason for establishing traceability of a measurement is to ensure confidence and reliability in forensic toxicological test results.

Single copy price: Free

Obtain an electronic copy from: http://asb.aafs.org/

Document will be provided electronically on AAFS Standards Board website free of charge.

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

## AAFS (American Academy of Forensic Sciences)

### New Standard

BSR/ASB Std 020-201x, Standards for Validation Studies of DNA Mixtures for the Development and Verification of a Laboratory Mixture Interpretation Protocol (new standard)

This document is designed to provide direction and guidance to laboratories for the development of DNA mixture interpretation protocols that consistently produce reliable and reproducible interpretations and conclusions, which are supported by internal validation data.

#### Single copy price: Free

Obtain an electronic copy from: http://asb.aafs.org/

Document will be provided electronically on AAFS Standards Board website free of charge.

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

## APA (APA - The Engineered Wood Association)

### Revision

BSR/APA PRG 320-201x, Standard for Performance-Rated Cross-Laminated Timber (revision of ANSI/APA PRG 320-2017)

This standard covers manufacturing, qualification, quality assurance, design, and installation requirements for performance-rated cross-laminated timber products.

Single copy price: Free

Obtain an electronic copy from: borjen.yeh@apawood.org

Order from: Borjen Yeh, (253) 620-7467, borjen.yeh@apawood.org

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

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

#### Revision

BSR/ASME BPVC Section III-201x, Rules for Construction of Nuclear Facility Components (revision of ANSI/ASME BPVC Section III-2017)

The rules of this standard constitute requirements for the design, construction, stamping, and overpressure protection of items used in nuclear power plants and other nuclear facilities. This standard consists of the following divisions:

(a) Division 1. Metallic vessels, heat exchangers, storage tanks, piping systems, pumps, valves, core support structures, supports, and similar items;

(b) Division 2. Concrete containment vessels with metallic liners;

(c) Division 3. Containment Systems for spent nuclear fuel and high-level radioactive material;

(d) Division 4. Components for fusion devices; and

(e) Division 5. High-temperature reactors, vessels, storage tanks, piping, pumps, valves, core support structures, and non-metallic core components for use in nuclear power plants and other nuclear facilities.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

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

Send comments (with copy to psa@ansi.org) to: Allyson Byk, (212) 591 -8521, byka@asme.org

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

#### **New Standard**

BSR/ASTM E0927-201x, Specification for Solar Simulation for Photovoltaic Testing (new standard)

http://www.astm.org/Standards/E0927.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E0948-201x, Test Method for Electrical Performance of Photovoltaic Cells Using Reference Cells Under Simulated Sunlight (new standard)

http://www.astm.org/Standards/E0948.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E0973-201x, Test Method for Determination of the Spectral Mismatch Parameter Between a Photovoltaic Device and a Photovoltaic Reference Cell (new standard)

http://www.astm.org/Standards/E0973.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

## ASTM (ASTM International)

#### New Standard

BSR/ASTM E1021-201x, Test Method for Spectral Responsivity Measurements of Photovoltaic Devices (new standard)

http://www.astm.org/Standards/E1021.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E1036-201x, Test Methods for Electrical Performance of Nonconcentrator Terrestrial Photovoltaic Modules and Arrays Using Reference Cells (new standard)

http://www.astm.org/Standards/E1036.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E1038-201x, Test Method for Determining Resistance of Photovoltaic Modules to Hail by Impact with Propelled Ice Balls (new standard)

http://www.astm.org/Standards/E1038.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E1040-201x, Specification for Physical Characteristics of Nonconcentrator Terrestrial Photovoltaic Reference Cells (new standard)

http://www.astm.org/Standards/E1040.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E1125-201x, Test Method for Calibration of Primary Non-Concentrator Terrestrial Photovoltaic Reference Cells Using a Tabular Spectrum (new standard)

http://www.astm.org/Standards/E1125.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E1143-201x, Test Method for Determining the Linearity of a Photovoltaic Device Parameter with Respect to a Test Parameter (new standard)

http://www.astm.org/Standards/E1143.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E1171-201x, Test Methods for Photovoltaic Modules in Cyclic Temperature and Humidity Environments (new standard)

http://www.astm.org/Standards/E1171.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E1362-201x, Test Methods for Calibration of Non-Concentrator Photovoltaic Non-Primary Reference Cells (new standard)

http://www.astm.org/Standards/E1362.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E1462-201x, Test Methods for Insulation Integrity and Ground Path Continuity of Photovoltaic Modules (new standard)

http://www.astm.org/Standards/E1462.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E1597-201x, Test Method for Saltwater Pressure Immersion and Temperature Testing of Photovoltaic Modules for Marine Environments (new standard)

http://www.astm.org/Standards/E1597.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

## ASTM (ASTM International)

#### New Standard

BSR/ASTM E1799-201x, Practice for Visual Inspections of Photovoltaic Modules (new standard) http://www.astm.org/Standards/E1799.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E1802-201x, Test Methods for Wet Insulation Integrity Testing of Photovoltaic Modules (new standard) http://www.astm.org/Standards/E1802.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E1830-201x, Test Methods for Determining Mechanical Integrity of Photovoltaic Modules (new standard) http://www.astm.org/Standards/E1830.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

New Standard

BSR/ASTM E2047-201x, Test Method for Wet Insulation Integrity Testing of Photovoltaic Arrays (new standard) http://www.astm.org/Standards/E2047.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E2236-201x, Test Methods for Measurement of Electrical Performance and Spectral Response of Nonconcentrator Multijunction Photovoltaic Cells and Modules (new standard)

http://www.astm.org/Standards/E2236.htm

Single copy price: Free

- Obtain an electronic copy from: cleonard@astm.org
- Order from: accreditation@astm.org
- Send comments (with copy to psa@ansi.org) to: Same

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

#### New Standard

BSR/ASTM E2481-201x, Test Method for Hot Spot Protection Testing of Photovoltaic Modules (new standard)

http://www.astm.org/Standards/E2481.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E2527-201x, Test Method for Electrical Performance of Concentrator Terrestrial Photovoltaic Modules and Systems Under Natural Sunlight (new standard)

http://www.astm.org/Standards/E2527.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E2685-201x, Specification for Steel Blades Used with the Photovoltaic Module Surface Cut Test (new standard)

http://www.astm.org/Standards/E2685.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### New Standard

BSR/ASTM E2766-201x, Practice for Installation of Roof Mounted Photovoltaic Arrays on Steep-Slope Roofs (new standard) http://www.astm.org/Standards/E2766.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

### ASTM (ASTM International)

#### New Standard

BSR/ASTM E2848-201x, Test Method for Reporting Photovoltaic Non-Concentrator System Performance (new standard) http://www.astm.org/Standards/E2848.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

### ASTM (ASTM International)

#### New Standard

BSR/ASTM E2908-201x, Guide for Fire Prevention for Photovoltaic Panels, Modules, and Systems (new standard) http://www.astm.org/Standards/E2908.htm Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org

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

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E2939-201x, Practice for Determining Reporting Conditions and Expected Capacity for Photovoltaic Non-Concentrator Systems (new standard)

http://www.astm.org/Standards/E2939.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

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## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM E3006-201x, Practice for Ultraviolet Conditioning of Photovoltaic Modules or Mini-Modules Using a Fluorescent Ultraviolet (UV) Lamp Apparatus (new standard)

http://www.astm.org/Standards/E3006.htm

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

## **ASTM (ASTM International)**

## New Standard BSR/ASTM F1047-201x, Specification for Frying and Braising Pans, Tilting Type (new standard) http://www.astm.org/ANSI\_SA Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

## **ASTM (ASTM International)**

#### New Standard

BSR/ASTM WK23821-201x, Specification for Transportation Tunnel Structural Components and Passive Fire Protection Systems (new standard) http://www.astm.org/ANSI\_SA Single copy price: Free Obtain an electronic copy from: cleonard@astm.org Order from: accreditation@astm.org Send comments (with copy to psa@ansi.org) to: Same

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

#### Revision

BSR/ASTM E329-201x, Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection (revision of ANSI/ASTM E329 -2014)

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

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### Revision

BSR/ASTM E2659-201x, Practice for Certificate Programs (revision of ANSI/ASTM E2659-2017)

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

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

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

#### Revision

BSR/ASTM E2708-201x, Terminology for Accreditation and Certification (revision of ANSI/ASTM E2708-2017)

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

Single copy price: Free

Obtain an electronic copy from: cleonard@astm.org

Order from: accreditation@astm.org

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

### AWS (American Welding Society)

#### New Standard

BSR/AWS D16.6M/D16.6-201x, Specification for Robot Arc Welding Training and Testing Cell (new standard)

This document specifies the recommended design, integration, installation, and use of robotic arc welding systems used to train and certify operators and technicians under the AWS Certified Robotic Arc Welding (CRAW) program. Robotic and automatic arc welding systems consist of an arc welding power source, arc welding torches and accessories, robot/manipulator, shielding gas delivery system, welding electrode feeding equipment, welding circuit, communication control wiring, and system grounding. An example of a typical Robotic Arc Welding Cell is shown in Figure 1. This document assumes that the robot training and testing will utilize GMAW or FCAW processes

Single copy price: \$48.00

Obtain an electronic copy from: pportela@aws.org

Order from: Peter Portela, (800) 443-9353, pportela@aws.org

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

## AWS (American Welding Society)

#### Revision

BSR/AWS D16.1M/D16.1-201x, Specification for Robotic Arc Welding Safety (revision of ANSI/AWS D16.1M/D16.1-2004 (R2016))

The requirements of this standard apply to industrial robot systems that are used to perform the gas metal arc welding (GMAW), metal cored arc welding (MCAW), and flux cored arc welding (FCAW) processes. The purpose of this standard is to establish minimum safety requirements with respect to the design, manufacture, maintenance, and operation of arc welding robot systems and ancillary equipment. It is also designed to help identify and minimize hazards involved in maintaining, operating, and setting up of arc welding robot systems. This standard includes principles that may be applied to robotic systems with other arc welding processes.

Single copy price: \$48.00

Obtain an electronic copy from: pportela@aws.org

Order from: Peter Portela, (800) 443-9353, pportela@aws.org

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

## TAPPI (Technical Association of the Pulp and Paper Industry)

#### Reaffirmation

BSR/TAPPI T 464 om-2012 (R201x), Water vapor transmission rate of paper and paperboard at high temperature and humidity (reaffirmation of ANSI/TAPPI T 464 om-2012)

This method is for the gravimetric determination of the water vapor transmission rate (WVTR) of sheet materials at 37.8°C (100°F) with an atmosphere of 90% RH on one side and a desiccant on the other.

Single copy price: Free

Obtain an electronic copy from: standards@tappi.org

Order from: Laurence Womack, (770) 209-7276, standards@tappi.org

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

## UL (Underwriters Laboratories, Inc.)

#### Reaffirmation

BSR/UL 2202-2012 (R201x), Standard for Safety for Electric Vehicle (EV) Charging System Equipment (reaffirmation of ANSI/UL 2202-2012)

These requirements cover conductive charging system equipment intended to be supplied by a branch circuit of 600 volts or less for recharging the storage batteries in over-the-road electric vehicles (EV). The equipment includes off board and on board chargers. Off-board equipment may be considered for indoor use only or indoor/outdoor use. On board equipment is always considered outdoor use. Off board equipment is intended to be installed in accordance with the National Electrical Code, NFPA 70.

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: Patricia Sena, (919) 549 -1636, patricia.a.sena@ul.com

## UL (Underwriters Laboratories, Inc.)

#### Reaffirmation

BSR/UL 6142-2012 (R201X), Standard for Safety for Small Wind Turbine Systems (reaffirmation of ANSI/UL 6142-2012)

Reaffirmation of ANSI Approval for UL 6142.

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: Casey Granata, (919) 549 -1054, Casey.Granata@UL.Com

## **Comment Deadline: February 6, 2018**

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

## ASME (American Society of Mechanical Engineers)

### New Standard

BSR/ASME B89.1.14-200x, Calipers (new standard)

This standard is intended to provide the essential requirements for the specification, verification, and calibration of calipers, including vernier, dial, electronic digital, and specialty calipers.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

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

Send comments (with copy to psa@ansi.org) to: Remington Richmond, (212) 591-8404, richmondr@asme.org

## ASME (American Society of Mechanical Engineers)

## New Standard

BSR/ASME PTC 19.6-201x, Electrical Power Measurements (new standard) It is the purpose of this Standard to give instructions and guidance for the accurate determination of electrical power quantities that are commonly needed in support of the ASME Performance Test Codes.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

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

Send comments (with copy to psa@ansi.org) to: Donnie Alonzo, (212) 591 -7004, dalonzo@asme.org

## ASME (American Society of Mechanical Engineers)

## Revision

BSR/ASME A112.6.3-201x, Floor and Trench Drains (revision of ANSI/ASME A112.6.3-2016)

This Standard covers floor, area, adjustable floor, and trench drains that are used inside of, or outside and immediately adjacent to, building structures. This Standard specifies design requirements, definitions, nomenclature, outlet types and connections, grate opening areas, top-loading classifications, materials, and finishes.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

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

Send comments (with copy to psa@ansi.org) to: Angel Guzman, (212) 591 -8018, guzman@asme.org

## Projects Withdrawn from Consideration

An accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

## **API (American Petroleum Institute)**

BSR/API Spec 17E/ISO 13628-5-2010 (R201x), Specification for Subsea Umbilicals (reaffirmation of ANSI/API Spec 17E/ISO 13628-5-2010)

This part of ISO 13628 specifies requirements and gives recommendations for the design, material selection, manufacture, design verification, testing, installation and operation of umbilicals and associated ancillary equipment for the petroleum and natural gas industries.

Inquiries may be directed to Edmund Baniak, (202) 682-8135, baniake@api. org

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

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

## API (American Petroleum Institute)

ANSI/API Spec 17E/ISO 13628-5-2010, Specification for Subsea Umbilicals Questions may be directed to: Edmund Baniak, (202) 682-8135, baniake@api.org

## Correction

### BSR/NFSI B101.1-201x

The 11/24/2017 Standards Action Call for Comment notice for BSR/NFSI B101.1-201x (revision of ANSI/NFSI B101.1-2009) is hereby withdrawn from further consideration due to comments received during the PINS comment period.

Inquiries may be directed to: Russell Kendzior, National Floor Safety Institute (NFSI), (817) 749-1700, russk@nfsi.org.

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

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

#### IES (Illuminating Engineering Society)

Office:	120 Wall St. 17th Floor		
	New York, NY 10005		
Contact:	Patricia McGillicuddy		
Phone:	(212) 248-5000		
E-mail:	pmcgillicuddy@ies.org		

BSR/IES RP-8-201x, Roadway Lighting (revision of ANSI/IES RP-8 -2014)

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

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

Contact: Jason Snider

Phone: (734) 418-6660

E-mail: jsnider@nsf.org

BSR/NSF 50-201x (i133r1), Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (revision of ANSI/NSF 50-2016)

BSR/NSF 350-201x (i25r1), Onsite residential and commercial water reuse treatment systems (revision of ANSI/NSF 350-201x (i25r1))

#### SAWE (Society of Allied Weights Engineers)

Office:P.O. Box 60024, Terminal Annex<br/>Los Angeles, CA 90060Contact:Terri CrawfordPhone:(619) 544-8888Fax:(619) 544-3543E-mail:terri.husley-crawford@nassco.com

BSR/SAWE Standard M-4-201x, Vendor Weight Control for the Marine Industry (new standard)

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

Office: 929 W. Portobello Avenue

- Mesa, AZ 85210
- Contact: Jing Kwok

Phone: (602) 281-4497

- E-mail: jing.kwok@vita.com
- BSR/VITA 47.0-201x, Environments, Design and Construction, Safety, and Quality for Plug-In Modules Standard (new standard)
- BSR/VITA 47.1-201x, Common Requirements for Environments, Design and Construction, Safety, and Quality for VITA 47 Plug-In Modules Dot Standard (new standard)

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

## **Call for Committee Members**

## ASC O1 – Safety Requirements for Woodworking Machinery

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

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

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

# **Final Actions on American National Standards**

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

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

#### Reaffirmation

ANSI/ASAE EP302.4-AUG93 (R2017), Design and Construction of Surface Drainage Systems on Agricultural Lands in Humid Areas (reaffirmation of ANSI/ASAE EP302.4-AUG93 (R2013)): 11/30/2017

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

### Revision

\* ANSI/ASHRAE Standard 194-2017, Method of Test for Direct-Expansion Ground-Source Heat Pumps (revision of ANSI/ASHRAE Standard 194-2012): 12/1/2017

## AWC (American Wood Council)

### Revision

ANSI/AWC WFCM-2018, Wood Frame Construction Manual for Oneand Two-Family Dwellings (revision and redesignation of ANSI/AWC WFCM-2015): 12/5/2017

## AWWA (American Water Works Association)

#### Revision

ANSI/AWWA B510-2017, Carbon Dioxide (revision of ANSI/AWWA B510-2012): 11/30/2017

# BICSI (Building Industry Consulting Service International)

### New Standard

ANSI/BICSI 008-2018, Wireless Local Area Network (WLAN) Systems Design and Implementation (new standard): 12/4/2017

## CSA (CSA Group)

### New Standard

\* ANSI/CSA C22.2 No. 336-2018, Particular requirements for rechargeable battery-operated commercial robotic floor treatment machines with traction drives (new standard): 12/4/2017

## DASMA (Door and Access Systems Manufacturers Association)

#### Revision

\* ANSI/DASMA 108-2017, Standard Method for Testing Sectional Garage Doors and Rolling Doors: Determination of Structural Performance under Uniform Static Air Pressure Difference (revision of ANSI/DASMA 108-2012): 12/4/2017

# IEEE (Institute of Electrical and Electronics Engineers)

### New Standard

- ANSI/IEEE 524-2016, Guide to the Installation of Overhead Transmission Line Conductors (new standard): 12/4/2017
- ANSI/IEEE 1012-2016, Standard for System, Software and Hardware Verification and Validation (new standard): 12/4/2017

ANSI/IEEE 1881-2016, Standard Glossary of Stationary Battery Terminology (new standard): 12/4/2017

### Revision

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

### New National Adoption

- INCITS/ISO/IEC 9075-1:2016 [2017], 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]): 12/4/2017
- INCITS/ISO/IEC 9075-2:2016 [2017], 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] and INCITS/ISO/IEC 9075 -2:2011/Cor 1:2013 [2014]): 12/4/2017
- INCITS/ISO/IEC 9075-4:2016 [2017], 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]): 12/4/2017
- INCITS/ISO/IEC 9075-9:2016 [2017], 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] and INCITS/ISO/IEC 9075-9:2008/COR 1:2010 [2012]): 12/4/2017
- INCITS/ISO/IEC 9075-11:2016 [2017], 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]): 12/4/2017
- INCITS/ISO/IEC 9075-13:2016 [2017], 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] and INCITS/ISO/IEC 9075-13-2008/Cor 1 -2012): 12/5/2017
- INCITS/ISO/IEC 9075-14:2016 [2017], 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]): 12/5/2017
- INCITS/ISO/IEC 13249-1:2016 [2017], 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]): 12/5/2017
- INCITS/ISO/IEC 13249-3:2016 [2017], 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]): 12/4/2017
- INCITS/ISO/IEC 19776-1:2015 [2017], 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]): 12/4/2017

ANSI/IEEE 1647-2016, Standard for the Functional Verification Language e (revision of ANSI/IEEE 1647-2011): 11/30/2017

### Reaffirmation

- INCITS 434-2007 [R2017], Information technology Tenprint Capture Using BioAPI (reaffirmation of INCITS 434:2007 [R2012]): 12/4/2017
- INCITS 494-2012 [R2017], Information technology Role Based Access Control - Policy Enhanced (reaffirmation of INCITS 494 -2012): 12/4/2017
- INCITS/ISO/IEC 9796-2:2010 [R2017], Information technology -Security techniques - Digital signature schemes giving message recovery - Part 2: Integer factorization based mechanisms (reaffirmation of INCITS/ISO/IEC 9796-2:2010 [2012]): 12/5/2017
- INCITS/ISO/IEC 9797-2:2011 [R2017], Information technology -Security techniques - Message Authentication Codes (MACs) - Part
   2: Mechanisms using a dedicated hash-function (reaffirmation of INCITS/ISO/IEC 9797-2:2011 [2012]): 12/5/2017
- INCITS/ISO/IEC 9797-3:2011 [R2017], Information technology -Security techniques - Message Authentication Codes (MACs) - Part 3: Mechanisms using a universal hash-function (reaffirmation of INCITS/ISO/IEC 9797-3:2011 [2012]): 12/5/2017
- INCITS/ISO/IEC 9798-6:2010 [R2017], Information technology -Security techniques - Entity authentication - Part 6: Mechanisms using manual data transfer (reaffirmation of INCITS/ISO/IEC 9798 -6:2010 [2012]): 12/5/2017
- INCITS/ISO/IEC 11770-5:2011 [R2017], Information technology -Security techniques - Key management - Part 5: Group key management (reaffirmation of INCITS/ISO/IEC 11770-5:2011 [2012]): 12/5/2017
- INCITS/ISO/IEC 13888-2:2010 [R2017], Information technology -Security techniques - Non-repudiation - Part 2: Mechanisms using symmetric techniques (reaffirmation of INCITS/ISO/IEC 13888 -2:2010 [2012]): 12/5/2017
- INCITS/ISO/IEC 15408-1:2009 [R2017], Information technology -Security techniques - Evaluation criteria for IT security - Part 1: Introduction and general model (reaffirmation of INCITS/ISO/IEC 15408-1:2009 [2012]): 12/4/2017
- INCITS/ISO/IEC 15946-5:2009 [R2017], Information technology -Security techniques - Cryptographic techniques based on elliptic curves - Part 5: Elliptic curve generation (reaffirmation of INCITS/ISO/IEC 15946-5:2009 [2012]): 12/5/2017
- INCITS/ISO/IEC 18033-3:2010 [R2017], Information technology -Security techniques - Encryption algorithms - Part 3: Block ciphers (reaffirmation of INCITS/ISO/IEC 18033-3:2010 [2012]): 12/4/2017
- INCITS/ISO/IEC 19795-1:2006 [R2017], Information technology -Biometric performance testing and reporting - Part 1: Principles and framework (reaffirmation of INCITS/ISO/IEC 19795-1:2007 [R2012]): 12/4/2017
- INCITS/ISO/IEC 27033-3:2010 [R2017], Information technology -Security techniques - Network security - Part 3: Reference networking scenarios - Threats, design techniques and control issues (reaffirmation of INCITS/ISO/IEC 27033-3:2010 [2012]): 12/5/2017
- INCITS/ISO/IEC 29192-2:2012 [R2017], Information technology -Security techniques - Lightweight cryptography - Part 2: Block ciphers (reaffirmation of INCITS/ISO/IEC 29192-2:2012 [2012]): 12/4/2017
- INCITS/ISO/IEC 19792:2009 [R2017], Information technology -Security techniques - Security evaluation of biometrics (reaffirmation of INCITS/ISO/IEC 19792:2009 [2012]): 12/5/2017
- INCITS/ISO/IEC 24745:2011 [R2017], Information technology -Security techniques - Biometric information protection (reaffirmation of INCITS/ISO/IEC 24745:2011 [2012]): 12/5/2017
- INCITS/ISO/IEC 27007:2011 [R2017], Information technology -Security techniques - Guidelines for information security management systems auditing (reaffirmation of INCITS/ISO/IEC 27007:2011 [2012]): 12/5/2017

- INCITS/ISO/IEC 29100:2011 [R2017], Information technology -Security techniques - Privacy Framework (reaffirmation of INCITS/ISO/IEC 29100:2011 [2012]): 12/5/2017
- INCITS/ISO/IEC 29150:2011 [R2017], Information technology -Security techniques - Signcryption (reaffirmation of INCITS/ISO/IEC 29150:2011 [2012]): 12/4/2017

#### Withdrawal

INCITS/ISO/IEC 27005:2011 [2012], Information technology - Security techniques - Information security risk management (withdrawal of INCITS/ISO/IEC 27005:2011 [2012]): 12/5/2017

## **NSF (NSF International)**

### Revision

\* ANSI/NSF 350-2017 (i21r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2017): 11/28/2017

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

- \* ANSI/UL 506-2008 (R2017), Standard for Safety for Specialty Transformers (reaffirmation of ANSI/UL 506-2008 (R2012)): 11/29/2017
- ANSI/UL 5085-2-2012 (R2017), Standard for Safety for Low Voltage Transformers - Part 2: General Purpose Transformers (reaffirmation of ANSI/UL 5085-2-2012): 11/29/2017
- ANSI/UL 5085-3-2012 (R2017), Standard for Safety for Low Voltage Transformers - Part 3: Class 2 and Class 3 Transformers (reaffirmation of ANSI/UL 5085-3-2012): 11/29/2017

#### Revision

ANSI/UL 746B-2017, Standard for Safety for Polymeric Materials -Long Term Property Evaluations (revision of ANSI/UL 746B-2016): 11/30/2017

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

### New Standard

- ANSI/VITA 68.0-2017, VPX Compliance Channel Standard (new standard): 12/4/2017
- ANSI/VITA 68.1-2017, VPX Compliance Channel Fixed Signal Integrity Budget Standard (new standard): 12/4/2017
- ANSI/VITA 74.0-2017, Compliant System Small Form Factor Module Base Standard (new standard): 12/4/2017

## Correction

#### **Change in Project Intent**

#### ANSI/AWS A5.18/A5.18M-2017

In the July 21, 2017 issue of Standards Action, ANSI/AWS A5.18/A5.18M was incorrectly listed as a Reaffirmed standard. It is actually a New Standard and its designation has been changed to ANSI/AWS A5.18/A5.18M-2017.

# **Project Initiation Notification System (PINS)**

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

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. Use the following Public Document Library url to access PDF & EXCEL reports of approved & proposed ANS: List of Approved and Proposed ANS

Directly and materially affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

#### 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/ASME B36.10M-201x, Welded and Seamless Wrought Steel Pipe (revision of ANSI/ASME B36.10M-2015)

Stakeholders: Users, manufacturers, designers, consultants, and government agencies concerning pipe and pipelines.

Project Need: Revise the current standard to make it consistent with B16.11-2011 by adding data from Schedule 160 and Double Extra Strong (XXS) pipes for sizes NPS 1/8 (DN 6), NPS 1/4 (DN 8), and NPS 3/8 (DN 10).

This Standard covers the standardization of dimensions of welded and seamless wrought steel pipe for high or low temperatures and pressures.

## BSR/ASME B36.19M-201x, Stainless Steel Pipe (revision of ANSI/ASME B36.19M-2004 (R2015))

Stakeholders: Users, manufacturers, designers, consultants, and government agencies concerning pipe and pipelines.

Project Need: Revise the current standard to make it consistent with B16.11-2011 by updating some of the data on pipe sizes NPS 10 (DN 250) and NPS 12 (DN 300) for the outside diameters and plain end masses.

This Standard covers the standardization of dimensions of welded and seamless wrought stainless steel pipe for high or low temperatures and pressures.

#### ESTA (Entertainment Services and Technology Association)

Office:	630 Ninth Avenue Suite 609	
Contact:	Karl Ruling	
Fax:	(212) 244-1502	

E-mail: standards@esta.org

BSR E1.21-201x, Entertainment Technology - Temporary Structures Used for Technical Production of Outdoor Entertainment Events (revision of ANSI E1.21-2013)

Stakeholders: Entertainment event producers, event production companies, technicians, and performers.

Project Need: The standard is being opened for revision to clarify and reorganize OMP information, guidance, and content.

This document establishes a minimum level of design and performance parameters for the design, manufacturing, use, and maintenance of temporary ground-supported structures used in the production of outdoor entertainment events. The purpose of this guidance is to ensure the structural reliability and safety of these structures and does not address fire safety and safe egress issues.

BSR E1.47-201x, Entertainment Technology - Recommended Guidelines for Entertainment Rigging System Inspections (revision of ANSI E1.47-2017)

Stakeholders: Rigging system inspectors, rigging system owners, stagehands and performers, insurance companies, occupational health and safety authorities.

Project Need: The standard is being revised to clarify and add requirements and additional references.

The standard offers guidance on inspecting entertainment rigging systems, which are systems used to lift and support scenery, luminaires, and other equipment overhead in entertainment venues, such as theatres, video/film studios, amphitheatres, and arenas used for live performances or special events.

BSR E1.62-201x, Minimum specifications for mass-produced portable platforms, ramps, stairs, and choral risers for live performance events (new standard)

Stakeholders: Portable platform and choral riser manufacturers, specifiers, buyers, and users. The latter includes the technicians who must set up the portable platforms and risers and the people who must stand on them.

Project Need: There is no American National Standard that unambiguously covers the products within this proposed standard's scope. The IBC gives a minimum distributed load rating for portable platforms, but does not provide a point load rating, a sideways load specification, or deflection criteria. DIN 15921 covers much of this material, but it is in German, and has a fairly low force specification for railings, below that for an OSHA "standard guardrail".

The standard would cover serially manufactured portable platforms, stair units and ramps used with those platforms, and choral risers. It would also cover railings provided as fall protection accessories for these units. It would not cover custom platforms or complete stage systems. It would give minimum payload and sideways force handling specifications.

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

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

Contact: Moon Kim Fax: (404) 894-8194

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

BSR/MSE/ISO 50001-201x, Energy management systems -Requirements with guidance for use (identical national adoption of ISO 50001:2018)

Stakeholders: U.S. TAG to ISO/TC 301; Utilities (supply/generation and distribution); Energy service organizations; Energy managers (any sector); Those responsible for purchasing energy; Consumer advocate organizations; Those responsible for contracting related to energy or energy services.

Project Need: This Standard is needed because of the high-level stakeholder interest in information to assist with requirements of energy management systems and is requested from U.S. TAG to ISO/TC 301 for U.S. identical national adoption. This will be a revision to the ANSI/MSE/ISO 50001-2011.

This document specifies requirements for establishing, implementing, maintaining and improving an energy management system, and its aim is to enable an organization to follow a systematic approach in achieving continual improvement of energy performance.

#### NFPA (National Fire Protection Association)

Office: One Batterymarch Park Quincy, MA 02169

Contact: Dawn Michele Bellis

E-mail: dbellis@nfpa.org

BSR/NFPA 11-201x, Standard for Low-, Medium-, and High-Expansion Foam (revision of ANSI/NFPA 11-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard covers the design, installation, operation, testing, and maintenance of low-, medium-, and high-expansion and compressed air foam systems for fire protection.

BSR/NFPA 32-201x, Standard for Dry Cleaning Facilities (revision of ANSI/NFPA 32-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard shall apply to establishments hereinafter defined as drycleaning plants.

BSR/NFPA 35-201x, Standard for the Manufacture of Organic Coatings (revision of ANSI/NFPA 35-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard shall apply to facilities that use flammable and combustible liquids, as defined in this standard, to manufacture organic coatings for automotive, industrial, institutional, household, marine, printing, transportation, and other applications. This standard shall not apply to the following: (1) Operations involving the use or application of coating materials and (2) Storage of organic coatings in locations other than the manufacturing facility.

BSR/NFPA 51-201x, Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes (revision of ANSI/NFPA 51-2018)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

Applies to the following: (1) Design and installation of oxygen-fuel gas welding and cutting systems and allied processes (3.3.2), except for systems meeting the criteria in 1.1.5; (2) Utilization of gaseous fuels generated from flammable liquids under pressure where such fuels are used with oxygen; (3) Storage on the site of a welding and cutting system installation of the following: (a) Gases to be used with such systems where more than one cylinder each of oxygen and fuel gas are stored in any single storage area [includes storage of more than one cylinder each in any stored for use in systems.

BSR/NFPA 53-201x, Recommended Practice on Materials, Equipment, and Systems Used in Oxygen-Enriched Atmospheres (revision of ANSI/NFPA 53-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This document establishes recommended minimum criteria for the safe use of oxygen (liquid/gaseous) and the design of systems for use in oxygen and oxygen-enriched atmospheres (OEAs).

BSR/NFPA 73-201x, Standard for Electrical Inspections for Existing Dwellings (revision of ANSI/NFPA 73-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard provides criteria for identification of hazardous conditions of electrical systems in existing one-family, two-family, and multifamily dwellings, including mobile homes and manufactured homes.

BSR/NFPA 160-201x, Standard for the Use of Flame Effects Before an Audience (revision of ANSI/NFPA 160-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard shall provide requirements for the protection of the audience, support personnel, performers, the operator, assistants, and property where flame effects are used.

BSR/NFPA 214-201x, Standard on Water-Cooling Towers (revision of ANSI/NFPA 214-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard applies to fire protection for field-erected and factoryassembled water-cooling towers of combustible construction or those in which the fill is of combustible material.

#### BSR/NFPA 257-201x, Standard on Fire Test for Window and Glass Block Assemblies (revision of ANSI/NFPA 257-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard prescribes standardized fire and hose stream test procedures that apply to the evaluation of fire window assemblies, including windows, glass block, and other light-transmitting assemblies intended to retard the spread of fire through openings in fire resistancerated walls. This standard is not to be construed as determining the suitability of fire window assemblies for continued use after fire exposure. This standard provides a standardized method for comparing the performance of fire window assemblies.

#### BSR/NFPA 268-201x, Standard Test Method for Determining Ignitibility of Exterior Wall Assemblies Using a Radiant Heat Energy Source (revision of ANSI/NFPA 268-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This fire test response standard describes a method for determining the propensity of ignition of exterior wall assemblies from exposure to 12.5 kW/m2 (1.10 Btu/ft2-sec) radiant heat in the presence of a pilot ignition source. This test method evaluates the propensity of ignition of an exterior wall assembly where subjected to a minimum radiant heat flux of 12.5 kW/m2 (1.10 Btu/ft2-sec). This method determines whether ignition of an exterior wall assembly occurs when the wall is exposed to a specified radiant heat flux, in the presence of a pilot ignition source, during a 20-minute period. This test method utilizes a gas-fired radiant panel to apply a radiant heat flux of 12.5 kW/m2 (1.10 Btu/ft2-sec) to a representative sample of an exterior wall assembly while the test specimen is exposed simultaneously to a pilot ignition source. This test method applies to exterior wall assemblies having planar, or nearly planar, external surfaces.

BSR/NFPA 269-201x, Standard Test Method for Developing Toxic Potency Data for Use in Fire Hazard Modeling (revision of ANSI/NFPA 269-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This test method is intended to provide a means for assessing the lethal toxic potency of combustion products produced from a material ar product ignited when expected to a radiant flux. This test method

lethal toxic potency of combustion products produced from a material or product ignited when exposed to a radiant flux. This test method has been designed to generate toxic potency data on materials and products (including composites) for use in fire hazard analysis. It is also permitted to be used to assist in the research and development of materials and products.

Lethal Toxic Potency Values. Lethal toxic potency values associated with 30-minute exposures are predicted using calculations that employ combustion atmospheric analytical data for carbon monoxide, carbon dioxide, oxygen (vitiation), and, if present, hydrogen cyanide, hydrogen chloride, and hydrogen bromide. These predictive equations are therefore limited to those materials and products whose smoke toxicity can be attributed to these toxicants. The confirmation of the predicted lethal toxic potency values by means of an animal check will serve to determine the extent to which additional toxicants contribute to the lethal toxic potency of the smoke. Where an animal check test result does not confirm the predicted lethal toxic potency values, the presence of one or more additional toxicants or toxicological

BSR/NFPA 275-201x, Standard Method of Fire Tests for the

Evaluation of Thermal Barriers (revision of ANSI/NFPA 275-2017) Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This method of fire tests for qualifying a thermal barrier for protecting foam plastic insulation or metal composite materials (MCM), referred to in the standard as a thermal barrier, is applicable to building construction materials, products, or assemblies intended to be used to protect foam plastic insulation or MCM from direct fire exposure. The performance of the thermal barrier is evaluated by its ability to limit the temperature rise on its unexposed surface and by the ability of the thermal barrier to remain intact in order to provide protection from ignition of the foam plastic insulation or MCM during a standard fire exposure.

BSR/NFPA 287-201x, Standard Test Methods for Measurement of Flammability of Materials in Cleanrooms Using a Fire Propagation Apparatus (FPA) (revision of ANSI/NFPA 287-2011)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard shall determine and quantify the flammability characteristics of materials containing polymers that are used in cleanroom applications. The propensity of these materials to support fire propagation, as well as other flammability characteristics, are quantified by means of a fire propagation apparatus. Measurements obtained include time to ignition (tign), chemical (Q'chem), and convective (Q'c) heat release rates, mass loss rates (m'), and smoke extinction coefficient (D). This standard includes the following separate test methods: (1) The ignition test, which shall be used for the determination of tign (2) The combustion test, which shall be used for the determination of Q'chem, Q', m', and D (3) The fire propagation test, which shall be used for the determination of Q'chem.

BSR/NFPA 288-201x, Standard Methods of Fire Tests of Horizontal Fire Door Assemblies Installed in Horizontal Fire Resistance-Rated Assemblies (revision of ANSI/NFPA 288-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard shall apply to horizontal fire door assemblies of various materials and types of construction that are installed in openings of fire resistance-rated floor systems or roofs to retard the passage of fire. Tests made in conformity with this test method demonstrate the performance of horizontal fire door assemblies during the test exposure; however, such tests shall not be construed as determining the suitability of horizontal fire door assemblies for use after their exposure to fire.

BSR/NFPA 303-201x, Fire Protection Standard for Marinas and Boatyards (revision of ANSI/NFPA 303-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard applies to the construction and operation of marinas, boatyards, yacht clubs, boat condominiums, docking facilities associated with residential condominiums, multiple-docking facilities at multiple-family residences, and all associated piers, docks, and floats. This standard also applies to support facilities and structures used for construction, repair, storage, hauling and launching, or fueling of vessels if fire on a pier would pose an immediate threat to these facilities, or if a fire at a referenced facility would pose an immediate threat to a docking facility. This standard applies to marinas and facilities servicing small recreational and commercial craft, yachts, and other craft of not more than 300 gross tons.

BSR/NFPA 307-201x, Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves (revision of ANSI/NFPA 307-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard shall provide general principles for the construction and fire protection of marine terminals, piers, and wharves. Nothing in this standard shall supersede any of the regulations of governmental or other regulatory authority. The provisions of this standard shall reflect situations and state-of-the-art techniques at the time the standard was issued.

#### BSR/NFPA 312-201x, Standard for Fire Protection of Vessels During Construction, Conversion, Repair, and Lay-Up (revision of ANSI/NFPA 312-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard shall apply to vessels during the course of construction, conversion, repairs, or while laid up. This standard shall not apply to situations where it is in conflict with or superseded by requirements of any government regulatory agency.

BSR/NFPA 385-201x, Standard for Tank Vehicles for Flammable and Combustible Liquids (revision of ANSI/NFPA 385-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard shall apply to tank vehicles used for the transportation of asphalt and for the transportation of normally stable flammable and combustible liquids with flash points below 200°F (93°C). This standard shall also provide minimum requirements for the design and construction of cargo tanks and their appurtenances and shall set forth certain matters pertaining to tank vehicles.

BSR/NFPA 408-201x, Standard for Aircraft Hand Portable Fire Extinguishers (revision of ANSI/NFPA 408-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard specifies requirements for the type, capacity, rating, number, location, installation, and maintenance of aircraft handportable fire extinguishers to be provided for the use of flight crew members or other occupants of an aircraft for the control of incipient fires in the areas of aircraft that are accessible during flight. This standard also includes requirements for training flight crew members in the use of these extinguishers.

BSR/NFPA 409-201x, Standard on Aircraft Hangars (revision of ANSI/NFPA 409-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard contains the minimum requirements for the proper construction of aircraft hangars and protection of aircraft hangars from fire. This standard applies only to buildings or structures used for aircraft storage, maintenance, or related activities. Other uses within an aircraft hangar shall be protected in accordance with other applicable NFPA Standards.

BSR/NFPA 415-201x, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways (revision of ANSI/NFPA 415-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard specifies the minimum fire protection requirements for the construction and protection of airport terminal buildings. It specifies the minimum requirements for the design and maintenance of the drainage system of an aircraft fueling ramp to control the flow of fuel that can be spilled on a ramp and to minimize the resulting possible danger. In addition, it contains the minimum requirements for the design, construction, and fire protection of aircraft loading walkways between the terminal building and aircraft.

BSR/NFPA 418-201x, Standard for Heliports (revision of ANSI/NFPA 418-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard specifies the minimum requirements for fire protection for heliports and rooftop hangars. This standard does not apply to ground-level helicopter hangars. All hangars not covered by this standard are required to comply with NFPA 409, Standard on Aircraft Hangars. Temporary landing sites and emergency evacuation facilities are outside the scope of this standard.

BSR/NFPA 423-201x, Standard for Construction and Protection of Aircraft Engine Test Facilities (revision of ANSI/NFPA 423-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard establishes the minimum fire safety practices regarding location, construction, services, utilities, fire protection, operation, and maintenance of aircraft engine test facilities. These facilities include test cells and test stands. This standard does not apply to engines and engine accessories or to engine test facilities where fuels other than hydrocarbon fuels are used.

BSR/NFPA 424-201x, Guide for Airport/Community Emergency Planning (revision of ANSI/NFPA 424-2018)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This guide describes the elements of an airport/community emergency plan that require consideration before, during, and after an emergency has occurred. The scope of the airport/community emergency plan should include command, communication, and coordination functions for executing the AEP. Throughout this document, the airport/community emergency plan will be referred to as the "AEP".

BSR/NFPA 475-201x, Recommended Practice for Organizing,

Managing, and Sustaining a Hazardous Materials/Weapons of Mass Destruction Response Program (revision of ANSI/NFPA 475-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This recommended practice provides the minimum criteria for organizing, managing, and sustaining a hazardous material response program (HMRP) based on the authority having jurisdiction's (AHJ) function and assessed level of risk. A review of the laws, regulations, consensus standards, and guidance documents in addition to guidance for risk assessment, HMRP planning, resource management, staffing, training, health and medical issues, financial management, programs influences, and developing relationships are covered in this recommended practice.

BSR/NFPA 501-201x, Standard on Manufactured Housing (revision of ANSI/NFPA 501-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard shall cover all the equipment and installations used in the design, construction, transportation, fire safety, plumbing, heatproducing, and electrical systems of manufactured homes that are designed to be used as dwelling units. This standard shall, to the maximum extent possible, establish performance requirements. In certain instances, however, the use of specific requirements is necessary.

BSR/NFPA 501A-201x, Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities (revision of ANSI/NFPA 501A-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard shall cover fire safety requirements for the installation of manufactured homes and manufactured home sites, including accessory buildings, structures, and communities.

BSR/NFPA 520-201x, Standard on Subterranean Spaces (revision of ANSI/NFPA 520-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard addresses the safeguarding of life and property against fire, explosion, and related hazards associated with developed subterranean spaces. This standard does not cover the following types of subterranean spaces: (1) Tourist caverns, (2) Wine storage caverns, (3) Gas and oil storage reservoirs, (4) Hazardous waste repositories, (5) Utility installations such as pump stations, (6) Working mines, (7) Transportation and pedestrian tunnels, (8) Aboveground buildings with belowground stories, and (9) Cut and cover underground structures specifically addressed in the building code.

BSR/NFPA 550-201x, Guide to the Fire Safety Concepts Tree (revision of ANSI/NFPA 550-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This guide describes the structure, application, and limitations of the Fire Safety Concepts Tree.

BSR/NFPA 655-201x, Standard for Prevention of Sulfur Fires and Explosions (revision of ANSI/NFPA 655-2017)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts.

Project Need: Public interest and need.

This standard addresses the size reduction of sulfur and the handling of sulfur in any form.

This standard shall not apply to the mining of sulfur, recovery of sulfur from process streams, or transportation of sulfur. This standard shall not apply to the recovery of sulfur from process streams, such as sour gas processing or oil refinery operations, and all its encompassed processes and operations, which include block melting, degassing, and forming. The owner/operator shall be responsible for implementing the requirements in this standard. This standard shall be used in conjunction with the requirements of NFPA 654. Where conflicts exist, the requirements of NFPA 655 shall apply.

BSR/NPFA 102-201x, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures (revision of ANSI/NPFA 102-2016)

Stakeholders: Manufacturers, users, installers/maintainers, labor, enforcing authority, insurance, consumers, special experts. Project Need: Public interest and need.

This standard addresses the following: (1) The construction, location, protection, and maintenance of grandstands and bleachers, folding and telescopic seating, tents, and membrane structures, and (2) Seating facilities located in the open air or within enclosed or semi-enclosed structures such as tents, membrane structures, and stadium complexes.

#### SAWE (Society of Allied Weights Engineers)

Office: P.O. Box 60024 Terminal Annex Los Angeles, CA 90060 Contact: Terri Crawford

Fax: (619) 544-3543

E-mail: terri.husley-crawford@nassco.com

BSR/SAWE Standard M-4-201x, Vendor Weight Control for the Marine Industry (new standard)

Stakeholders: NAVSEA, SUPSHIP, MSC, ABS, ICI Services, Government marine vessel subcontractors, Austal, Newport News Shipbuilding, Huntington Ingalls Shipbuilding, GD NASSCO, GD Bath Iron Works, Fincantieri, VT Halter Marine, all shipbuilders and shipbuilder suppliers, shipbuilder subcontractors.

Project Need: Create standard for vendors/suppliers to identify the weight and center of gravity of equipment for shipbuilders/engineering facilities with weight-reporting requirements

There is a requirement for Marine Industry to report/monitor the Weight And Center of Gravity of the vessel that is being built. This identifies a standard of Vendors/Suppliers to facilitate this effort.

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

Office: 929 W. Portobello Avenue

Mesa, AZ 85210

Contact: Jing Kwok

E-mail: jing.kwok@vita.com

BSR/VITA 47.0-201x, Environments, Design and Construction, Safety, and Quality for Plug-In Modules Standard (new standard)

Stakeholders: Manufacturers, suppliers, and users of modular embedded computers.

Project Need: Develop a standard for standardizing environmental factors for embedded computers.

This standard documents the VITA 47-2007 Environments, Design and Construction, Safety, and Quality for Plug-In Module requirements for all heritage applications.

BSR/VITA 47.1-201x, Common Requirements for Environments, Design and Construction, Safety, and Quality for VITA 47 Plug-In Modules Dot Standard (new standard)

Stakeholders: Manufacturers, suppliers, and users of modular embedded computers.

Project Need: Develop a standard for standardizing common environmental requirement factors for embedded computers.

This standard defines the common environments, design and construction, safety, and quality for Plug-In Module requirements common across VITA 47.1, VITA 47.2, and VITA 47.3.

# American National Standards Maintained Under Continuous Maintenance

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

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

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

- AAMI (Association for the Advancement of Medical Instrumentation)
- AARST (American Association of Radon Scientists and Technologists)
- AGA (American Gas Association)
- AGSC-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 (Green Building Initiative)
- HL7 (Health Level Seven)
- IES (Illuminating Engineering Society)
- MHI (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NEMA (National Electrical Manufacturers Association)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network, Inc.)
- SAE (SAE International)
- TCNA (Tile Council of North America)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

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

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

#### APA

APA - The Engineered Wood Association

7011 South 19th Street Tacoma, WA 98466 Phone: (253) 620-7467 Fax: (253) 565-7265 Web: www.apawood.org

#### ASABE

American Society of Agricultural and Biological Engineers 2950 Niles Road Saint Joseph, MI 49085 Phone: (269) 932-7027 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: (404) 636-8400 Fax: (404) 321-5478 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

#### ASTM ASTM International

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

#### AWC

American Wood Council 222 Catoctin Circle Suite 201 Leesburg, VA 20175 Phone: (202) 463-2770 Fax: (202) 463-2791 Web: www.awc.org

#### AWS

American Welding Society 8669 NW 36 ST., #130 Miami, FL 33166 Phone: (800) 443-9353 Fax: (305) 443-5951 Web: www.aws.org

#### AWWA

American Water Works Association 6666 W. Quincy Ave.

Denver, CO 80235 Phone: (303) 347-6178 Fax: (303) 795-7603 Web: www.awwa.org

#### BICSI

Building Industry Consulting Service International
8610 Hidden River Parkway
Tampa, FL 33637
Phone: (813) 903-4712
Fax: (813) 971-4311
Web: www.bicsi.org

#### CSA

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

#### DASMA

Door and Access Systems Manufacturers Association

1300 Sumner Avenue Cleveland, OH 44115 Phone: (216) 241-7333 Fax: (216) 241-0105

#### ESTA

Entertainment Services and Technology Association

630 Ninth Avenue Suite 609 New York, NY 10036-3748 Phone: (212) 244-1505 Fax: (212) 244-1502 Web: www.esta.org

#### GTESS

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

#### IEEE

Institute of Electrical and Electronics Engineers (IEEE)

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

#### IES

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

#### ITI (INCITS)

InterNational Committee for Information Technology Standards

1101 K Street NW Suite 610 Washington, DC 20005-3922 Phone: (202) 626-5737 Web: www.incits.org

#### NFPA

National Fire Protection Association

One Batterymarch Park Quincy, MA 02169 Phone: (617) 984-7246 Web: www.nfpa.org

#### NSF

NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 418-6660 Web: www.nsf.org

#### SAWE

Society of Allied Weights Engineers P.O. Box 60024, Terminal Annex Los Angeles, CA 90060 Phone: (619) 544-8888 Fax: (619) 544-3543 Web: www.sawe.org

#### TAPPI

Technical Association of the Pulp and Paper Industry

15 Technology Parkway South Peachtree Corners, GA 30092 Phone: (770) 209-7276 Fax: (770) 446-6947 Web: www.tappi.org

#### UL

Underwriters Laboratories, Inc. 12 Laboratory Drive

Research Triangle Park, NC 27709-3995 Phone: (919) 549-1054 Web: www.ul.com

#### VITA

VMEbus International Trade Association (VITA)

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

# **ISO & IEC Draft International Standards**

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

#### <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 9053, Acoustics - Determination of static airflow resistance - 12/22/2017, \$53.00

#### AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO/DIS 9167, Rapeseed - Determination of glucosinolates content -Method using high-performance liquid chromatography -12/21/2017, \$93.00

#### AIR QUALITY (TC 146)

- ISO/DIS 20264, Stationary source emissions Determination of the mass concentration of individual volatile organic compounds (VOCs) in waste gases from non-combustion processes 2/18/2018, \$98.00
- ISO/DIS 21832, Workplace air Procedures for determination of metals and metalloids in airborne particles 2/16/2018, \$107.00

## COMPRESSORS, PNEUMATIC TOOLS AND PNEUMATIC MACHINES (TC 118)

ISO/DIS 8573-4, Compressed air - Contaminant measurement - Part 4: Particle content - 2/15/2018, \$88.00

#### FLOOR COVERINGS (TC 219)

- ISO/DIS 24343-2, Resilient and laminate floor coverings -Determination of indentation and residual indentation - Part 2: Shortterm residual indentation of resilient floor covering - 2/15/2018, \$40.00
- ISO/DIS 24343-3, Resilient and laminate floor coverings -Determination of indentation and residual indentation - Part 3: Indentation of resilient semi-flexible/vinyl composition tiles -2/18/2018, \$33.00

#### FURNITURE (TC 136)

- ISO/DIS 7175-1, Furniture Childrens cots and folding cots for domestic use - Part 1: Safety requirements - 12/24/2017, \$53.00
- ISO/DIS 7175-2, Furniture Childrens cots and folding cots for domestic use - Part 2: Test methods - 12/24/2017, \$98.00

#### LIFTS, ESCALATORS, PASSENGER CONVEYORS (TC 178)

ISO/DIS 8100-30, Lifts for the transport of persons and goods - Part 30: Class I, II, III and IV lifts installation - 12/24/2017, \$98.00

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

- ISO/DIS 10426-4, Petroleum and natural gas industries Cements and materials for well cementing - Part 4: Preparation and testing of foamed cement slurries at atmospheric pressure - 2/18/2018, \$33.00
- ISO/DIS 19904-1, Petroleum and natural gas industries Floating offshore structures Part 1: Ship-shaped, semi-submersible, spar and shallow-draught cylindrical structures 12/21/2017, \$194.00

#### NUCLEAR ENERGY (TC 85)

ISO/DIS 20042, Measurement of radioactivity - Gamma emitting radionuclides - Generic test method using gamma spectrometry -2/18/2018, \$125.00

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

ISO/DIS 11979-1, Ophthalmic implants - Intraocular lenses - Part 1: Vocabulary - 2/15/2018, \$58.00

#### PACKAGING (TC 122)

ISO/DIS 21976, Packaging - Tamper verification features for medicinal product packaging - 12/24/2017, \$71.00

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

ISO/DIS 21400, Pulp - Determination of cellulose nanocrystal sulfur and sulfate half-ester content - 12/23/2017, \$93.00

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

ISO/DIS 17492, Clothing for protection against heat and flame -Determination of heat transmission on exposure to both flame and radiant heat - 2/16/2018, \$77.00

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

- ISO/DIS 11452-2, Road vehicles Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 2: Absorber-lined shielded enclosure - 12/24/2017, \$93.00
- ISO/DIS 20078-1, Road vehicles Extended vehicle (ExVe) web services Part 1: ExVe content 2/19/2018, \$71.00
- ISO/DIS 20078-2, Road vehicles Extended vehicle (ExVe) web services - Part 2: ExVe access - 2/19/2018, \$67.00
- ISO/DIS 20078-3, Road vehicles Extended vehicle (ExVe) web services Part 3: ExVe security 2/19/2018, \$71.00
- ISO/DIS 20078-4, Road vehicles Extended vehicle (ExVe) web services Part 4: ExVe control 2/19/2018, \$67.00

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

- ISO/DIS 20661, Ships and marine technology Cutter suction dredger supervisory and control system - 2/12/2018, \$40.00
- ISO/DIS 20662, Ships and marine technology Hopper dredger supervisory and control system - 2/12/2018, \$67.00
- ISO/DIS 20663, Ships and marine technology Grab dredger supervisory and control system 2/12/2018, \$53.00
- ISO/DIS 3715-1, Ships and marine technology Propulsion plants for ships - Part 1: Vocabulary for geometry of propellers - 2/12/2018, \$71.00

#### STEEL (TC 17)

ISO/DIS 4978, Steel sheet and strip for welded gas cylinders - 12/25/2017, \$40.00

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

ISO/DIS 9092, Nonwovens - Definition - 2/11/2018, \$33.00

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

ISO/DIS 20498-1, Traditional Chinese medicine - Computerized tongue image analysis system - Part 1: General requirements - 12/23/2017, \$53.00

#### WATER QUALITY (TC 147)

- ISO/DIS 12010, Water quality Determination of short-chain polychlorinated alkanes (SCCP) in water - Method using gas chromatography-mass spectrometry (GC-MS) and negative-ion chemical ionization (NCI) - 2/11/2018, \$107.00
- ISO/DIS 20236, Water quality Determination of total organic carbon (TOC), dissolved organic carbon (DOC) total bound nitrogen (TNb) and dissolved bound nitrogen (DNb) after high temperature oxidative combustion - 12/24/2017, \$82.00

## ISO/IEC JTC 1, Information Technology

- ISO/IEC 10646/DAmd1, Information technology Universal Coded Character Set (UCS) - Amendment 1 - 2/19/2018, \$185.00
- ISO/IEC DIS 20546, Information technology Big data Overview and vocabulary 2/19/2018, \$58.00
- ISO/IEC DIS 11770-2, Information technology Security techniques -Key management - Part 2: Mechanisms using symmetric techniques - 2/15/2018, \$93.00
- ISO/IEC DIS 15693-2, Cards and security devices for personal identification - Contactless vicinity objects - Part 2: Air interface and initialization - 2/19/2018, \$77.00
- ISO/IEC DIS 19086-4, Information technology Cloud computing -Service level agreement (SLA) framework - Part 4: Security and privacy - 2/19/2018, \$77.00

- ISO/IEC DIS 19896-3, Information technology Security techniques -Competence requirements for information security testers and evaluators - Part 3: Knowledge, skills and effectiveness requirements for ISO/IEC 15408 evaluators - 2/11/2018, \$98.00
- ISO/IEC DIS 15067-3-3, Information technology Home Electronic System (HES) application model - Part 3-3: Model of a system of interacting Energy Management Agents (EMAs) for demand response energy management - 2/23/2018, \$88.00

## **IEC Standards**

- CABPUB/156/DTS, ISO/IEC TS 17021-10, Conformity assessment -Requirements for bodies providing audit and certification of management systems - Part 3: Competence requirements for auditing and certification of OHAS management systems, 2018/1/26
- 9/2327/CDV, IEC 61991 ED2: Railway applications Rolling stock -Protective provisions against electrical hazards, 2018/2/23
- 17A/1166/CD, IEC 62271-108 ED2: High-voltage switchgear and controlgear - Part 108: High-voltage alternating current disconnecting circuit-breakers for rated voltages of 72,5 kV and above, 2018/2/23
- 22H/229/CD, IEC 62040-5-1 ED1: Uninterruptible power systems (UPS) - Part 5-1: DC output UPS - Safety requirements, 2018/2/23
- 22H/228/CD, IEC 62040-3 ED3: Uninterruptible power systems (UPS)
   Part 3: Method of specifying the performance and test requirements, 2018/2/23
- 23K/30/CDV, IEC 62962 ED1: Particular requirements for loadshedding equipment (LSE), 2018/2/23
- 27/1049/CD, IEC 60519-6 ED4: Safety in installations for electroheating and electromagnetic processing - Part 6: Particular requirements for microwave equipment, 2018/2/23
- 34A/2039/CDV, IEC 62717/AMD2 ED1: Amendment 2 LED modules for general lighting - Performance requirements, 2018/2/23
- 46C/1089/CDV, IEC 61156-1-4 ED1: Multicore and symmetrical pair/quad cables for digital communications - Assessment of the conductor heating in bundled cables due to the deployment of power transmission based on IEEE 802.3 PoE-regime, 2018/2/23
- 59F/338/CD, IEC 62885-4 ED1: Surface cleaning appliances Part 4: Cordless dry vacuum cleaners for household or similar use -Methods for measuring the performance, 2018/2/23
- 59F/333/CDV, IEC 62885-2 ED2: Surface cleaning appliances Part 2: Dry vacuum cleaners for household or similar use - Methods for measuring the performance, 2018/2/23
- 64/2242/CDV, IEC 60364-5-53/AMD3/FRAG4 ED3: Amendment 3 (f4) - Low-voltage electrical installation - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control -Clause 532: Devices and precautions for protection against thermal effects, 2018/2/23
- 64/2247/CD, IEC 60364-5-53/AMD3/FRAG5 ED3: Amendment 3 to fragment 5: Low-Voltage electrical installations - Part 5-53: Selection and erection of electrical equipments - Isolation, switching and control Clause 531, 2018/3/23
- 64/2239/CDV, IEC 60364-5-53/AMD3/FRAG1 ED3: Amendment 3 (f1) - Low-Voltage electrical installations - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control, 2018/2/23
- 64/2241/CDV, IEC 60364-5-53/AMD3/FRAG3 ED3: Amendment 3 (f3) - Low-Voltage electrical installations - Part 5-53: Selection and erection of electrical equipments - Isolation, switching and control, 2018/2/23
- 64/2240/CDV, IEC 60364-5-53/AMD3/FRAG2 ED3: Amendment 3 (f2) - Low-Voltage electrical installations - Part 5-53: Selection and erection of electrical equipments - Isolation, switching and control, 2018/2/23

66/642/CDV, IEC 61010-2-051 ED4: Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-051: Particular requirements for laboratory equipment for mixing and stirring, 2018/2/23

66/643/CDV, IEC 61010-2-061 ED4: Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-061: Particular requirements for laboratory atomic spectrometers with thermal atomization and ionization, 2018/2/23

66/644/CDV, IEC 61010-2-101 ED3: Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-101: Safety requirements for in vitro diagnostic (IVD) medical equipment, 2018/2/23

82/1370/DTS, IEC TS 62994 ED1: Environmental health and safety (EH&S) risk assessment of the PV module through the life cycle -General principles and definitions of terms, 2018/2/23

85/619/CD, IEC 61557-11 ED2: Electrical safety in low voltage distribution systems up to 1000 V a.c. and 1500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 11: Effectiveness of residual current monitors (RCMs) type A and type B in TT, TN and IT systems, 2018/2/23

86A/1842/CD, IEC 60793-2-10 ED7: Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres, 2018/2/23

 86B/4113/CD, IEC 61300-3-55 ED1: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-55: Examination and measurements -Polarisation extinction ratio and keying accuracy of polarisation maintaining passive optical components, 2018/2/23

86C/1495/CD, IEC 62343-1 ED2: Dynamic modules - Part 1: Performance standards - General conditions, 2018/2/23

95/378/CD, IEC 60255-26 ED4: Measuring relays and protection equipment - Part 26: Electromagnetic compatibility requirements, 2018/2/23

110/922/CDV, IEC 61747-30-5 ED1: Liquid crystal display devices -Part 30-5: Optical measuring methods of transmissive transparent LCD display modules, 2018/2/23

116/358/NP, PNW 116-358: Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-7: Particular requirements for transportable wall saws, 2018/2/23

121A/190/CD, IEC 60947-6-2 ED3: Low-voltage switchgear and controlgear - Part 6-2: Multiple function equipment - Control and protective switching devices (or equipment) (CPS), 2018/2/23

JTC1-SC41/21/CD, ISO/IEC 21823-1 ED1: Information technology -Internet of Things (IoT) - Interoperability for Internet of Things Systems - Part 1: Framework, 2018/1/26

# **Newly Published ISO & IEC Standards**



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

## **ISO Standards**

#### AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO 18787:2017, Foodstuffs - Determination of water activity, \$68.00

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

<u>ISO 9788:2017.</u> Air cargo - Double stud tie-down fittings - Design and testing requirements, \$68.00

ISO 18676:2017, Space systems - Guidelines for the management of systems engineering, \$103.00

#### CRANES (TC 96)

<u>ISO 4309:2017.</u> Cranes - Wire ropes - Care and maintenance, inspection and discard, \$209.00

#### **FASTENERS (TC 2)**

ISO 16228:2017, Fasteners - Types of inspection documents, \$138.00

#### GAS CYLINDERS (TC 58)

<u>ISO 5145:2017.</u> Gas cylinders - Cylinder valve outlets for gases and gas mixtures - Selection and dimensioning, \$162.00

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

<u>ISO 8637-1:2017</u>, Extracorporeal systems for blood purification - Part 1: Haemodialysers, haemodiafilters, haemofilters and haemoconcentrators, \$138.00

#### MACHINE TOOLS (TC 39)

ISO 19085-8:2017, Woodworking machines - Safety - Part 8: Belt sanding and calibrating machines for straight workpieces, \$162.00

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

<u>ISO 18437-6:2017</u>, Mechanical vibration and shock - Characterization of the dynamic mechanical properties of visco-elastic materials -Part 6: Time-temperature superposition, \$138.00

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

 <u>ISO 20263:2017</u>, Microbeam analysis - Analytical electron microscopy
 Method for the determination of interface position in the crosssectional image of the layered materials, \$185.00

#### **NON-DESTRUCTIVE TESTING (TC 135)**

ISO 16809:2017, Non-destructive testing - Ultrasonic thickness measurement, \$185.00

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

<u>ISO 8596:2017.</u> Ophthalmic optics - Visual acuity testing - Standard and clinical optotypes and their presentation, \$68.00

ISO 11981:2017, Ophthalmic optics - Contact lenses and contact lens care products - Determination of physical compatibility of contact lens care products with contact lenses, \$68.00

ISO 11986:2017, Ophthalmic optics - Contact lenses and contact lens care products - Determination of preservative uptake and release, \$45.00

#### PACKAGING (TC 122)

ISO 19809:2017, Packaging - Accessible design - Information and marking, \$103.00

#### PAINTS AND VARNISHES (TC 35)

<u>ISO 6270-2:2017</u>, Paints and varnishes - Determination of resistance to humidity - Part 2: Condensation (in-cabinet exposure with heated water reservoir), \$68.00

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

<u>ISO 16900-2:2017</u>, Respiratory protective devices - Methods of test and test equipment - Part 2: Determination of breathing resistance, \$68.00

#### PLASTICS (TC 61)

<u>ISO 2797:2017.</u> Textile glass - Rovings - Basis for a specification, \$45.00

ISO 5025:2017, Reinforcement products - Woven fabrics -Determination of width and length, \$45.00

<u>ISO 6237:2017</u>, Adhesives - Wood-to-wood adhesive bonds -Determination of shear strength by tensile loading, \$68.00

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

ISO 21307:2017, Plastics pipes and fittings - Butt fusion jointing procedures for polyethylene (PE) piping systems, \$103.00

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

<u>ISO 10006:2017</u>, Quality management - Guidelines for quality management in projects, \$162.00

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

ISO 20077-1:2017, Road Vehicles - Extended vehicle (ExVe) methodology - Part 1: General information, \$138.00

- ISO 29061-3:2017, Road vehicles Methods and criteria for usability evaluation of child restraint systems and their interface with vehicle anchorage systems Part 3: Installation of child restraint systems using vehicle seat belts, \$138.00
- ISO 29061-4:2017, Road vehicles Methods and criteria for usability evaluation of child restraint systems and their interface with vehicle anchorage systems Part 4: Securing of child in child restraint system and daily handling aspects, \$103.00
- ISO 29061-5:2017, Road vehicles Methods and criteria for usability evaluation of child restraint systems and their interface with vehicle anchorage systems Part 5: Installation and securing of child in a booster system, \$103.00

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

ISO 1825:2017, Rubber hoses and hose assemblies for aircraft ground fuelling and defuelling - Specification, \$162.00

#### SPORTS AND RECREATIONAL EQUIPMENT (TC 83)

<u>ISO 21924-1:2017</u>, Protective equipment for martial arts - Part 1: General requirements and test methods, \$45.00

<u>ISO 21924-2:2017</u>, Protective equipment for martial arts - Part 2: Additional requirements and test methods for instep protectors, shin protectors and forearm protectors, \$68.00

ISO 21924-3:2017, Protective equipment for martial arts - Part 3: Additional requirements and test methods for trunk protectors, \$45.00

<u>ISO 21924-4:2017</u>, Protective equipment for martial arts - Part 4: Additional requirements and test methods for head protectors, \$68.00

<u>ISO 21924-5:2017.</u> Protective equipment for martial arts - Part 5: Additional requirements and test methods for genital protectors and abdominal protectors, \$68.00

<u>ISO 21924-6:2017</u>, Protective equipment for martial arts - Part 6: Additional requirements and test methods for breast protectors for females, \$68.00

<u>ISO 21924-7:2017</u>, Protective equipment for martial arts - Part 7: Additional requirements and test methods for hand and foot protectors, \$68.00

#### TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)

ISO 21720:2017, XLIFF (XML Localisation interchange file format), \$232.00

## TEXTILE MACHINERY AND ALLIED MACHINERY AND ACCESSORIES (TC 72)

<u>ISO 368:2017</u>, Spinning preparatory, spinning and doubling (twisting) machinery - Tubes for ring-spinning, doubling and twisting spindles, taper 1:38 and 1:64, \$45.00

#### **TIMBER STRUCTURES (TC 165)**

ISO 13912:2017, Structural timber - Machine strength grading - Basic principles, \$138.00

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

ISO 22634-1:2017, Cigarettes - Determination of benzo[a]pyrene in cigarette mainstream smoke using GC/MS - Part 1: Method using methanol as extraction solvent, \$68.00

<u>ISO 22634-2:2017.</u> Cigarettes - Determination of benzo[a]pyrene in cigarette mainstream smoke using GC/MS - Part 2: Method using cyclohexane as extraction solvent, \$68.00

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

ISO 5395-3/Amd2:2017. Garden equipment - Safety requirements for combustion-engine-powered lawnmowers - Part 3: Ride-on lawnmowers with seated operator - Amendment 2: Cutting means enclosure guards, \$19.00

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

<u>ISO 13926-2:2017.</u> Pen systems - Part 2: Plunger stoppers for peninjectors for medical use, \$68.00

#### TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

 <u>ISO 13184-3:2017</u>, Intelligent transport systems (ITS) - Guidance protocol via personal ITS station for advisory safety systems - Part 3: Road guidance protocol (RGP) conformance test specification, \$103.00

ISO 14813-6:2017. Intelligent transport systems - Reference model architecture(s) for the ITS sector - Part 6: Use of ASN.1, \$103.00

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

ISO 13918:2017, Welding - Studs and ceramic ferrules for arc stud welding, \$138.00

ISO 17633:2017. Welding consumables - Tubular cored electrodes and rods for gas shielded and non-gas shielded metal arc welding of stainless and heat-resisting steels - Classification, \$162.00

## **ISO Technical Reports**

### PLASTICS (TC 61)

<u>ISO/TR 10093:2017</u>, Plastics - Fire tests - Standard ignition sources, \$185.00

## **ISO Technical Specifications**

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

ISO/TS 18864:2017, Health informatics - Quality metrics for detailed clinical models, \$162.00

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

ISO/IEC 11770-3/Amd1:2017, Information technology - Security techniques - Key management - Part 3: Mechanisms using asymmetric techniques - Amendment 1: Blinded Diffie-Hellman key agreement, \$19.00

ISO/IEC 14882:2017, Programming languages - C++, \$232.00

- ISO/IEC 19941:2017. Information technology Cloud computing -Interoperability and portability, \$209.00
- ISO/IEC 10192-3:2017, Information technology Home electronic system (HES) interfaces - Part 3: Modular communications interface for energy management, \$232.00

ISO/IEC 7816-11:2017. Identification cards - Integrated circuit cards -Part 11: Personal verification through biometric methods, \$138.00

<u>ISO/IEC 23000-13:2017</u>, Information technology - Multimedia application format (MPEG-A) - Part 13: Augmented reality application format, \$232.00

ISO/IEC 14165-151:2017, Information technology - Fibre channel -Part 151: Fibre Channel BaseT (FC-BaseT), \$232.00

ISO/IEC/IEEE 8802-1Q/Amd4:2017, Information technology -Telecommunications and information exchange between systems -Local and metropolitan area networks - Specific requirements - Part 1Q: Bridges and bridged networks - Amendment 4: Frame preemption, \$209.00

ISO/IEC/IEEE 8802-1Q/Amd5:2017, Information technology -Telecommunications and information exchange between systems -Local and metropolitan area networks - Specific requirements - Part 1Q: Bridges and bridged networks - Amendment 5: Enhancements to bridging of IEEE 802.11 media, \$138.00

ISO/IEC/IEEE 8802-3/Amd2:2017, Information technology -Telecommunications and information exchange between systems -Local and metropolitan area networks - Specific requirements - Part 3: Standard for Ethernet - Amendment 2: Media access control parameters, physical layers, and management parameters for 25 Gb/s operation, \$232.00

### ISO/IEC/IEEE 8802-3/Amd3:2017, Information technology -

Telecommunications and information exchange between systems -Local and metropolitan area networks - Specific requirements - Part 3: Standard for Ethernet - Amendment 3: Physical layers and management parameters for 25 Gb/s and 40 Gb/s operation, types 25GBASE-T and 40GBASE-T, \$232.00 ISO/IEC/IEEE 8802-3/Amd4:2017, Information technology -Telecommunications and information exchange between systems -Local and metropolitan area networks - Specific requirements - Part 3: Standard for Ethernet - Amendment 4: Physical layer specifications and management parameters for 1 Gb/s operation over a single twisted-pair copper cable, \$232.00

- ISO/IEC/IEEE 8802-3/Amd5:2017, Information technology -Telecommunications and information exchange between systems -Local and metropolitan area networks - Specific requirements - Part 3: Standard for Ethernet - Amendment 5: Specification and management parameters for interspersing express traffic, \$209.00
- ISO/IEC/IEEE 8802-3/Amd7:2017, Media access control parameters, physical layers, and management parameters for 2.5 Gb/s and 5 Gb/s operation, types 2.5GBASE-T and 5GBASE-T, \$232.00
- ISO/IEC/IEEE 12207:2017, Systems and software engineering -Software life cycle processes, \$232.00

#### OTHER

<u>ISO/IEC 17011:2017</u>, Conformity assessment - Requirements for accreditation bodies accrediting conformity assessment bodies, \$162.00

## **IEC Standards**

#### **ELECTROACOUSTICS (TC 29)**

- IEC 60942 Ed. 4.0 b:2017, Electroacoustics Sound calibrators, \$317.00
- <u>S+ IEC 60942 Ed. 4.0 en:2017 (Redline version)</u>, Electroacoustics -Sound calibrators, \$412.00

#### PIEZOELECTRIC AND DIELECTRIC DEVICES FOR FREQUENCY CONTROL AND SELECTION (TC 49)

IEC 62604-2 Ed. 2.0 en:2017, Surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers of assessed quality - Part 2: Guidelines for the use, \$164.00

#### SWITCHGEAR AND CONTROLGEAR (TC 17)

- IEC 62271-101 Amd.1 Ed. 2.0 b:2017, Amendment 1 High-voltage switchgear and controlgear - Part 101: Synthetic testing, \$352.00
- IEC 62271-101 Ed. 2.1 b:2017, High-voltage switchgear and controlgear Part 101: Synthetic testing, \$1055.00

## **IEC Technical Specifications**

### SOLAR THERMAL ELECTRIC PLANTS (TC 117)

IEC/TS 62862-1-2 Ed. 1.0 en:2017. Solar thermal electric plants - Part 1-2: General - Creation of annual solar radiation data set for solar thermal electric (STE) plant simulation, \$199.00

IEC/TS 62862-1-3 Ed. 1.0 en:2017. Solar thermal electric plants - Part 1-3: General - Data format for meteorological data sets, \$117.00

# **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

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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 AN 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 ad 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

## **FM Approvals**

The reaccreditation of FM Approvals, 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 FM Approvals-sponsored American National Standards, effective December 1, 2017. For additional information, please contact: Ms. Josephine Mahnken, Senior Business Process Specialist, FM Approvals, P.O. Box 9102, 1151 Boston-Providence Turnpike, Norwood, MA 02062; phone: 781.255.4813; email: josephine.mahnken@fmapprovals.com.

# International Organization for Standardization (ISO)

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

### **Occupational Health and Safety Management**

### Comment Deadline: January 12, 2018

BSI, the ISO member body for the UK and secretariat of ISO Project Committee 283 (ISO/PC 283), has submitted to ISO a proposal for a new field of ISO technical activity on Occupational Health and Safety Management, with the following scope statement:

Standardization in the field of occupational health and safety management to enable an organization to control its OH&S risks and improve its OH&S performance.

Please note that BSI proposed a new work item proposal on this subject in 2013 which was approved and the standard ISO 45001 (Occupational health and safety management systems -- Requirements with guidance for use) is currently being developed under ISO/PC 283. As stated in the proposal, during the development of ISO 45001 it became apparent that there are currently no other ISO or IEC committees developing generic occupational health and safety standards other than ISO/PC 283, and this proposal seeks to gain support for an ISO/TMB decision to convert the project committee into a technical committee to enable continual maintenance of ISO 45001 and the development of supporting and related standards.

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, January 12, 2018.

## U.S. New Work Item Proposal

# Specifications for the Process of Remanufacturing

### Comment Deadline: December 22, 2017

ANSI has received a request from The Remanufacturing Industries Council (RIC), an ANSI member and ANSIaccredited SDO, to submit to ISO a new work item proposal for the development of an ISO standard on the subject of Specifications for the Process of Remanufacturing, with the following scope statement:

This standard defines and provides a benchmark for the process of global remanufacturing, and establishes specifications that characterize the remanufacturing process and differentiate remanufacturing from other practices.

Please note that in 2013 and in 2016, SAC (China) submitted proposals for a new ISO technical committee on remanufacturing technology which were both rejected by the ISO members, including ANSI. In the case of the SAC proposals, they focused on remanufacturing of specific technologies or products, whereas this draft ANSI proposal focuses on the remanufacturing process, which is regarded as more acceptable to RIC and its stakeholders.

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, December 22, 2017.

# **Information Concerning**

## International Organization for Standardization (ISO)

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

## ISO/TC 215 – Health informatics

## Reply Deadline: December 15, 2017

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 215 – Health informatics. ANSI has delegated the responsibility for the administration of the Secretariat for ISO/TC 215 to the American Health Information Management Association (AHIMA). AHIMA has advised ANSI of its intent to relinquish its role as delegated Secretariat for this committee.

ISO/TC 215 operates under the following scope:

Standardization in the field of health informatics, to facilitate the coherent and consistent capture, interchange and use of health-related data, information, and knowledge to support and enable all aspects of the health system.

ANSI is seeking organizations in the U.S. that may be interested in assuming the role of delegated Secretariat for ISO/TC 215. 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.

If no U.S. organization steps forward to assume the ISO/TC 215 Secretariat, or if there is insufficient support for ANSI to assume direct administration of this activity by Friday, December 15, 2017, then ANSI will inform the ISO Central Secretariat that the U.S. will relinquish its leadership of the committee. This will allow ISO to solicit offers from other countries interested in assuming the Secretariat role.

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

### ANSI/IES RP-8-14 ADDENDUM #1

If you, as a user of ANSI/IES RP-8-14, *Roadway Lighting*, believe you have located an error not covered by the following revisions, please mail or send a letter with your information to Pat McGillicuddy, IES Manager of Standards Development, at <u>pmcgillicuddy@ies.org</u>, IES, 120 Wall St., 17<sup>th</sup> Floor, New York, NY 10005. Additions will be posted to this list online as they become available.

Please confine your comments to specific typographical errors or misstatements of fact in the document's text and/or graphics. Do not attempt a general revision of ANSI/IES RP-8-14.

*New text is in italic bold font. Deleted text has a strikethrough.* 

#### 1.1 Purpose of this Standard Practice

#### In Canada, The TAC Guide for the Design of Roadway Lighting includes guidance for warranting.

1.3-Roadway Highway Lighting and Street Lighting

Note: All instances of "roadway lighting" are changed to "highway lighting".

1.4 Related Documents

*Note: Add or update the following references:* 

- IES DG-21-15 Design Guide for Residential Street Lighting
- IES G-1-03 16 Security Lighting Guidelines for People, Property, and Critical Infrastructure
- IES RP-20-98 14 Lighting for Parking Facilities
- IES RP-33-<del>99</del> **14** Lighting for Exterior Environments

#### 2.4 Luminaire Classification System (LCS)

#### Note: Edits to 4th paragraph:

Since the LCS system is based on the percent of luminaire lumens within the zones of solid angles of a sphere and the previous system was based on light intensities on a lateral and transverse grid on a target area *luminous intensity as a percentage of lamp lumens*, there is no direct correlation between the two systems. The former system was defined in IES TM-3 (withdrawn) and is now given for reference in Annex E of this practice.

#### 3.6 Glare and Sky-Glow Issues

*Note: Edits to* 3<sup>*rd*</sup> *Paragraph:* 

IES TM-11-00/R11, Light Trespass: Research, Results, and Recommendations, provides guidelines on limitations for light trespass. Note: Edits to 5<sup>th</sup> Paragraph:

The appropriate lighting level restrictions at each of the above Lighting Zones is currently under review by the IES Roadway Lighting Committee but were not validated and available at the time of this revision. 3.9 Spectral Considerations

IES TM-12-12, Spectral Effects of Lighting on Visual Performance at Mesopic Light Levels, discusses the special issues that have to be considered when evaluating the impact of spectral characteristics of light sources for night time viewing. Essentially the rated lumens of sources are based on the photopic luminous efficiency function, which measures the effectiveness of light to produce a visual sensation in the fovea as a function of wavelength (Figure 9). This curve peaks at a wavelength of 555 nm, which is a greenish yellow color (now used for some roadway signs and emergency vehicles). At very low light levels vision is primarily mediated by the rod system of photoreceptors, which have a different response curve, and are only present outside of the foveal (central vision) region of the retina. The scotopic luminous efficiency function peaks at 505 nm, which, when viewed by cone vision, is a green color.

For street and roadway lighting, average light levels are usually in the mesopic range—between the photopic and scotopic ranges. There have been numerous studies, most notably by the LRC (Lighting Research Center, Rensselaer Polytechic Institute), and more recently by the MOVE consortium (Mesopic Optimization of Visual Efficiency Developed by a European research consortium project), that have shown improved visual performance in the periphery, with light sources that have enhanced scotopic content, when light levels are in the mesopic range.

The results of these studies are summarized in CIE Technical Report 191:2010, "Recommended System for Mesopic Photometry Based on Visual Performance", and have been expressed in terms of adjustment factors that scale the adaptation luminance level to the level that would give the same visual performance for a light source with a scotopic to photopic (S/P) ratio of one. This CIE document provides a means for calculating mesopic multipliers to account for improved visual performance when using broad spectrum light sources at low lighting levels with higher S/P ratios. Figure 9 illustrates this by showing curves at various light levels in the mesopic range and giving effective mesopic adjustment factors as a function of source S/P ratios. However, each IES committee is responsible for the proper application of these in their respective practices. The luminance levels in Tables 2 and 3 were developed for roadway locations in the direct line of sight of the observer, and thus are to be interpreted as photopic levels only. However, the lighting of off-roadway areas is often important in determining the overall quality of the lighting system. This is particularly true for urban areas and lower vehicular speeds, where it is important to be able to evaluate possible road conflicts from pedestrians, bicyclists, and animals. These hazards are likely to be seen in peripheral view, and their visibility will be affected by the mesopic shift.







Figure 9: Example effective luminance factors (from CIE 191) for a variety of adaptation luminances and S/P ratios. The right vertical axis shows Luminance ( cd/m<sup>2</sup>). (©Illuminating Engineering Society of North America.)

The Roadway Lighting Committee is recommending that these mesopic multipliers only be used in applications for street lighting where the posted speed limit is 25 mph (40 km/h) or less. The application of these factors may be appropriate in situations where the fixed roadway lighting system is the dominant or only light source in the driver's field of view. In cases where bright sources or surroundings increase adaptation levels significantly, these factors are not appropriate. A study sponsored by the Federal Highway Administration (FHWA) is underway to evaluate spectral power distribution effects on the nighttime driving task under dynamic conditions. Based on results of this and other research this document will be updated as appropriate.

The spectral content of street and roadway lighting products is varied and, to a limited extent, controllable. Luminaires are available with many different blends of spectra; from nearly monochromatic yellows and reds to combinations of red, blue and green that appear as white light to many observers. Designers may select the spectral content of luminaires to achieve effects of color in the environment of their projects.

As anticipated in RP-8-14, the US Federal Highway Administration (FHWA) sponsored research by the Transportation Institute at Virginia Polytechnic Institute and State University (VTTI)<sup>54</sup> to evaluate the effects of changing spectral content in overhead street and roadway luminaires on driver performance. The Roadway Lighting Committee after review of this research concluded that varying spectral content of overhead luminaires does not affect driver performance, as represented by detection of potential hazards.

IES TM-12-12 and The Lighting Handbook, 10<sup>th</sup> ed. (IES 2011) introduced mesopic adjustment factors as potentially relevant to street and highway lighting calculations. The Roadway Lighting Committee considered the possibility that driver performance may vary with changes in spectral content of overhead lighting. After considering the results of the VTTI research, the Roadway Lighting Committee determined that the under realistic driving conditions, the driver is primarily photopically adapted, and therefore mesopic adjustment factors are not appropriate for street and roadway lighting calculations at posted speeds of 40 km/h (25 mi/h) and higher. Therefore, calculations for street and roadway luminance and illuminance are to remain based on the photopic luminous efficiency function without adjustment for

The luminance levels in Tables 2 and 3 (in Sections 4.1 and 4.2, respectively) were developed for roadway locations in the direct line of sight of the observer, and thus are to be interpreted as photopic levels only.

## The Roadway Lighting Committee is continuing to investigate mesopic impacts for roads with posted speeds of lower than 40 km/h (25 mi/h) and pedestrian-to-pedestrian visual tasks.

### 4.0 Roadway Lighting Recommendations

#### *Note: Edits to 8<sup>th</sup> paragraph:*

For determining what horizontal illuminance level should be used instead of the recommended luminance level, a ratio of  $1cd/m^2 \cong 15$  lux for an R3 pavement and  $1 cd/m^2 \cong 10$  lux for an R1 pavement can be used. the following an equivalencies may be used:  $1cd/m^2$  for 10 lux on R1 pavement;  $1cd/m^2$  for 15 lux on R2 or R3 pavement; and  $1cd/m^2$  for 13.3 lux on R4 pavement. Field validation of a lighting system's performance may be done by luminance or illuminance.

In street and highway lighting, veiling luminance,  $L_v$ , is the metric used to evaluate disability glare as experienced by the driver. Stray light within the eye, produced by light sources in the field of view, effectively superimposes a "veil" of luminance on the retina. This decreases the apparent contrast of objects against their background and can sometimes cause visual discomfort. In Table 2 and Table 3 (in Sections 4.1 and 4.2, respectively), the criterion for limiting glare is expressed as the Veiling Luminance Ratio, which is the veiling luminance maximum divided by the average luminance of the road surface. In this way, luminaire "brightness" is considered in the context of the "brightness" of the road surface as seen by the driver. Note: Add after the 9<sup>th</sup> paragraph:

Other considerations when applying these recommendations include:

- All Highways and Streets shall be lighted as per their classification as determined by the proper warrants.
- When a specifying authority selects a Luminaire Classification System with a specific B-U-G rating for a particular highway or street's luminaires, this shall not serve to compromise the design criteria as determined by the highway or street Design Classification and Pedestrian Classification
- Environmental Lighting Zones shall have no influence in the selection of the proper Highway or Street Classification.
- No off-road lighting shall be considered in determining either a Highway or Street Classification nor shall any off-road lighting contribution be used to achieve the minimum lighting requirements of a classification.
- Highway and Street lighting design shall be restricted as much as possible to the roadway area.
- However, it may be desirable to extend the lighting to adjacent areas such as:
  - Sidewalks, utilizing the proper maintained illuminance values for walkways
    - **Building verticals, for security** 
      - This should be a predetermined agreement with the responsible local authorities.
- Off-road lighting installations shall take into consideration any adjacent Highways or Streets as not to create any safety issues to drivers.
- 4.1 Highway Lighting Add after Table 2:

The reader may notice that the luminance criterion for expressways is higher than that for either of the freeway types, even though the expressway speed limits tend to be lower. The reason is the additional complexity inherent in expressways, as manifested in an increase in points of conflict due to the presence of intersections and even driveways.

4.2.1 Pedestrian Areas and Bikeways

The values in the following tables do not consider areas with increased crime and vandalism. IES G-1-16, Security Lighting Guidelines for People, Property, and Critical Infrastructure, offers excellent guidance for this. Definitions for conflict areas can be found in Section 2.2. The recommended values also include reflected light from the sidewalk surface, which can be a significant contributor. Semi-cylindrical illuminance can also be considered as a design method. Additional information on this metric can be found in CIE 115:2010 Lighting of Road for Motor and Pedestrian Traffic.

High Pedestrian Conflict Areas:

Table 4 includes recommended horizontal and vertical illuminances for pedestrian areas. Vertical illuminance is measured at a height of 1.5 m (5 ft.) in both directions and parallel to the main pedestrian flow.

#### Table Notes:

E<sub>avg</sub>: Minimum maintained average horizontal illuminance at pavement

E<sub>min</sub>: Minimum horizontal illuminance at pavement

E<sub>V.min</sub>: Minimum vertical illuminance at 1.5m above the pavement in both directions and parallel to the main pedestrian flow.

#### Pedestrian Only areas apply to areas such as sidewalks

\* Horizontal only

6.5.2 Benefits Several benefits are derived from the application of a high-mast lighting system: This is in sharp contrast to a conventional lighting system 15 meters (50 ft.) 20 meters (66 ft).

#### 5.13.3 Recommendations

Note: 3<sup>rd</sup> Paragraph:

In addition, the *illumination installation* should also be evaluated for glare. Glare can be debilitating and quickly generate confusion for the driver. Therefore, the Veiling Luminance Ratio should never be greater than  $0.3 \frac{L_{vmax}}{L_{avy}}$ . for situations where

there is a long enough straight road to enable the calculation of a Veiling Luminance Ratio, its value should never be greater than 0.3. Alternatively, for the situations where curving roads or ramps prevent calculation of the veiling luminance ratio, luminaires with a low-G BUG rating are desirable.

A.4.2 Summary of Pavement Illuminance Data

Pavement illuminance data is summarized in terms of the average of the pavement illuminance at all grid points. Uniformity ratios are calculated as follows: the average-to-minimum ratio is determined by dividing the average illuminance at all grid points by the value for the lowest grid point.

A.6 The r-Tables

This Standard Practice has adopted the angular nomenclature and format of the CIE, shown in Tables A1 through A4 (in Section A.7). The values in the r-tables represent the reduced luminance coefficient r. The r values shown in the tables are not pure reflectance but are the reflectance q at angle beta and gamma multiplied by the cosine cubed of gamma the luminance coefficient q at angles 6 and y multiplied by the cosine cubed of y and then multiplied by a factor *MF*, which is often 10,000 so that they are larger integer numbers. The average luminance coefficient  $Q_0$  (Q-zero), represents the "lightness" of the pavement and is defined as the solid-angle-weighted average of the luminance coefficients for the relevant directions of incident light.<sup>53</sup> Each r-table shows the applicable  $Q_0$  value.

A.7 Calculation of Veiling Luminance

 $L_{\psi} = \frac{K}{\phi^{\pi}}, n=2.3 \cdot 0/7 \times \log_{10}(\phi) f \text{ or } \phi < 2, n f \text{ or } 2 \le \phi$ 

 $L_v = K/\theta^n$ 

Where:

n

L<sub>v</sub> = Veiling Luminance from one individual luminaire

 $K = 10 \times$  (The vertical illuminance at the plane of  $\frac{25 \cdot year \cdot old}{25 \cdot year \cdot old}$  the observer's eye, which is perpendicular to the line of sight and adjusted for the effects of aging on vision) The observer in this formula is assumed to have the visual performance of a 25-year-old. (See Annex B, Section B.2.1.4, for calculation of age correction factors.)

 $= 2.3 - 0.7 \log_{10}(\vartheta) \text{ for } \vartheta < 2; n = 2 \text{ for } \vartheta \ge 2$  $\# \vartheta \qquad = \text{Angle in degrees}$ 

A.8 Calculation of Target Visibility *First Step* 

 $L_a = L_b + L_V$   $LL_a = log_{10}(L_a)$   $A = \arctan^{-1}(Target \ size/Distance \ observer \ to \ target) \times 60$ 

Second Step If  $L_a \ge 0.6$ then  $F = [\log_{10}(4.2841 L_a^{0.1556}) + (0.1684 L_a^{0.5867})]^2$ and  $L = (0.05946 L_a^{0.466})^2$ 

#### If $L_{a} > 0.0418$ and $L_{a} < 0.6$ 0.00418 < $L_{a} < 0.6$

then  $F = 10^{\{2 \ [(0.0866 \ LLa^2) + (0.3372 \ LLa) - 0.072]\}}$ and  $L = 10^{[2 \ [(0.319 \ LLa - 1.256)]]}$ 

If  $L_a < 0.00418$ then  $F = 10^{(0.346 \, LLa + 0.056)}$ and  $L = 10^{[(0.0454 \, LLa^2) + (1.055 \, LLa) - 1.782]}$ 

### Fourth Step

If  $-1 < LL_a > -2.4$ , then  $M = 10^{-10^{-(0.125 \times ((:LL_a+1)2)} + 0.0245)} + 0.0245} -2.4 < LL_a < -1$ , then  $M = 10^{-\{0.075 \ [(LLa+1)^2] + 0.0245\}}$ If  $LL_a \ge -1$ , then  $M = 10^{-\{0.125 \ [(LLa+1)^2] + 0.0245\}}$  If  $LL_a \leq -2.4$ , then FCP = 0.5. (TGB and FCP [see next step] need not be calculated.)

Then,  $TGB = -0.6 L_a^{-0.1488}$ And,  $FCP = 1 - [(M)(A)^{TGB}/2.4(DL_1)(AZ=2)/2]$ FCP = 1 - [M (A<sup>TGB</sup>) / 2.4 DL<sub>1</sub>]

Summary of Data. Small Target Visibility values are typically both positive and negative over an area on the roadway. An *absolute* value of 1.0 or less indicates that the target is below threshold for a standard observer who is allowed a fixation of 0.2 seconds. Large *VL* values are not counted as heavily in the computation of the weighted average, *STV*, in order to compensate for this saturation in recognition times. The computation of these summary values is described below.

1. Positive and negative values of VL are made positive and converted to RWVL (Roadway Visibility Level) values:  $\frac{RWVL=10^{(-0.1*ABS(VL))}}{RWVL=10^{(-0.1*ABS(VL))}}$ 

 $RWVL = 10^{[-0.1|VL|]}$ 

2. The *RWVL* values are averaged to obtain *AWRVL*:

ARWVL = (Sum of all RWVL) / (Number of points in the grid)

3. The *ARWVL* average is converted to weighted average *VL*, or *STV*, by the equation:

STV = Weighted Average VL = -10  $\log_{10}(ARWVL)$ References <del>20</del> **17 and 21** through 42 in Annex D provide more information on Small Target Visibility

## A.9.1.1 Determination of Calculation Point Locations - edits to 2<sup>nd</sup> – 5<sup>th</sup> paragraphs

Luminaire location geometry refers to the spacing, mounting height, overhang, tilt, and orientation of the luminaire. In the event that the luminaire geometry is not uniform along the length of the roadway, the gridded portion should continue until it has reached the point where the luminaire geometry remains constant.

Contributed values from a luminaire to a calculation point shall be included in the luminance calculations only when the luminaire/point combination has an r-value that is non-zero.

The calculation points for horizontal and vertical illuminance in the pedestrian area adjacent to the street shall match the street grid spacing **be spaced no more than 2 meters apart**, positioned in the center of the sidewalk pedestrian area, located 1.5 meters above the sidewalk, and calculated assuming a meter aimed along the sidewalk in both walking directions.

Calculation points for the vertical illuminance in crosswalks shall be positioned at a height of 1.5 meters and spaced at 0.5 meters. A single line of calculation points shall be placed in the center of the crosswalk extending from curb line to the centerline of the roadway with the meter oriented in the direction of the approaching driver for both sides of the roadway.

Calculation points for intersections shall extend from the stop bar at each street across the entire intersection. The grid spacing for the points shall be 2 meters throughout the calculation area.

### A.9.2 Curved Roadway Sections

Curved roadway sections (less than-600 **160**-meter radius) and roads with steep and variable grades (6 percent or greater) are calculated using the horizontal illuminance method. Grids should be placed across the travel lanes, at the same locations defined in Section A.9.1.2. The lighting levels can be derived using the illuminance-luminance equivalencies given in Section 4.0 for the pavement classification under consideration.

### Annex E – Classification of Luminaire Light Distribution

(This Annex is not part of ANSI/IES RP-8-14, *American National Standard Practice for Roadway Lighting*, but is included for informational purposes only.)

This annex was contained in RP-8-1983. The classification method is still valid and used for roadway lighting luminaires. The IES has however replaced the categories of Section E4 describing the control of the candlepower distribution with a new system of classification described in IES TM-15-11 Luminaire Classification System for Outdoor Luminaires.



Figure E1. Recommended vertical light distribution boundaries on a rectangular coordinate Grid (representation of a sphere). Dashed lines are isocandela traces.

#### E.1.2 Classification – First paragraph

All luminaires can be classified according to their lateral and vertical distribution patterns. Different lateral distributions are available for different street widths to mounting height ratios; and different vertical distributions are available for different spacing-to-mounting height ratios.



Figure E3. Recommended lateral light distribution boundaries on a rectangular coordinate grid (representation of a sphere). E.2 Lateral Longitudinal Light Distributions

Lateral Longitudinal (along-road) light distributions are divided into three groups: short (S), medium (M), and long (L). E.3.1 Luminaires at or Near Center of Area

The group of lateral width *transverse distribution* classifications that deals with luminaires intended to be mounted at or near the center of the area to be lighted has similar light distributions on both the "house side" and the "street side" of the reference.

### E.3.1.4 Type VS

### A Type VS luminaire is one where the zonal lumens for each of the eight horizontal octants (0-45, 45-90, 90-135, 135-180, 180-225, 225-270, 270-315, and 315-360 degrees) are within ± 10 percent of the average zonal lumens of all octants. The distribution is similar to the Type V distribution but has a square shape.

E.3.2 Luminaires on Near Side of Area

The lateral width *transverse distribution* classifications that deal with luminaires that are intended to be mounted near the side of the area to be lighted vary as to the width of distribution range on the street side of the reference line.

#### E4. Control of distribution above maximum candlepower

Although the pavement brightness generally increases when increasing the vertical angle of light flux emission, it should be emphasized that the disability and discomfort glare also increase. However, since the respective rates of increase and decrease of these factors are not the same, design compromises become necessary in order to achieve balanced performance. Therefore, varying degrees of control of candlepower in the upper portion of the beam above maximum candlepower are required. This control of the candlepower distribution is divided into four categories. These categories do not apply to luminaires tested using absolute photometry.

E4.1 Full Cutoff

A luminaire light distribution is designated as full cutoff (FC) when there is no

light at or above an angle of 90 degrees above nadir (horizontal), and the candlepower per

1000 lamp lumens does not numerically exceed 100 (10 percent) at an angle of 80 degrees

above nadir. This applies to any lateral angle around the luminaire.

E4.2 Cutoff

A luminaire light distribution is designated as cutoff (C) when the candlepower per

1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees

above nadir (horizontal), and 100 (10 percent) at a vertical angle 80 degrees above nadir. This applies to any lateral angle around the luminaire.

#### E4.3 Semi cutoff

A luminaire light distribution is designated as semi cutoff (SC) when the candlepower per 1000 lamp lumens does not numerically exceed 50 (5 percent) at an angle of 90 degrees above nadir (horizontal), and 200 (20 percent) at a vertical angle of 80 degrees above nadir. This applies to any lateral angle around the luminaire.

#### E4.4 Non-cutoff

## A luminaire light distribution is designated as non-cutoff (NC) when there is no candlepower limitation in the zone above maximum candlepower.

#### E.4 Variations and Comments

With the variations in roadway width, type of surface, luminaire mounting height, and spacing that may be found in actual practice, there can be a large number of "ideal" intensity distributions. For practical applications, however, a few types of lateral transverse distribution patterns may be preferable to many complex arrangements. This simplification of distribution types will be more easily understood, and consequently there will be greater assurance of proper installation and more-reliable maintenance. E.4.1 Upward Tilt

When luminaires are tilted upward, it raises the angle of the street-side light distribution. Features such as cutoff or width **BUG** *rating or transverse-distribution* classification can be changed appreciably. When the tilt is planned, the luminaire should be photometered and the light distribution classified for the position in which it will be installed.

#### E.4.2 Coverage

Types I, II, III, and IV-lateral *transverse* light distributions should vary across transverse roadway lines other than that which includes the maximum candlepower, in order to provide adequate coverage of the rectangular roadway area involved. The width of the lateral angle of *forward reach of the transverse* distribution required to adequately cover a typical width of roadway varies with the vertical angle or length of *longitudinal light* distribution as shown by the TRL (transverse roadway line). For a TRL 4.5 MH, the lateral angle of distribution for roadway coverage is obviously narrower than that required for TRL 3.0 MH or TRL 2.0 MH. For a luminaire with a longitudinal reach to TRL 4.5 MH, the extent of the transverse light distribution is obviously less than that allowed by a luminaire with a longitudinal reach to TRL 3.0 MH or TRL 2.0 MH.

#### E.4.4 Multiple-Luminaire Arrangements

For high-mast installations involving multiple luminaires on one structure or support, the entire group of luminaires may be considered as a single composite luminaire for purposes of determining distribution type, cutoff classification or maximum candlepower. Photometric data may be supplied in this form.

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## NSF/ANSI 50 - 2016a

Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities

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3 Swimming pool water contact materials and swimming pool treatment chemicals

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## 3.2 Swimming pool treatment chemicals

Swimming pool treatment chemicals shall be evaluated in accordance with the requirements of Annex R and shall not impart undesirable levels of either chemical constituents or contaminants to the water.

Swimming pool treatment chemicals evaluations under this Standard shall be include:

- the swimming pool treatment chemical constituents;
- the product-specific contaminants identified in the formulation review or by testing; and
- other constituents as identified in the formulation review or by testing.
- •

## 12 Filtration media

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## 12.2.3 Sand and alternate sand-type filter media

Filter media in a sand-type filter shall conform to <del>3.</del> 2, 5.1.8, 5.1.9, and 5.3.5, and 12.3 when tested in a representative sand-type filter in accordance with Annex B, sections B.3, B.4 and B.5.

**12.2.3.1** The manufacturer of sand and an alternate sand-type filter media shall specify the particle size and uniformity coefficient for the media. Particle size and uniformity coefficient shall be confirmed in accordance with ASTM C136 with sieves conforming to ASTM E11.

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Revision to NSF/ANSI 350-2017 Draft 1, Issue 25 (November 2017)

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NSF/ANSI Standard for Wastewater Treatment Systems —

# Onsite residential and commercial water reuse treatment systems.

8 Performance testing and evaluation

## 8.4.1.1 Graywater

Influent samples shall be collected two times per week, except for the following (which shall be collected one timer per week): total phosphorous; COD; and total coliform. ; surfactants, iron, fats, oil and grease Effluent samples shall be collected three times per week during design loading periods and three times during each stress recovery period (the week following completion of each of the stress simulations described in 8.1.2.2.2). Influent samples shall be collected two times per week during all stress events, except power/equipment failure stress and vacation stress where no samples shall be collected. Color, odor, oily film and foam on the effluent once very 2 m (8 wk [56 d]) for a total of 3 samples over the course of the test.

### 8.4.1.2 Residential Wastewater

Influent residential wastewater samples shall be collected three times per week, except for the following (which shall be collected one time per week): total phosphorous; COD; and total coliform; and TOC. Effluent samples shall be collected three times per week during design loading periods and three times during each stress recovery period. Influent samples shall be collected two times per week during all stress events, except power/equipment failure stress and vacation stress where no samples shall be collected. Color, odor, oily film and foam on the effluent once every 2 m (8 wk [56 d]) for a total of 3 samples over the course of the test.

Annex A

(normative)

	Key elements fo	or a field evaluation of a commercial (C) onsite treatment system	
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	Table A.1	Summary of analytical accuracy and precision limit goals	

Analyses	Units	Reference methods	Accuracy percent recovery	Precision relative percent diff.
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Revision to NSF/ANSI 350-2017 Draft 1, Issue 25 (November 2017)

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BOD₅	mg/L	SM 5210 B	75-125	0-20
CBOD <sub>5</sub>	mg/L	SM 5210 B	75-125	0-20
total suspended solids	mg/L	SM 2540 D	NA	0-10
рН	SU	SM 4500-H+-B	NA <sup>1</sup>	0-10
temperature	°C	SM 2550 B <sup>2</sup>	NA	0-10
E. coli	MPN/100mL	SM 9221		
turbidity	NTU	EPA 180.1	89-102	0-7
total chlorine residual	mg/L	SM 4500-CI-B-I	98-111	0-10
TKN	mg/L as N	EPA 351.2	80-120	0-10
NO <sub>3</sub> /NO <sub>2</sub>	mg/L as N	EPA 353.2	80-120	0-10
total phosphorous	mg/L	SM 4500-P-E	89-123	0-10
COD	mg/L	SM 5220 B		
total coliform	MPN/100mL	SM 9221		
TOC	mg/L	SM 5310 C	79-129	0-5
surfactants	<del>mg/L</del>	<del>SM 5540 C</del>	<del>86-130</del>	<del>0-7</del>
fats, oil and grease	<del>mg/L</del>	<del>SM 5520 B</del>		
iron	<del>mg/L</del>	EPA 200.7	<del>86-108</del>	<del>0-9</del>
alkalinity	mg/L as CaCO₃	EPA 310.1	80-120%	0-10
hardness	mg/L as CaCO₃	EPA 200.7	88-119	0-17
<sup>1</sup> NA: Not applicable.		<u>.</u>	<u>.</u>	•
<sup>2</sup> Standard Methods.				

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

### **1. Electronic Media Instruction**

## PROPOSAL

91.5.1 With reference to 91.5, the instructions and warning statements required by Manufacturer's Literature, Section 91 and Installation Instructions, Section 155 shall be provided as printed material other instructions may be provided in electronic read-only media format, such as DVD, website, flash drive or CD-ROM. If electronic media instructions are provided, the instructions and warning statements required by Manufacturer's Literature, Section 91 and Installation Instructions, Section 155 shall also be included within the electronic media instructions.

91.5.2 The printed instruction material referenced in 91.5.1 shall contain detailed instructions of how to et reproduction without obtain a printed copy of the material contained in electronic format.

2. Countertop Fryers

PROPOSAL

### **109A Manufacturer's Literature**

109A.1 A cord connected, counter-top deep fryer ated nominal 120 V provided with an individual marketing container shall include instructions that the appliance is not intended for household use.

Exception: This requirement is not applicable to deep fryers additionally complying with the Standard for Household Electric Skillets and Frying Type Appliances, UL 1083.

## **109B Carton Markings**

109B.1 A cord connected counter-top deep fryer rated nominal 120 V provided with an individual marketing container shall be marked "NOT FOR HOUSEHOLD USE". The marking shall:

Be located on at least one outside surface; and a)

Appear in lettering not less than the height specified in Table 109B.1.

Exception: This requirement is not applicable to deep fryers additionally complying with the Standard for Household Electric Skillets and Frying-Type Appliances, UL 1083.

## Table 109B.1

### Lettering height

<b>NA</b> /•
More than
<u>0</u>
<u>6 (152)</u>
<u>10 (254)</u>

## BSR/UL 985-201x, Standard for Safety for Household Fire Warning System Units

## 1. Alarm Verification Labeling

81.579.8 The following markinginformation shall be included on a control unit, separate module, or interface which incorporates an alarm verification feature. The marking shall consist of the word "WARNING" and the following or equivalent wording in letters not less than 3/32 inch (2.4 mm) high:

"THIS UNIT INCLUDES AN ALARM VERIFICATION FEATURE THAT WILL RESULT IN A DELAY OF THE SYSTEM ALARM SIGNAL FROM THE INDICATED CIRCUITS. THE TOTAL DELAY (CONTROL UNIT PLUS SMOKE DETECTORS) SHALL NOT EXCEED 60 SECONDS. NO OTHER SMOKE DETECTOR SHALL BE CONNECTED TO THESE CIRCUITS UNLESS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION."

As part of the marking, iInformation shall be provided for the circuit, control unit delay time, smoke detector model, and smoke detector delay time, the following or equivalent format may be used.

	HICL	SMOKE DETECTOR	
CIRCUIT (ZONE)	CONTROL UNIT DELAY SEC.	MODEL	DELAY - SEC.
			(a)
			(a)

<sup>a</sup> Include detector data or the following or equivalent statement: "The delay (power-up) (start-up) time marked on the installation wiring diagram of the smoke detector or on the installed smoke detector(s) is to be used."

## 2. Revision to Charging Current Test

51.2.4 At the conclusion of the discharge period, maximum (alarm) load is to be applied for 4 minutes. The battery terminal voltage of the discharge battery and the voltage of all output circuits is then to be measured.

Exception No 1: Where a combination system includes carbon monoxide signaling, after the 4 minutes of fire or carbon monoxide alarm, the maximum carbon monoxide alarm load shall continue to be applied for a period of not be less than 12 hours. The 5-second "off" time of the carbon monoxide alarm signal shall be permitted to be changed to 60 seconds plus or minus 10 percent.

Exception No. <u>2</u>: <u>The secondary power source of a household carbon monoxide system</u> shall not be required to operate the system for 12 hours of alarm if the power source of carbon monoxide detectors and carbon monoxide audible notification appliances incorporating a low-power radio (wireless) transmitter/transceivers are capable of providing at least 24 hours in the normal condition, followed by 12 hours of alarm.

## BSR/UL 1449, Standard for Safety for Surge Protective Devices

## 1. Allowance for Lower Power Factors During Intermediate Current Testing

**Table 44.4** 

## Intermediate current test - available fault current from AC source of supply for Type 1 and Type 2 SPDs and permanently connected Type 3 SPDs

Test No.	Current (amps)	Power factor <sup>b</sup>
1	1000 ± 5%	0.7 - 1
2	500 ± 5%	0.7 - 1
3	100 ± 5%	0.8-1
4	Short circuit current rating <sup>a</sup>	See Table 52.1
<sup>a</sup> Current from Table	e 12.2, but not less than specified in Table 12	.1.
<sup>b</sup> Power factor may	be less.	9.K

## Table 44.5

## Intermediate current test - available fault current from the AC source of supply for Type 3 SPDs<sup>b</sup>

Test No.	Current (amps)	Power factor <sup>c</sup>	
1	a	See Table 52.1	
2	150 ± 5%	0.8 - 1	
3	50 ± 5%	0.8 - 1	
<sup>a</sup> Current from Table 12.1. For receptacle SPDs, 5kA shall be applied.			
<sup>b</sup> Also applies to permanently connected receptacle SPDs.			
° Power factor may be less.			

## 2. Addition of Hybrid-Type SPD Definition and Testing

<u>3.14.2 HYBRID-TYPE SPD - An SPD that has a combination of a Voltage Switching device in</u> series with Voltage Limiting device. Together, they are high impedance when no surge is present, but can have a sudden change in impedance to a low value on one device while limiting the voltage on another device. Common example of components in series such as GDT + MQV. These SPDs are sometimes called Hybrid SPDs.

40.2.2.2 An SPD that does not permit follow current, such as a metal-oxide varistor or a voltage limiting device in series with a voltage switching device a hybrid-type SPD, shall be tested on an ac or dc power source having sufficient current source capability that during the flow of current the crest value of the power frequency voltage or the dc voltage, measured at the SPD terminals, does not fall below the crest or dc rated voltage of the SPD by more than 10 percent.

Exception No. 1: The available short-circuit current (SCC) may be determined by measuring the open circuit voltage ( $V_{oc}$ ) under no load conditions and by measuring the closed circuit voltage  $(V_{cc})$  and current (I) with the circuit loaded with an approximate 20 A resistive load. The short circuit current is determined using the following equation:

$$SCC = (V_{oc} \times I) \div (V_{oc} - V_{cc})$$

For ac power sources, the power factor (pf) is determined by measuring the power, in watts, dissipated by the resistive load ( $P_{load}$ ) and using the following equation: \$40<sup>64</sup>

$$pf = (P_{load}) \div (V_{cc} \times I)$$

Note: All voltage, amperage and wattage measurements are made using true rms voltage ampere and watt meters respectively.

Exception No. 2: For In testing as specified in 40.7, the test sample shall be connected to a voltage source. The impedance of the power source shall be such that during the flow of follow current the crest value of the power frequency voltage or the dc voltage, measured at the SPD terminals, does not fall below the crest value of its MCOV by more than 10 percent.

Exception No. 3: The available short circuit current is measured to be 100 A or greater.

44.2.3 For each representative device, the overvoltage is to be applied for 7 hours, or until the SPD becomes disconnected from the ac supply (due, for example, to open circuiting of a thermal or overcurrent protective device).

Exception: For permanently connected (Type 1) and Type 3 SPDs) devices that do not conduct current (beyond leakage current) when subjected to the test, any one of the following options, or any combination thereof, shall be implemented and the test described in 44.2.1 repeated:

Short out any voltage switching components with solid wire that shall not open a) during this test;

Increase the test voltage above the values in 44.1 until disconnection occurs; or b)

Use lower voltage rated nonlinear voltage limiting and/or voltage switching C) components. Test at the maximum voltage specified in 44.1 until disconnection occurs.

1) Voltage limiting components may be replaced with lower voltage rated components from the same manufacturer and product family with identical chemical composition.

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2) Voltage switching devices may be replaced with lower voltage rated (breakdown voltage is lower than the peak of the test voltage) components from the same manufacturer and product family with identical physical dimensions.

3) For combination type SPDs with voltage limiting components in series with voltage switching devices, voltage limiting components may be replaced with lower voltage rated components from the same manufacturer and product family with identical chemical composition and voltage switching devices may be replaced with lower voltage rated (breakdown voltage is lower than the peak of the test voltage) components from the same manufacturer and product family with identical physical dimensions to achieve conduction.

d) For voltage switching-type SPDs or hybrid-type SPDs, a combination waveform surge shall be applied on the AC power source at a voltage level to turn on the SPD.

44.3.2 For each representative device, the overvoltage is to be applied for 7 hours, or until the SPD becomes disconnected from the ac supply (due, for example, to open circuiting of a thermal or overcurrent protective device).

Exception: For permanently connected devices that do not conduct current (beyond leakage current) nor exhibit any conditions described in 44.1.11 when subjected to the test, any one of the following options, or any combination thereof, shall be implemented and the test described in 44.3.1 repeated:

a) Short out any voltage switching components with solid wire that shall not open during this test;

b) Increase the test voltage above the values in 44.1 until disconnection occurs; or

c) Use lower voltage rated nonlinear voltage limiting and/or voltage switching components. Test at the maximum voltage specified in 44.1 until disconnection occurs.

1) Voltage limiting components may be replaced with lower voltage rated components from the same manufacturer and product family with identical chemical composition.

2) Voltage switching devices may be replaced with lower voltage rated (breakdown voltage is lower than the peak of the test voltage) components from the same manufacturer and product family with identical physical dimensions.

3) For combination type SPDs with voltage limiting components in series with voltage switching devices, voltage limiting components may be replaced with lower voltage rated components from the same manufacturer and product family with identical chemical composition and voltage switching devices may be replaced with lower voltage rated (breakdown voltage is lower than the peak of the test voltage) components from the same manufacturer and product family with identical physical dimensions to achieve conduction.

d) For voltage switching-type SPDs <u>or hybrid-type SPDs</u>, a combination waveform surge shall be applied on the AC power source at a voltage level to turn on the SPD.



## Standards Action Publishing Schedule for 2018, Volume No. 49

\*The "Submit End" deadline applies to forms received by Monday, 5:00 PM ET

Based on the dates below, an ANSI-Developer can anticipate that a request made between the SUBMIT START date and the \*SUBMIT END 5 PM date will appear in ANSI Standards Action on the SA PUBLISHED date. The last three columns display the 30, 45 & 60-DAY PR (Public Review) END dates

ISSUE	SUBMIT START	*SUBMIT END 5 PM	SA PUBLISHED	30-DAY PR END	45-DAY PR END	60-DAY PR END
1	12/19/2017	12/25/2017	Jan-5	2/4/2018	2/19/2018	3/6/2018
2	12/26/2017	1/1/2018	Jan-12	2/11/2018	2/26/2018	3/13/2018
3	1/2/2018	1/8/2018	Jan-19	2/18/2018	3/5/2018	3/20/2018
4	1/9/2018	1/15/2018	Jan-26	2/25/2018	3/12/2018	3/27/2018
5	1/16/2018	1/22/2018	Feb-2	3/4/2018	3/19/2018	4/3/2018
6	1/23/2018	1/29/2018	Feb-9	3/11/2018	3/26/2018	4/10/2018
7	1/30/2018	2/5/2018	Feb-16	3/18/2018	4/2/2018	4/17/2018
8	2/6/2018	2/12/2018	Feb-23	3/25/2018	4/9/2018	4/24/2018
9	2/13/2018	2/19/2018	Mar-2	4/1/2018	4/16/2018	5/1/2018
10	2/20/2018	2/26/2018	Mar-9	4/8/2018	4/23/2018	5/8/2018
11	2/27/2018	3/5/2018	Mar-16	4/15/2018	4/30/2018	5/15/2018
12	3/6/2018	3/12/2018	Mar-23	4/22/2018	5/7/2018	5/22/2018
13	3/13/2018	3/19/2018	Mar-30	4/29/2018	5/14/2018	5/29/2018
14	3/20/2018	3/26/2018	Apr-6	5/6/2018	5/21/2018	6/5/2018
15	3/27/2018	4/2/2018	Apr-13	5/13/2018	5/28/2018	6/12/2018
16	4/3/2018	4/9/2018	Apr-20	5/20/2018	6/4/2018	6/19/2018
17	4/10/2018	4/16/2018	Apr-27	5/27/2018	6/11/2018	6/26/2018
18	4/17/2018	4/23/2018	May-4	6/3/2018	6/18/2018	7/3/2018
19	4/24/2018	4/30/2018	May-11	6/10/2018	6/25/2018	7/10/2018
20	5/1/2018	5/7/2018	May-18	6/17/2018	7/2/2018	7/17/2018
21	5/8/2018	5/14/2018	May-25	6/24/2018	7/9/2018	7/24/2018
22	5/15/2018	5/21/2018	Jun-1	7/1/2018	7/16/2018	7/31/2018
23	5/22/2018	5/28/2018	Jun-8	7/8/2018	7/23/2018	8/7/2018
24	5/29/2018	6/4/2018	Jun-15	7/15/2018	7/30/2018	8/14/2018
25	6/5/2018	6/11/2018	Jun-22	7/22/2018	8/6/2018	8/21/2018
26	6/12/2018	6/18/2018	Jun-29	7/29/2018	8/13/2018	8/28/2018
27	6/19/2018	6/25/2018	Jul-6	8/5/2018	8/20/2018	9/4/2018
28	6/26/2018	7/2/2018	Jul-13	8/12/2018	8/27/2018	9/11/2018
29	7/3/2018	7/9/2018	Jul-20	8/19/2018	9/3/2018	9/18/2018
30	7/10/2018	7/16/2018	Jul-27	8/26/2018	9/10/2018	9/25/2018
31	7/17/2018	7/23/2018	Aug-3	9/2/2018	9/17/2018	10/2/2018



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32	7/24/2018	7/30/2018	Aug-10	9/9/2018	9/24/2018	10/9/2018
33	7/31/2018	8/6/2018	Aug-17	9/16/2018	10/1/2018	10/16/2018
34	8/7/2018	8/13/2018	Aug-24	9/23/2018	10/8/2018	10/23/2018
35	8/14/2018	8/20/2018	Aug-31	9/30/2018	10/15/2018	10/30/2018
36	8/21/2018	8/27/2018	Sep-7	10/7/2018	10/22/2018	11/6/2018
37	8/28/2018	9/3/2018	Sep-14	10/14/2018	10/29/2018	11/13/2018
38	9/4/2018	9/10/2018	Sep-21	10/21/2018	11/5/2018	11/20/2018
39	9/11/2018	9/17/2018	Sep-28	10/28/2018	11/12/2018	11/27/2018
40	9/18/2018	9/24/2018	Oct-5	11/4/2018	11/19/2018	12/4/2018
41	9/25/2018	10/1/2018	Oct-12	11/11/2018	11/26/2018	12/11/2018
42	10/2/2018	10/8/2018	Oct-19	11/18/2018	12/3/2018	12/18/2018
43	10/9/2018	10/15/2018	Oct-26	11/25/2018	12/10/2018	12/25/2018
44	10/16/2018	10/22/2018	Nov-2	12/2/2018	12/17/2018	1/1/2019
45	10/23/2018	10/29/2018	Nov-9	12/9/2018	12/24/2018	1/8/2019
46	10/30/2018	11/5/2018	Nov-16	12/16/2018	12/31/2018	1/15/2019
47	11/6/2018	11/12/2018	Nov-23	12/23/2018	1/7/2019	1/22/2019
48	11/13/2018	11/19/2018	Nov-30	12/30/2018	1/14/2019	1/29/2019
49	11/20/2018	11/26/2018	Dec-7	1/6/2019	1/21/2019	2/5/2019
50	11/27/2018	12/3/2018	Dec-14	1/13/2019	1/28/2019	2/12/2019
51	12/4/2018	12/10/2018	Dec-21	1/20/2019	2/4/2019	2/19/2019
52	12/11/2018	12/17/2018	Dec-28	1/27/2019	2/11/2019	2/26/2019