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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

Comment Deadline: June 3, 2018

EOS/ESD (ESD Association, Inc.)

Revision

BSR/ESD S541-201x, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items Packaging Materials (revision of ANSI/ESD S541-2003 (R2008))

This document applies to packaging used to store, transport, and protect ESDS electronic items during all phases of production and distribution. This document does not address protection from EMI/RFI/EMP or protection of volatile materials.

[Click here to view these changes in full](#)

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

EOS/ESD (ESD Association, Inc.)

Revision

BSR/ESDA/JEDEC JS-002-201x, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing Charged Device Model (CDM) Device Level (revision of ANSI/ESDA/JEDEC JS-002-2015)

This document establishes the procedure for testing, evaluating, and classifying devices and microcircuits according to their susceptibility (sensitivity) to damage or degradation by exposure to a defined field-induced charged device model (CDM) electrostatic discharge (ESD). All packaged semiconductor devices, thin film circuits, surface acoustic wave (SAW) devices, opto-electronic devices, hybrid integrated circuits (HICs), and multi-chip modules (MCMs) containing any of these devices are to be evaluated according to this standard. To perform the tests, the devices must be assembled into a package similar to that expected in the final application. This CDM document does not apply to socketed discharge model testers. This test method combines the main features of JEDEC JESD22-C101 and ANSI/ESD S5.3.1. New verification procedures and test condition definitions have been introduced to facilitate this combination.

[Click here to view these changes in full](#)

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

IES (Illuminating Engineering Society)

Revision

BSR/IES RP-1-2013 Addendum 2-201x, Office Lighting (revision of ANSI/IES RP-1-2013)

Create an addendum to revise Section 4.2.2.3, Compact Fluorescent Lamps, to balance the level of detail in relation to Section 4.2.2.1, Light Emitting Diodes; consider CRI revisions, OLEDs, and color tuning.

[Click here to view these changes in full](#)

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

NECA (National Electrical Contractors Association)

New Standard

BSR/NECA 121-201X, Standard for Installing Nonmetallic-Sheathed Cable (Type NM-B) and Underground Feeder and Branch-Circuit Cable (Type UF) (new standard)

This standard describes installation procedures for nonmetallic-sheathed cable (Type NM) and underground feeder and branch-circuit cable (Type UF).

[Click here to view these changes in full](#)

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

NSF (NSF International)

Revision

BSR/NSF 2-201x (i28r1), Food Equipment (revision of ANSI/NSF 2-2016)

Equipment covered by this Standard includes, but is not limited to, bakery, cafeteria, kitchen, and pantry units and other food handling and processing equipment such as tables and components, counters, hoods, shelves, and sinks.

[Click here to view these changes in full](#)

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

RESNET (Residential Energy Services Network, Inc.)

Addenda

BSR/RESNET/ICC 301-201x Addendum F-201x, Normative Appendix A (addenda to ANSI/RESNET/ICC 301-2014)

Revise Standard ANSI/RESNET/ICC 301-2014 to add Normative Appendix A that provides inspection procedures and grading criteria for insulation installed in residential buildings.

[Click here to view these changes in full](#)

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

TCIA (ASC A300) (Tree Care Industry Association)

Revision

BSR A300 Part 2-201x, Tree, Shrub, and Other Woody Plant Management - Standard Practices (Soil Management a. Assessment, b. Modification, c. Fertilization, and d. Drainage) (revision of ANSI A300 Part 2-2011)

A300 (Part 2) Soil Management standards are performance standards for management of soil including soil assessment, modification, fertilization, and drainage for trees, shrubs, and other woody plants. It is a guide in the drafting of work project specifications for consumers as well as federal, state, municipal, and private authorities including property owners, property managers, and utilities.

[Click here to view these changes in full](#)

Send comments (with copy to psa@ansi.org) to: Submit comments online at: www.tcia.org/A300Standards-CurrentProjects

UL (Underwriters Laboratories, Inc.)

Revision

BSR/UL 923-201x, Standard for Safety for Microwave Cooking Appliances (revision of ANSI/UL 923-2017)

This proposal for UL 923 covers: (1) Safety of smart-enabled microwave cooking appliances.

[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 1283-201x, Standard for Safety for Electromagnetic Interference Filters (revision of ANSI/UL 1283-2017)

(1) Additional requirements for overload testing when integral over temperature protection are provided.

[Click here to view these changes in full](#)

Send comments (with copy to psa@ansi.org) to: Megan Van Heirseel, (847) 664-2881, Megan.M.VanHeirseel@ul.com

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

BSR/UL 1998-201x, Standard for Safety for Software in Programmable Components (revision of ANSI/UL 1998-2013)

These requirements apply to non-networked embedded microprocessor software whose failure is capable of resulting in a risk of fire, electric shock, or injury to persons. This is a reference standard in which the requirements are to be applied when specifically referenced by other standards or product safety requirements. These requirements address the risks unique to product hardware controlled by software in programmable components.

[Click here to view these changes in full](#)

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

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

BSR/UL 2459-201x, Standard for Safety for Insulated Multi-Pole Splicing Wire Connectors (revision of ANSI/UL 2459-2014)

(1) Minimum Spacings Table 4; (2) Intermateability of connectors; (3) Use of multi-pole splicing wire connectors as disconnects in LED applications.

[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: June 18, 2018**AGA (ASC B109) (American Gas Association)****New Standard**

BSR B109.1-201x, Diaphragm-Type Gas Displacement Meters (Under 500 Cubic Feet per Hour Capacity) (new standard)

This publication represents a basic standard for safe operation and substantial and durable construction for diaphragm-type gas displacement meters having a gas-flow rating of under 500 cubic feet per hour (14.2m³/h) at 0.5-inch water column (125 Pa) differential pressure at standard conditions. The standard is designed to ensure efficient performance and substantial construction of equipment.

Single copy price: Free

Obtain an electronic copy from: jmeyers@aga.org

Order from: Jeffrey Meyers, (202) 824-7333, jmeyers@aga.org

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

AGA (ASC B109) (American Gas Association)**New Standard**

BSR B109.2-201x, Diaphragm-Type Gas Displacement Meters (500 Cubic Feet per Hour Capacity and Over) (new standard)

This publication represents a basic standard for safe operation and substantial and durable construction for diaphragm-type gas displacement meters having a gas-flow rating of 500 cubic feet per hour (14.2m³/h) and over at 0.5-inch water column (125 Pa) differential pressure at standard conditions. The standard is designed to ensure efficient performance and substantial construction of equipment.

Single copy price: Free

Obtain an electronic copy from: jmeyers@aga.org

Order from: Jeffrey Meyers, (202) 824-7333, jmeyers@aga.org

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

ANS (American Nuclear Society)**Reaffirmation**

BSR/ANS 15.8-1995 (R201x), Quality Assurance Program Requirements for Research Reactors (reaffirmation of ANSI/ANS 15.8-1995 (R2013))

The standard provides criteria for quality assurance in the design, construction, operation, and decommissioning of research reactors.

Single copy price: \$70.00

Obtain an electronic copy from: orders@ans.org

Order from: orders@ans.org

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

ASA (ASC S12) (Acoustical Society of America)**Reaffirmation**

BSR ASA S12.9-2013/Part 1 (R201x), Quantities and Procedures for Description and Measurement of Environmental Sound - Part 1: Basic Quantities and Definitions (reaffirmation of ANSI ASA S12.9-2013/Part 1)

Provides basic quantities for description of sound in community environments and general procedures for measurement of these quantities. Based on these quantities and procedures, compliance limits of sound may be specified by cognizant authorities and conformance with the limits controlled for purposes of environmental assessment, regulation, and land use planning.

Single copy price: \$95.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Neil Stremmel, (631) 390-0215, asastds@acousticalsociety.org

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

ASA (ASC S12) (Acoustical Society of America)**Reaffirmation**

BSR ASA S12.9-2013/Part 3 (R201x), Quantities and Procedures for Description and Measurement of Environmental Sound - Part 3: Short-Term Measurements with an Observer Present (reaffirmation of ANSI ASA S12.9-2013/Part 3)

Third in a series of parts concerning description and measurement of outdoor environmental sound. Describes recommended procedures for measurement of short-term, time-average environmental sound outdoors at one or more locations in a community for environmental assessment or planning for compatible land uses and for other purposes such as demonstrating compliance with a regulation.

Single copy price: \$115.00

Obtain an electronic copy from: asastds@acousticalsociety.org

Order from: Neil Stremmel, (631) 390-0215, asastds@acousticalsociety.org

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

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

BSR/ASHRAE Standard 25-201x, Methods of Testing Forced Circulation Free-Delivery Unit Coolers for Refrigeration (revision of ANSI/ASHRAE Standard 25-2001 (R2016))

This standard establishes uniform methods of testing for obtaining performance data and lists, defines the terms used in testing, specifies data to be recorded and formulas to be used in calculations, and sets limits and tolerances in testing.

Single copy price: \$35.00

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

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

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

BSR/ASHRAE/IES Standard 90.2-201x, Energy-Efficient Design of Low-Rise Residential Buildings (revision of ANSI/ASHRAE/IES Standard 90.2-2007)

This proposed revision of ASHRAE Standard 90.2 presents a completely new approach to delivered residential building energy performance than the 2007 edition of the Standard. This version of Standard 90.2 incorporates numerous revisions from the first Public Review Draft. It is these revisions that are the subject of this review. The SSPC worked with commentors on over 160 comment submissions to clarify and strengthen this new Standard.

Single copy price: \$35.00

Obtain an electronic copy from: standards.section@ashrae.org

Order from: standards.section@ashrae.org

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

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

BSR/ASME B31.8S-201x, Managing System Integrity of Gas Pipelines (revision of ANSI/ASME B31.8-2016)

This Code applies to onshore pipeline systems constructed with ferrous materials and that transport gas. The principles and processes embodied in integrity management are applicable to all pipeline systems. This Code is specifically designed to provide the operator with the information necessary to develop and implement an effective integrity management program utilizing proven industry practices and processes. The processes and approaches described within this Code are applicable to the entire pipeline.

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: Paul Stumpf, (212) 591-8536, stumpfp@asme.org

ASSE (ASC A10) (American Society of Safety Engineers)**Revision**

BSR ASSE A10.7-201X, Safety Requirements for Transportation, Storage, Handling and Use of Commercial Explosives and Blasting Agents (revision of ANSI ASSE A10.7-2011)

Provides the construction industry with reasonable minimum recommendations for establishing and maintaining a level of health and safety with regard to the transportation, storage, handling, and use of commercial explosives and blasting agents.

Single copy price: \$80.00

Obtain an electronic copy from: LBauerschmidt@asse.org

Order from: ASSE

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

ASSE (Safety) (American Society of Safety Engineers)**Reaffirmation**

BSR/AIHA Z9.6-2008 (R201x), Exhaust Systems for Grinding, Polishing and Buffing (reaffirmation of ANSI/AIHA Z9.6-2008)

The requirements and emission and exposure control principles described in this standard represent the minimum criteria intended to protect the health of personnel engaged in and working in the vicinity of grinding, polishing, and buffing operations and to control contaminants generated by those operations.

Single copy price: \$77.00

Obtain an electronic copy from: OMunteanu@ASSE.org

Order from: Ovidiu Munteanu, (847) 232-2012, OMunteanu@ASSE.org

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

ASSE (Safety) (American Society of Safety Engineers)**Revision**

BSR/ASSE Z9.2-201X, Fundamentals Governing the Design and Operation of Local Exhaust Ventilation Systems (revision and redesignation of ANSI/AIHA Z9.2-2001 (R2011))

This Standard establishes minimum requirements for the commissioning, design, specification, construction, and installation of fixed industrial local exhaust ventilation (LEV) systems used for the reduction and prevention of employee exposure to harmful airborne substances in the industrial environment. It also establishes fundamental requirements for the management, operation, maintenance, and testing of LEV systems to assure satisfactory performance over the life of the system, as well as the basic requirements for replacing air exhausted from the space.

Single copy price: \$77.00

Obtain an electronic copy from: OMunteanu@ASSE.org

Order from: Ovidiu Munteanu, (847) 232-2012, OMunteanu@ASSE.org

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

EOS/ESD (ESD Association, Inc.)**Reaffirmation**

BSR/ESD STM2.1-2013 (R201x), ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items Garments Resistive Characterization (reaffirmation of ANSI/ESD STM2.1-2013)

This document applies to outer garments that utilize surface conductive or dissipative components or materials, used for static control applications.

NOTE: The test methods defined in this document are not intended to measure materials with buried conductive layers.

Single copy price: \$145.00 (Hardcover); \$135.00 (Softcover)

Obtain an electronic copy from: cearl@esda.org

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

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

EOS/ESD (ESD Association, Inc.)**Reaffirmation**

BSR/ESD STM4.2-1998 (R201x), ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - ESD Protective Worksurfaces - Charge Dissipation Characteristics (reaffirmation of ANSI/ESD STM4.2-1998 (R2010))

This document provides a test method that measures the charge dissipation characteristics of worksurfaces. To accomplish this, a conductive test object is charged, placed on the worksurface under test, and then removed. The resultant charge on the test object is an indicator of the ability of the tested worksurface to dissipate charge from the test object placed on it. This is only applicable however for the test object specified within this document. This standard test method is designed for use in a laboratory environment for qualification, evaluation, or acceptance of worksurfaces and not for periodic testing.

Single copy price: \$145.00 (Hardcover); \$135.00 (Softcover)

Obtain an electronic copy from: cearl@esda.org

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

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

IES (Illuminating Engineering Society)**New Standard**

BSR/IES TM-33-201x, Standard Format for the Electronic Transfer of Luminaire Optical Data (new standard)

This document specifies an electronic (XML-based) data format for the transfer of luminaire optical data useful for lighting design and analysis. Project need: With the introduction of solid-state lighting with color-changing capabilities, there is a need to include spectral power distributions in data representations.

Single copy price: \$25.00

Obtain an electronic copy from: pmcgillicuddy@ies.org

Order from: Patricia McGillicuddy, (917) 913-0027, pmcgillicuddy@ies.org

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

NEMA (ASC C119) (National Electrical Manufacturers Association)**Revision**

BSR C119.5-201x, Insulation Piercing Connector Systems, Rated 600 Volts or Less (Low-Voltage Aerial Bundled Cables and Insulated and Non-Insulated Line Wires) (revision of ANSI C119.5-2009)

This standard covers insulation piercing connectors used for making electrical connections between insulated, insulated-to-bare, and bare-to-bare conductors rated 600 V or less and 90°C (low-voltage aerial bundled cables and bare and insulated line wires) on overhead distribution lines for electric utilities. Underground insulation piercing connector systems rated at 600 V are covered by ANSI C119.1.

Single copy price: \$83.00

Obtain an electronic copy from: pau_orr@nema.org

Order from: NEMA; pau_orr@nema.org

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

SCTE (Society of Cable Telecommunications Engineers)**New Standard**

BSR/SCTE 17-201x, Test Procedure for Carrier to Noise (C/N, CCN, CIN, CTN) (new standard)

This procedure defines the measurement procedure for determining the ratio of carrier to thermal noise and "noise-like" interference for broadband telecommunications system components. The test involves measuring the noise levels, or the combined noise plus "noise-like" intermodulation product levels, relative to the carrier level of a CW signal.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 16-201x, Test Procedure for Hum Modulation (revision of ANSI/SCTE 16-2012)

This test procedure provides instructions for how to measure hum modulation in active and passive broadband RF telecommunications equipment (taps, line passives, RF Amplifiers, Optical Nodes, etc.) in a laboratory environment. This procedure is not intended for field measurements.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 95-201x, HMS Inside Plant HMTS Theory of Operation (revision of ANSI/SCTE 95-2009)

This document contains information about the background of the Hybrid Management Termination System (HMTS). This document is a companion document for the HMTS MIB, and does not replace the MIB. Although this document has been written to be consistent with the HMTS MIB, in case there would be any conflicts between these two documents, the MIB is the reference.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 154-1-201x, Digital Video Common MIB (revision of ANSI/SCTE 154-1-2008)

This document provides the branch object identifiers for each of the MIBs within the SCTE HMS DIGITAL VIDEO COMMON MIB tree. The HMS DIGITAL COMMON MIB provides standard common MIB definitions for all HMS inside plant digital devices.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 154-2-201x, SCTE-HMS-QAM-MIB (revision of ANSI/SCTE 154-2-2008)

This document provides the definition for MIB objects within the SCTE-HMS-QAM-MIB Tree.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 154-3-201x, Encoder MIB (revision of ANSI/SCTE 154-3-2008)

This document provides the branch object identifiers for each of the MIBs within the SCTE HMS HEADENDIDENT Tree.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 154-4-201x, MPEG Management Information Base SCTE-HMS-MPEG MIB (revision of ANSI/SCTE 154-4-2008)

This document provides the definition for MIB objects within the SCTE HMS MPEG MIB Tree.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 154-5-201x, SCTE-HMS-Headendident Textual Conventions MIB (revision of ANSI/SCTE 154-5-2008)

This document provides the branch object identifiers for each of the MIBs within the SCTE HMS DIGITAL VIDEO MIB's (DVM) in the Digital branch of the SCTE MIBs. The SCTE HMS HEADENDIDENT-TC MIB provides standard common MIB text syntax for all HMS devices.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

SCTE (Society of Cable Telecommunications Engineers)**Revision**

BSR/SCTE 163-201x, SCTE HMS Switched Digital Video MIB (revision of ANSI/SCTE 163-2009)

This document provides the definition for MIB objects within the SCTE HMS SDV MIB Tree.

Single copy price: \$50.00

Obtain an electronic copy from: standards@scte.org

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

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

TAPPI (Technical Association of the Pulp and Paper Industry)**New Standard**

BSR/TAPPI T 266 om-201x, Determination of sodium, calcium, copper, iron and manganese in pulp and paper by atomic absorption (new standard)

This method describes the determination of sodium, calcium, copper, iron, and manganese in pulp, paper, and wood by atomic absorption spectroscopy. This method may also be applicable to other elements, provided that they do not volatilize in the process.

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

TIA (Telecommunications Industry Association)**Withdrawal**

ANSI J-STD-036-C-2011, Enhanced Wireless 9-1-1 Phase II (withdrawal of ANSI J-STD-036-C-2011)

This Addendum specifies new Class of Service Position Source (CoS) indicators, as well as the associated Position Source codes for the Mobile Positioning Center (MPC) and Positioning Determining Entity (PDE). The new CoS indicators will represent:

- Text message to "911";
- Call originating from a small, semi-static wireless cell site; and
- Static wireless device at a residential address.

Single copy price: \$79.00

Obtain an electronic copy from: standards@tiaonline.org

Order from: TIA; standards@tiaonline.org

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

TIA (Telecommunications Industry Association)**Withdrawal**

ANSI J-STD-036-C-1-2013, Enhanced Wireless 9-1-1 Phase II (withdrawal of ANSI J-STD-036-C-1-2013)

This addendum is being created to assign two POSOUR codes to be used in association with two new CoS indicators for to support text to 911 and small fixed cells.

Single copy price: \$377.00

Obtain an electronic copy from: standards@tiaonline.org

Order from: TIA; standards@tiaonline.org

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

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

BSR/UL 1773-201x, Standard for Safety for Termination Boxes (revision of ANSI/UL 1773-2016)

This proposal covers the addition of compact Stranded AA-8000 Aluminum Alloy Conductors to Tables 9.1, 9.2, and 9.3 for minimum wire bending space at terminals.

Single copy price: Free

Obtain an electronic copy from: <http://www.shopulstandards.com>

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

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

BSR/UL 8750-201X, Standard for Safety for Light Emitting Diode (LED) Equipment for Use In Lighting Products (Proposal dated 5-4-18) (revision of ANSI/UL 8750-2018)

(1) Revision to the scope to elaborate on limitations; (2) Revision to flammability requirements for secondary optics and direct plug-in and through cord units; (3) Revisions to requirements for enclosure openings; (4) Revisions to strain and pushback relief requirements for clarification; (5) Revision of requirements for electrical spacings; (6) Revision of requirements for protective devices to make reference to fusing resistors; (7) Revision to supplement SA for a more clear decision path to determine compliance; (8) Revisions to Supplement SC to align Type TL LED driver requirements with Class P LED driver types; (9) Revisions to requirements in Supplement SE; (10) Insulation systems of insulating transformers interacting with NIM (Non-Electrical Insulating Material).

Single copy price: Free

Obtain an electronic copy from: <http://www.shopulstandards.com>

Send comments (with copy to psa@ansi.org) to: Ross Wilson, (919) 549-1511, Ross.Wilson@ul.com

Comment Deadline: June 20, 2018**Comments on the NFPA 2400 First Draft Report must be received by June 20, 2018**

The National Fire Protection Association announces the availability of NFPA 2400 for concurrent review and comment by NFPA and ANSI. The disposition of all comments received will be published in the Second Draft Report, www.nfpa.org/2400next. All comments on the NFPA 2400 First Draft Report must be received by June 20, 2018. The First Draft Report for NFPA 2400 contains the disposition of public input received. Anyone wishing to review the First Draft Report NFPA 2400 may do so on www.nfpa.org/2400next. For more information on the rules and for up-to-date information on schedules and deadlines for processing NFPA Documents, check the NFPA website at <http://www.nfpa.org> or contact NFPA's Codes and Standards Administration, at NFPA, One Batterymarch Park, Quincy, MA, 02269-7471. Those who send comments to NFPA on the related documents are invited to copy ANSI's Board of Standards Review.

NFPA (National Fire Protection Association)**New Standard**

BSR/NFPA 2400-201x, Standard for Small Unmanned Aircraft Systems (sUAS) used for Public Safety Operations (new standard)

This standard shall cover the minimum requirements relating to the operation, deployment, and implementation of small unmanned aircraft systems (sUAS) for public safety operations. This standard shall establish operational protocols for public safety entities who use and support sUAS. This standard shall include the minimum job performance requirements (JPRs) for public safety personnel who operate and support sUAS. This standard shall include minimum requirements for the maintenance of sUAS when used by public safety entities. This standard shall provide additional minimum requirements specific to public safety entities.

Comment Deadline: July 3, 2018

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

ITI (INCITS) (InterNational Committee for Information Technology Standards)**New National Adoption**

INCITS/ISO/IEC 20000-2:2012 [201x], Information technology - Service management - Part 2: Guidance on the application of service management systems (identical national adoption of ISO/IEC 20000-2:2012)

Provides guidance on the application of service management systems (SMS) based on the requirements in ISO/IEC 20000-1. Enables organizations and individuals to interpret ISO/IEC 20000-1 more accurately, and therefore to use it more effectively. The guidance includes examples and suggestions to enable organizations to interpret and apply ISO/IEC 20000-1, including references to other parts of ISO/IEC 20000 and other relevant standards. This includes guidance on the use of an SMS for the planning, design, transition, delivery and improvement of the SMS and services. At a minimum, this includes service management policies, objectives, plans, service management processes, process interfaces, documentation, and resources. The SMS provides ongoing control, greater effectiveness, efficiency, and opportunities for continual improvement of service management and of services. It enables an organization to work effectively with a shared vision.

Single copy price: \$232.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

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

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

New National Adoption

INCITS/ISO/IEC 20000-3:2012 [201x], Information technology - Service management - Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1 (identical national adoption of ISO/IEC 20000-3:2012)

Useful for service providers, consultants, and assessors. It includes practical guidance on scope definition, applicability, and demonstration of conformity to the requirements in ISO/IEC 20000-1. Guidance on the different types of conformity assessment and assessment standards is included. Although the requirements in ISO/IEC 20000-1 do not change with organizational structure, technology or service, operating the processes in a particular service environment will result in specific skill, tool, and information requirements. Service management processes can cross many organizational, legal, and national boundaries as well as different time zones. Service providers can provide a range of services to several different types of customers, both internal and external. Service providers can also depend on a complex supply chain for the delivery of services. This dependency can make the agreement and application of scope a complex stage in the service provider's use of ISO/IEC 20000-1.

Single copy price: \$162.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

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

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

New National Adoption

INCITS/ISO/IEC 30105-2:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes - Part 2: Process Assessment Model (PAM) (identical national adoption of ISO/IEC 30105-2:2016)

Specifies the lifecycle process requirements performed by the IT-enabled business process outsourcing service provider for the outsourced business processes. It defines the processes to plan, establish, implement, operate, monitor, review, maintain, and improve its services. This document covers IT-enabled business processes that are outsourced; is not intended to cover IT services but includes similar, relevant process for completeness; is applicable to the service provider, not to the customer; is applicable to all lifecycle processes of ITES-BPO; serves as a process assessment model for organizations providing ITES-BPO services that: conforms to the requirements of ISO/IEC 33004; supports the performance assessment by providing indicators for the interpretation of the process purposes and outcomes, as defined in ISO/IEC 24774, and the process attributes, as defined in ISO/IEC 33020.

Single copy price: \$232.00

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

New National Adoption

INCITS/ISO/IEC 30105-1:2016 [201x], Information technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes - Part 1: Process reference model (PRM) (identical national adoption of ISO/IEC 30105-1:2016)

Specifies the lifecycle process requirements performed by the IT-enabled business process outsourcing service provider for the outsourced business processes. It defines the processes to plan, establish, implement, operate, monitor, review, maintain and improve its services. This document covers IT-enabled business processes that are outsourced; is not intended to address IT processes but includes references to them at key touchpoints for completeness; is applicable to the service provider, not to the customer; is applicable to all lifecycle processes of ITES-BPO; serves as a process reference model for organizations providing ITES-BPO services.

Single copy price: \$138.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

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

New National Adoption

INCITS/ISO/IEC 30105-3:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes - Part 3: Measurement Framework (MF) and Organization Maturity Model (OMM) (identical national adoption of ISO/IEC 30105-3:2016)

Specifies the lifecycle process requirements performed by the IT-enabled business process outsourcing service provider for the outsourced business processes. It defines the processes to plan, establish, implement, operate, monitor, review, maintain, and improve its services. This document covers IT-enabled business processes that are outsourced; is not intended to cover IT services but includes similar, relevant process for completeness; is applicable to the service provider, not to the customer; is applicable to all lifecycle processes of ITES-BPO; serves as a measurement framework for processes and provide an organization maturity model for organizations providing ITES-BPO services that: conforms to the requirements of ISO/IEC 33003 and ISO/IEC 33004; supports the performance assessment by providing a framework to measure and derive capability and organization maturity levels.

Single copy price: \$138.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

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

New National Adoption

INCITS/ISO/IEC 30105-4:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 4: Terms and Concepts (identical national adoption of ISO/IEC 30105-4:2016)

Specifies the lifecycle process requirements performed by the IT-enabled business process outsourcing service provider for the outsourced business processes. It defines the processes to plan, establish, implement, operate, monitor, review, maintain, and improve its services. This document covers IT-enabled business processes that are outsourced; is not intended to cover IT services but includes similar, relevant process for completeness; is applicable to the service provider, not to the customer; is applicable to all lifecycle processes of ITES-BPO; defines terms and concepts used in ISO/IEC 30105.

Single copy price: \$138.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

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

New National Adoption

INCITS/ISO/IEC 30105-5:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 5: Guidelines (identical national adoption of ISO/IEC 30105-5:2016)

Specifies the lifecycle process requirements performed by the IT-enabled business process outsourcing service provider for the outsourced business processes. It defines the processes to plan, establish, implement, operate, monitor, review, maintain, and improve its services. This document covers IT-enabled business processes that are outsourced; is not intended to cover IT services but includes similar, relevant process for completeness; is applicable to the service provider, not to the customer; is applicable to all lifecycle processes of ITES-BPO; provides guidance on application of the process assessment model, how to strategically leverage the assessment and to use it in the context of an improvement program or risk assessment for an ITES-BPO service provider organization.

Single copy price: \$185.00

Obtain an electronic copy from: <http://webstore.ansi.org/>

Order from: <http://webstore.ansi.org/>

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

UL (Underwriters Laboratories, Inc.)

New Standard

BSR/UL 1204-201X, Standard for Safety for Parts Cleaners (new standard)

To obtain national recognition of a standard covering parts cleaners.

Single copy price: Free

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

Send comments (with copy to psa@ansi.org) to: Ross Wilson, (919) 549-1511, Ross.Wilson@ul.com

UL (Underwriters Laboratories, Inc.)

New Standard

BSR/UL 1369-201x, Standard for Safety for Aboveground Piping for Flammable and Combustible Liquids (new standard)

The following is being proposed: (1) First edition of the Standard for Safety for Aboveground Piping for Flammable and Combustible Liquids.

Single copy price: Free

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

Send comments (with copy to psa@ansi.org) to: Jeff Prusko, (847) 664-3416, jeffrey.prusko@ul.com

Technical Reports Registered with ANSI

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

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

ASC X9 (Accredited Standards Committee X9, Incorporated)

TR 48-2018, Card-Not-Present (CNP) Fraud Mitigation in the U.S. (technical report)

TR-48 Card-Not-Present (CNP) Fraud Mitigation in the United States: Strategies for Preventing, Detecting, and Responding to a Growing Threat summarizes CNP fraud mitigation tools used in the U.S. It identifies the primary types of CNP fraud attack trends currently impacting the payments industry and outlines the types of CNP fraud mitigation tools and strategies employed by industry stakeholders such as merchants, merchant acquirers, issuers, processors, payment gateways, and payment card networks. The document also provides information and recommendations for industry stakeholders to evaluate their current strategies for mitigating CNP fraud and reducing overall fraud losses.

Single copy price: Free

Order from: ambria.frazier@x9.org

Send comments (with copy to psa@ansi.org) to: Ambria Frazier, (410) 267-7707, Ambria.frazier@x9.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:

ASTM (ASTM International)

BSR/ASTM WK55216-201x, New Specification for Standard Specification for Polyethylene (PE) Branch Saddle Tees (new standard)

<http://www.astm.org/DATABASE.CART/WORKITEMS/WK55216.htm>

Inquiries may be directed to Laura Klineburger, (610) 832-9696, accreditation@astm.org

ASTM (ASTM International)

BSR/ASTM WK56607-201x, New Test Methods for Bench-Scale Test Methods for Classifying the Smolder Ignition Performance of Upholstered Furniture Components (new standard)

<https://www.astm.org/DATABASE.CART/WORKITEMS/WK56607.htm>

ASTM (ASTM International)

BSR/ASTM WK58040-201x, New Test Method for Surface Burning Characteristics of Building Materials that Melt, Drip, Disintegrate and Delaminate when Exposed to Fire (new standard)

<https://www.astm.org/DATABASE.CART/WORKITEMS/WK58040.htm>

30 Day Notice of Withdrawal: ANS 5 to 10 years past approval date

In accordance with clause 4.7.1 Periodic Maintenance of American National Standards of the ANSI Essential Requirements, the following American National Standards have not been reaffirmed or revised within the five-year period following approval as an ANS. Thus, they shall be withdrawn at the close of this 30-day public review notice in Standards Action.

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Audit Transaction v1.0-2011, NCPDP Audit Transaction Standard Implementation Guide v1.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Audit Transaction v2.0-2013, Audit Transaction Standard Version 2.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP BUS V3.0-2009, NCPDP Billing Unit Standard Implementation Guide Version 3.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FB v3.0-2011, Formulary and Benefit Standard v3.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FB v4.0-2013, NCPDP Formulary and Benefit Standard v4.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FB V2.0-2008, Formulary and Benefit Standard Version 2.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FB V2.1-2008a, Formulary and Benefit Standard Version 2.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FIR V1.0-2008, Financial Information Reporting Standard

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FIR V1.1-2009, Financial Information Reporting Standard Version 1.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP FIR V1.2-2009, Financial Information Reporting Standard v1.2

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP MS v4.0-2013, NCPDP Medicaid Subrogation Implementation Guide v4.0-2013

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP MR v05.00-2011, Manufacturer Rebate Utilization, Plan, Formulary, Market Basket, and Reconciliation Flat File Standard v05.00

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP MR v05.01-2011, Manufacturer Rebate Utilization, Plan, Formulary, Market Basket, and Reconciliation Flat File Standard

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP MR v06.00-2013, NCPDP Manufacturer Rebate Utilization, Plan, Formulary, Market Basket, and Reconciliation Flat File Standard v06.00-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Medical Rebate Standard v01.00-2011, NCPDP Medical Rebate Data Submission Implementation Guide v1.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Medical Rebate Standard v02.00-2013, NCPDP Medical Rebate Data Submission Implementation Guide v02.00-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP MR V04.01-2007, Manufacturer Rebate Utilization, Plan, Formulary, Market Basket, and Reconciliation Flat File Standard, Version 04.01

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP PA Transfer V1.0-2009, Prior Authorization Transfer Standard Version 1.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP PA Transfer v2.0-2013, NCPDP Prior Authorization Transfer Standard v2.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj V2.0-2008, Post Adjudication Standard Version 2.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj V2.1-2009, Post Adjudication Standard Version 2.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj V2.1-2009P, Post Adjudication Standard Version 2.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj V2.2-2010, NCPDP Post Adjudication Standard Version 2.2

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj v2.3-2010, NCPDP Post Adjudication Standard Implementation Guide v2.3-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj v3.0-2011, NCPDP Post Adjudication Standard Implementation Guide v3.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Post Adj v3.1-2012, NCPDP Post Adjudication Standard v3.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Prescription Transfer Standard V1.0-2008, Prescription Transfer Standard Version 1.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Prescription Transfer Standard V1.1-2009, Prescription Transfer Standard v1.1-200x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Prescription Transfer Standard v2.0-2010, Prescription Transfer Standard v2.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Prescription Transfer Standard v3.0-2013, NCPDP Prescription Transfer Standard v3.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP RDS Standard v1.0-2011, NCPDP Retiree Drug Subsidy Standard Implementation Guide v1.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP RDS Standard v2.0-2013, NCPDP Retiree Drug Subsidy Standard Implementation Guide v2.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC 2010121-2011, NCPDP SCRIPT Standard WG11004420xxxx

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC 2011071-2011, NCPDP SCRIPT Standard 2011071-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC 2011091-2011, NCPDP SCRIPT Standard 2011091

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC 2012011-2012, NCPDP SCRIPT Standard v2012011

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC 2012031-2012, NCPDP SCRIPT Standard 2012031

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.9-2009, SCRIPT Standard v10.9

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.0-2007, SCRIPT Standard Implementation Guide, Version 10.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Sig V1.0-2008, Sig Standard Version 1.0

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.1-2007, Prescriber/Pharmacist Interface SCRIPT Version 10.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Specialized Standard 2010121-2011, NCPDP Specialized Standard 2010121xxxx

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.10-2010, SCRIPT Standard v10.10

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Specialized Standard 2011071-2011, NCPDP Specialized Standard 2011071

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.11-2010, NCPDP SCRIPT Standard v10.11

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Specialized Standard 2012031-2012, NCPDP Specialized Standard 201xxx#

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.2-2007, SCRIPT Standard Implementation Guide Version 10.2

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Specialized Standard 2013011-2013, NCPDP Specialized Standard 2013011

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.3-2008, Prescriber/Pharmacist Interface SCRIPT Version 10.3

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC vE.0-2013, NCPDP Telecommunication Standard vE.0-201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.4-2008, Prescriber/Pharmacist Interface SCRIPT Version 10.4

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC vD.5-2010, NCPDP Telecommunication Standard vD.5

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.5-2008, SCRIPT Standard v10.5

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC vD.6-2011, NCPDP Telecommunication Standard vD.6

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.7-2009, SCRIPT Standard v10.7

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC vD.7-2011, NCPDP Telecommunication Standard vD.7

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP SC V10.8-2009, SCRIPT Standard v10.8

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC vD.8-2011, NCPDP Telecommunication Standard vD.8

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC vD.9-2012, NCPDP Telecommunication Standard Implementation Guide vD.9 201x

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC VC.4-2007, Telecommunication Standard, Version C.4

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC VD.1-2009, Telecommunication Standard Version D.1

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC VD.2-2009, Telecommunication Standard Version D.2

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC VD.3-2010, Telecommunication Standard Version D.3

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP TC VD.4-2010, NCPDP Telecommunication Standard Version D.4

NCPDP (National Council for Prescription Drug Programs)

ANSI/NCPDP Uniform Healthcare Payer Data Standard v2.0-2013, NCPDP Uniform Healthcare Payer Data Standard Implementation Guide v2.0-2013

NCPDP (National Council for Prescription Drug Programs)

ANSI/Uniform Healthcare Payer Data Standard v1.0-2011, NCPDP Uniform Healthcare Payer Data Standard Implementation Guide v1.0

Call-for-Comment

BSR/IKECA M-10-201x

Comment Deadline Extension: August 1, 2018

The Call for Comment Deadline for **BSR/IKECA M-10-201x** has been extended to **8/1/2018**. This is the second extension for public review on this proposed ANS.

BSR/IKECA M-10-201x, M-10 Standard for the Methodology for Maintenance of Commercial Kitchen Exhaust Systems (new standard)

This standard is to define acceptable methods to operate and maintain commercial kitchen exhaust systems by end users in the interim between professional system cleaning services. It applies to, but is not limited to, Type I exhaust systems as defined by NFPA 96 (NFPA 96, A.3.3.33). This standard does not apply to residential kitchen exhaust systems, replacement air systems, heating and air-conditioning systems, dryer exhaust systems, and toilet exhaust systems.

Single copy price: \$30.00 (non-members); \$24.00 (IKECA members)

Order from: International Kitchen Exhaust Cleaning System (IKECA)

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

Obtain an electronic copy from: <http://www.ikeca.org/standards/>

ASD Ordering Information

IKECA

International Kitchen Exhaust Cleaning Association

John Dixon

information@ikeca.org

(215) 320-3711

100 North 20th Street

Philadelphia, PA 19103-1462

www.ikeca.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.

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

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

Contact: *Lauren Bauerschmidt*

Phone: (847) 768-3475

Fax: (847) 768-3475

E-mail: lbauerschmidt@asse.org

BSR ASSE A10.7-201X, Safety Requirements for Transportation, Storage, Handling and Use of Commercial Explosives and Blasting Agents (revision of ANSI ASSE A10.7-2011)

CPLSO

Office: The Marchioness Building, Commercial Road
Bristol BS16TG, UK BS1 6TG

Contact: *Hugh Pratt*

Phone: (078) 796-2989

E-mail: pratt.hugh@cplso.org

BSR/CPLSO 18-201x, Effects of Charge on Human Beings and Livestock (new standard)

CTA (Consumer Technology Association)

Office: 1919 South Eads Street
Arlington, VA 22202

Contact: *Veronica Lancaster*

Phone: (703) 907-7697

Fax: (703) 907-4197

E-mail: vlancaster@cta.tech

BSR/CTA 709.8-201x, Control Networking Protocol Specification: Part 8: High Definition Power Line Transceiver Media Type for LON (new standard)

BSR/CTA 709.9-201x, Control Networking Protocol Specification: Part 9 LON ISM-RF Radio Frequency Transceiver Media Type for LON (new standard)

EOS/ESD (ESD Association, Inc.)

Office: 7900 Turin Rd., Bldg. 3
Rome, NY 13440

Contact: *Christina Earl*

Phone: (315) 339-6937

Fax: (315) 339-6793

E-mail: cearl@esda.org

BSR/ESD STM2.1-2013 (R201x), ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - Garments - Resistive Characterization (reaffirmation of ANSI/ESD STM2.1-2013)

BSR/ESD STM4.2-1998 (R201x), ESD Association Standard Test Method for the Protection of Electrostatic Discharge Susceptible Items - ESD Protective Worksurfaces - Charge Dissipation Characteristics (reaffirmation of ANSI/ESD STM4.2-1998 (R2010))

BSR/ESD S541-201x, ESD Association Standard for the Protection of Electrostatic Discharge Susceptible Items Packaging Materials (revision of ANSI/ESD S541-2003 (R2008))

BSR/ESDA/JEDEC JS-001-201x, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing - Human Body Model (HBM) - Component Level (revision of ANSI/ESDA/JEDEC JS-001-2017)

BSR/ESDA/JEDEC JS-002-201x, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing Charged Device Model (CDM) Device Level (revision of ANSI/ESDA/JEDEC JS-002-2015)

IES (Illuminating Engineering Society)

Office: 120 Wall St. 17th Floor
New York, NY 10005

Contact: *Patricia McGillicuddy*

Phone: (917) 913-0027

E-mail: pmcgillicuddy@ies.org

BSR/IES RP-1-2013 Addendum 2-201x, Office Lighting (revision of ANSI/IES RP-1-2013)

BSR/IES TM-33-201x, Standard Format for the Electronic Transfer of Luminaire Optical Data (new standard)

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

Office: 1101 K Street NW
Suite 610
Washington, DC 20005-3922

Contact: *Deborah Spittle*

Phone: (202) 737-8888

Fax: (202) 638-4922

E-mail: comments@standards.incits.org

INCITS/ISO/IEC 20000-2:2012 [201x], Information Technology - Service Management - Part 2: Guidance on the Application of Service Management Systems (identical national adoption of ISO/IEC 20000-2:2012)

INCITS/ISO/IEC 20000-3:2012 [201x], Information Technology - Service Management -- Part 3: Guidance on Scope Definition and Applicability of ISO/IEC 20000-1 (identical national adoption of ISO/IEC 20000-3:2012)

INCITS/ISO/IEC 30105-1:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 1: Process Reference Model (PRM) (identical national adoption of ISO/IEC 30105-1:2016)

INCITS/ISO/IEC 30105-2:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 2: Process Assessment Model (PAM) (identical national adoption of ISO/IEC 30105-2:2016)

INCITS/ISO/IEC 30105-3:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 3: Measurement Framework (MF) and Organization Maturity Model (OMM) (identical national adoption of ISO/IEC 30105-3:2016)

INCITS/ISO/IEC 30105-4:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 4: Terms and Concepts (identical national adoption of ISO/IEC 30105-4:2016)

INCITS/ISO/IEC 30105-5:2016 [201x], Information Technology - IT Enabled Services-Business Process Outsourcing (ITES-BPO) Lifecycle Processes - Part 5: Guidelines (identical national adoption of ISO/IEC 30105-5:2016)

NECA (National Electrical Contractors Association)

Office: 3 Bethesda Metro Center
Suite 1100
Bethesda, MD 20814

Contact: *Aga Golriz*

Phone: (301) 215-4549

E-mail: Aga.golriz@necanet.org

BSR/NECA 121-201X, Standard for Installing Nonmetallic-Sheathed Cable (Type NM-B) and Underground Feeder and Branch-Circuit Cable (Type UF) (new standard)

NEMA (ASC C37) (National Electrical Manufacturers Association)

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

Contact: *Gerard Winstanley*

Phone: (703) 841-3231

Fax: (703) 841-3331

E-mail: Gerard.Winstanley@nema.org

BSR C37.58-201x, Indoor AC Medium-Voltage Switches for Use in Metal-Enclosed Switchgear Conformance Test Procedures (revision of ANSI C37.58-2003 (R2010))

NSF (NSF International)

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

Contact: *Allan Rose*

Phone: (734) 827-3817

Fax: (734) 827-7875

E-mail: arose@nsf.org

BSR/NSF 2-201x (i28r1), Food Equipment (revision of ANSI/NSF 2-2016)

TIA (Telecommunications Industry Association)

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

Contact: *Teesha Jenkins*

Phone: (703) 907-7706

Fax: (703) 907-7727

E-mail: standards@tiaonline.org

ANSI J-STD-036-C-2011, Enhanced Wireless 9-1-1 Phase II (withdrawal of ANSI J-STD-036-C-2011)

ANSI J-STD-036-C-1-2013, Enhanced Wireless 9-1-1 Phase II (withdrawal of ANSI J-STD-036-C-1-2013)

UL (Underwriters Laboratories, Inc.)

Office: 333 Pfingsten Road
Northbrook, IL 60062

Contact: *Megan Monsen*

Phone: (847) 664-1292

E-mail: megan.monsen@ul.com

BSR/UL 1998-201x, Standard for Safety for Software in Programmable Components (revision of ANSI/UL 1998-2013)

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:

- General Interest
- Government
- Producer
- 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.

CSA (CSA Group)

Reaffirmation

ANSI/CSA HPRD 1-2013 (R2018), Thermally activated pressure relief devices for compressed hydrogen vehicle fuel containers (reaffirmation of ANSI/CSA HPRD 1-2013): 4/25/2018

ANSI/CSA HGV 4.4-2013 (R2018), Standard for breakaway devices for compressed hydrogen dispensing hoses and systems (reaffirmation of ANSI/CSA HGV 4.4-2013): 4/25/2018

ANSI/CSA HGV 4.6-2013 (R2018), Manually operated valves for use in gaseous hydrogen vehicle fueling stations (reaffirmation of ANSI/CSA HGV 4.6-2013): 4/25/2018

ANSI/CSA HGV 4.7-2013 (R2018), Automatic valves for use in gaseous hydrogen vehicle fueling stations (reaffirmation of ANSI/CSA HGV 4.7-2013): 4/25/2018

ANSI/PRD 1-2013 (R2018), Pressure relief devices for natural gas vehicle (NGV) fuel containers (reaffirmation of ANSI PRD 1-2013): 4/25/2018

EOS/ESD (ESD Association, Inc.)

New Standard

ANSI/ESD SP27.1-2018, ESD Association Standard Practice for the Recommended Information Flow Regarding Potential EOS Issues between Automotive OEM, Tier 1, and Semiconductor Manufacturers (new standard): 4/25/2018

IEEE (Institute of Electrical and Electronics Engineers)

New Standard

ANSI/IEEE 1827-2016, Guide for Electrical and Control Design of Hydroelectric Water Conveyance Facilities (new standard): 4/27/2018

ANSI/IEEE 1888.4-2016, Standard for Green Smart Home and Residential Quarter Control Network Protocol (new standard): 4/27/2018

ANSI/IEEE 3004.8-2016, Recommended Practice for Motor Protection in Industrial and Commercial Power Systems (new standard): 4/27/2018

Revision

ANSI/IEEE 352-2016, Guide for General Principles of Reliability Analysis of Nuclear Power Generating Station Systems and Other Nuclear Facilities (revision of ANSI/IEEE 352-1994 (R2010)): 4/27/2018

IES (Illuminating Engineering Society)

Addenda

ANSI/IES RP-16-2017, Addendum 1-2018, Nomenclature and Definitions for Illuminating Engineering - Addendum A (addenda to ANSI/IES RP-16-2017): 4/25/2018

Revision

ANSI/IES RP-22-2018, Tunnel Lighting (revision of ANSI/IES RP-22-2011): 4/25/2018

NECA (National Electrical Contractors Association)

Revision

* ANSI/NECA 305-2018, Standard for Fire Alarm System Job Practices (revision of ANSI/NECA 305-2010): 4/25/2018

NEMA (ASC C78) (National Electrical Manufacturers Association)

New Standard

- * ANSI C78.62612-2018, Standard for Electric Lamps - Self-ballasted LED Lamps - Performance Specifications (new standard): 4/25/2018
- * ANSI C78.62717-2018, Standard for Electric Lamps - LED modules for general lighting - Performance Requirements (new standard): 4/25/2018

UL (Underwriters Laboratories, Inc.)

Reaffirmation

ANSI/UL 2267-2013 (R2018), Standard for Safety for Fuel Cell Power Systems for Installation in Industrial Electric Trucks (reaffirmation of ANSI/UL 2267-2013): 4/24/2018

Revision

ANSI/UL 486A-486B-2018, Standard for Safety for Wire Connectors (revision of ANSI/UL 486A-486B-2016): 4/27/2018

ANSI/UL 486A-486B-2018a, Standard for Safety for Wire Connectors (revision of ANSI/UL 486A-486B-2016): 4/27/2018

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.

ASTM (ASTM International)

Contact: Corice Leonard, (610) 832-9744, accreditation@astm.org
 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959

BSR/ASTM WK62996-201x, New Guide for Building Resiliency Assessment (new standard)

Stakeholders: Whole Buildings and Facilities industry.

Project Need: There is a growing number of standards, varying in terms of which hazards they address, the scale of analysis, and performance outcomes. This guide attempts to provide the built environment industry professionals and government regulators a better comprehension of resiliency and standardize a practice for evaluating new construction designs and existing buildings.

(a) Identify existing ASTM or other standards relevant to building resiliency; (b) Perform a gap analysis on what topics and issues still need to be documented; (c) Develop a guide for evaluating a buildings resiliency; (d) Recommend if a standard practice should be developed.

BSR/ASTM WK63167-201x, New Practice for Heat Fusion Joining of Polyamide-12 (PA12) Pipe and Fittings (new standard)

Stakeholders: Joining industry.

Project Need: Polyamide-12 pressure pipe has been extensively tested in fuel gas distribution systems and industrial pressure piping systems in the USA and other countries. ASTM standard specifications exist for the pipe and the most frequently used appurtenances. The joining method is usually heat fusion joining. As the product comes into more frequent use and government regulators consider approval of the material and system, the need for a standard practice for fusion joining has become evident. End users and installers often ask for a standard joining method to form the basis for qualifying their personnel to join pipe. This standard will address that need.

Procedures for making joints with polyamide-12 (PA12) pipe and fittings by means of heat fusion joining in, but not limited to, a field environment.

BSR/ASTM WK63211-201x, New Practice for Heat Fusion Joining of Polypropylene (PP) Pipe and Fittings (new standard)

Stakeholders: Joining industry.

Project Need: This standard practice is being requested by numerous pipe and fitting producers and the end-use community.

This project is to develop a standard practice for the fusion joining of polypropylene (PP) pipe and fittings. This standard shall result in clearly defined fusion parameters specific to PP as well as standardized steps and guidelines to be used in the fusion joining of PP pipe and fittings. This project is in direct response to requests received from the end use community to better define the heat fusion joining procedures for PP piping systems.

CPLSO

Contact: Hugh Pratt, (078) 796-2989, pratt.hugh@cplso.org
 The Marchioness Building, Commercial Road, Bristol BS16TG, UK BS1 6TG

BSR/CPLSO 18-201x, Effects of Charge on Human Beings and Livestock (new standard)

Stakeholders: Medical and electrical products.

Project Need: To attain a National ANSI standard for the effects of charge on human beings and livestock

This standard describes the effects of charge passing through the human body in the form of single and multiple successive discharges. A means of examining random complex irregular charges is given. The charge durations considered are from 1 μ s up to and including 100 ms such as may be found in disconnecting auto charging cables. This standard does not consider charge induced within the body caused by its exposure to an external electromagnetic field.

CTA (Consumer Technology Association)

Contact: *Veronica Lancaster, (703) 907-7697, vlancaster@cta.tech*
 1919 South Eads Street, Arlington, VA 22202

- * BSR/CTA 709.8-201x, Control Networking Protocol Specification: Part 8: High Definition Power Line Transceiver Media Type for LON (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: Develop a standard for a communication protocol for networked control systems.

This standard specifies a communication protocol for networked control systems. The protocol provides peer-to-peer communication for networked control using web services. The standard describes services in layer 1 and layer 2. The layer 1 (physical layer) describes the MAC sub-layer interface to the physical layer. The layer 2 (data link layer), as described in ANSI/CTA 709.1, is integrated in UDP/IP communication using IPv4 and IPv6 protocols.

- * BSR/CTA 709.9-201x, Control Networking Protocol Specification: Part 9 LON ISM-RF Radio Frequency Transceiver Media Type for LON (new standard)

Stakeholders: Consumers, manufacturers, and retailers.

Project Need: Develop a new, high-speed, long-distance RF media to the current CTA-709 LON standards.

This standard specifies a new, high-speed, long-distance RF media to the current 709 LON standards. The ISM-RF (Industry, Science, Medicine Radio Frequency) transceiver uses unlicensed RF bands and are specific for EU, North America, and other regions through a software selectable configuration property. This new standard will provide full interoperability and backwards compatibility with any of the current CTA-709 media types using a standard LON-to-LON router. This new media type is suitable for building and home applications as well as smart city and campus applications. It utilizes a meshing software algorithm to ensure broad coverage over long distance without degrading performance. With over 1 MB/sec data rates, the primary use cases are for data collection, device monitoring, and control networks where wired devices are not suitable.

EOS/ESD (ESD Association, Inc.)

Contact: *Christina Earl, (315) 339-6937, cearl@esda.org*
 7900 Turin Rd., Bldg. 3, Rome, NY 13440

BSR/ESDA/JEDEC JS-001-201x, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing Human Body Model (HBM) Component Level (revision of ANSI/ESDA/JEDEC JS-001-2017)

Stakeholders: Electronics industry including telecom, consumer, medical, and industrial.

Project Need: The purpose (objective) of this standard is to establish a test method that will replicate HBM failures and provide reliable, repeatable HBM ESD test results from tester to tester, regardless of component type. Repeatable data will allow accurate classifications and comparisons of HBM ESD sensitivity levels.

This standard establishes the procedure for testing, evaluating, and classifying components and microcircuits according to their susceptibility (sensitivity) to damage or degradation by exposure to a defined human body model (HBM) electrostatic discharge (ESD).

IES (Illuminating Engineering Society)

Contact: *Patricia McGillicuddy, (917) 913-0027, pmcgillicuddy@ies.org*
 120 Wall Street, Floor 17, New York, NY 10005

BSR/IES RP-3x-201x, Recommended Practice for School and Office Lighting to Enhance Alertness (new standard)

Stakeholders: Lighting practitioners, designers, architects, members of the school community, utilities, government, general public.

Project Need: Establish a standard on the use of light during the daytime to enhance behavior and health in schools and offices.

Summarize state of the art research on the circadian, neuroendocrine and neurobehavioral effects of ocular light exposure as they pertain to daytime lighting in schools and offices; propose recommendations for lighting standards on light intensity, spectrum, timing and pattern; and the measurement, quantification and reporting of light in the context of these 'non-visual' responses to light.

NEMA (ASC C37) (National Electrical Manufacturers Association)

Contact: Gerard Winstanley, (703) 841-3231, Gerard.Winstanley@nema.org
1300 North 17th Street, Suite 900, Rosslyn, VA 22209

BSR C37.58-201x, Indoor AC Medium-Voltage Switches for Use in Metal-Enclosed Switchgear Conformance Test Procedures (revision of ANSI C37.58-2003 (R2010))

Stakeholders: Utilities, manufacturers, users, contractors.

Project Need: Update the existing standard for current industry practices.

This standard applies to the conformance test procedure for ac medium-voltage switches rated above 1000 volts as designed, manufactured, and tested in accordance with ANSI/IEEE C37.20.4. It is intended for use in metal-clad switchgear, as described in ANSI/IEEE C37.20.2, and metal-enclosed interrupter switchgear, as described in ANSI/IEEE C37.20.3. Conformance testing need not be performed but may be utilized to demonstrate that the switches conform with the ratings assigned, as agreeable to those concerned, usually some time after original design testing, to satisfy a specific need. This standard does not apply to installations under the exclusive control of electric utilities for the generation, control, transformation, transmission, and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, and the like, or outdoors by established rights on private property.

NOTE 1: An electric utility is an entity that is overseen by a public utility commission, a public service commission, or other regulatory agency having jurisdiction for such installations.

NOTE 2: Within this standard, the words "switch" or "switches" shall be considered to mean "indoor ac medium-voltage switches for use in enclosures," subject to the requirements of ANSI/IEEE C37.20.4.

BSR C37.85-201x, Alternating-Current High-Voltage Power Vacuum Interrupters - Safety - Requirements for X-Radiation Limits (revision of ANSI C37.85-2002 (R2010))

Stakeholders: Utilities, manufacturers, users, contractors.

Project Need: Update the existing standard for current industry practices.

This standard specifies the maximum permissible X-radiation emission from alternating-current high-voltage power vacuum interrupters that are intended to be operated at voltages above 1000 volts and up to 38,000 volts when tested in accordance with procedures described in this standard.

NOTES: The test procedures prescribed in this standard are not necessarily applicable for higher-voltage vacuum interrupters. In this standard, the term "interrupter" signifies "high-voltage power vacuum interrupter," unless qualified by other descriptive terms.

SCTE (Society of Cable Telecommunications Engineers)

Contact: Kim Cooney, (800) 542-5040, kcooney@scte.org
140 Phillips Rd, Exton, PA 19341

BSR/SCTE 36-201x, SCTE-ROOT Management Information Base (MIB) Definitions (revision of ANSI/SCTE 36-2012)

Stakeholders: Cable Telecommunications industry.

Project Need: Update to current technology.

This MIB provides the root object identifier for the Society of Telecommunications Engineers (SCTE) as an enterprise, as assigned by the Internet Assigned Numbers Authority (IANA). Any Management Information Base (MIB) that falls under the auspices of the SCTE must be assigned object identifiers underneath this enterprise object-id.

TNI (The NELAC Institute)

Contact: Kenneth Jackson, (518) 899-9697, ken.jackson@nelac-institute.org
PO Box 2439, Weatherford, TX 76086

BSR/TNI EL-V1M2-201x, Management and Technical Requirements for Laboratories Performing Environmental Analysis, Module 2: Quality Systems General Requirements (revision and partition of ANSI/TNI EL-V1-2016)

Stakeholders: Environmental laboratories; governmental and non-governmental accreditation bodies.

Project Need: The current standard is based on ISO/IEC 17025. That ISO standard was updated in 2017, therefore the current standard also needs to be updated to reflect the changes in ISO/IEC 17025. At the same time, it will be possible to revise and clarify existing items including technical manager requirements.

Module 2 of the TNI Environmental Laboratory Standard contains detailed quality-system requirements for consistent and uniform implementation by the laboratories conducting testing. Laboratories that comply with these requirements will produce data of known and documented quality and will demonstrate proficiency through the use of proficiency testing and employee training. The Quality Assurance procedures are applicable to environmental laboratories regardless of size and complexity. This module is for use by laboratories, clients, regulatory authorities, and accreditation bodies to ensure that the laboratory has appropriate management and technical quality systems to perform environmental testing.

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.

AGA (ASC B109)

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ANS

American Nuclear Society
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Fax: (708) 579-8248
Web: www.ans.org

ASA (ASC S12)

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Melville, NY 11747
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Fax: (631) 923-2875
Web: www.acousticalsociety.org

ASC X9

Accredited Standards Committee X9,
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275 West Street
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Web: www.x9.org

ASHRAE

American Society of Heating,
Refrigerating and Air-Conditioning
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ASME

American Society of Mechanical
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ASSE (ASC A10)

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ASSE (Safety)

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CTA

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EOS/ESD

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IEEE

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ITI (INCITS)

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NEMA (ASC C78)

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NFPA

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NSF

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RESNET

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TAPPI

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ISO & IEC Draft International Standards

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

Comments

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

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

Ordering Instructions

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

ISO Standards

ACOUSTICS (TC 43)

ISO 11203/DAMd1, Acoustics - Noise emitted by machinery and equipment - Determination of emission sound pressure levels at a work station and at other specified positions from the sound power level - Amendment 1 - 5/20/2018, \$40.00

ISO/DIS 5130, Acoustics - Measurements of sound pressure level emitted by stationary road vehicles - 5/20/2018, \$77.00

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

ISO/DIS 10993-9, Biological evaluation of medical devices - Part 9: Framework for identification and quantification of potential degradation products - 5/18/2018, \$71.00

ISO/DIS 10993-15, Biological evaluation of medical devices - Part 15: Identification and quantification of degradation products from metals and alloys - 5/18/2018, \$88.00

EARTH-MOVING MACHINERY (TC 127)

ISO 14397-1/DAMd1, Earth-moving machinery - Loaders and backhoe loaders - Part 1: Calculation of rated operating capacity and test method for verifying calculated tipping load - Amendment 1 - 5/20/2018, \$29.00

EQUIPMENT FOR FIRE PROTECTION AND FIRE FIGHTING (TC 21)

ISO/DIS 7203-1, Fire extinguishing media - Foam concentrates - Part 1: Specification for low-expansion foam concentrates for top application to water-immiscible liquids - 7/16/2018, \$112.00

ISO/DIS 7203-2, Fire extinguishing media - Foam concentrates - Part 2: Specification for medium- and high-expansion foam concentrates for top application to water-immiscible liquids - 7/16/2018, \$107.00

FASTENERS (TC 2)

ISO/DIS 10642, Fasteners - Hexagon socket countersunk head screws with reduced loadability - 5/17/2018, \$46.00

GRAPHICAL SYMBOLS (TC 145)

ISO 7010/DAMd243, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 243: Safety sign E030: Emergency exit for people unable to walk or with walking impairment (right) - 7/16/2018, \$29.00

IMPLANTS FOR SURGERY (TC 150)

IEC/DIS 60601-2-31, Medical electrical equipment - Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source, \$119.00

INTERNAL COMBUSTION ENGINES (TC 70)

ISO/DIS 8178-9, Reciprocating internal combustion engines - Exhaust emission measurement - Part 9: Test cycles and test procedures for measurement of exhaust gas smoke emissions from compression ignition engines using an Opacimeter - 7/19/2018, \$134.00

LIFTS, ESCALATORS, PASSENGER CONVEYORS (TC 178)

ISO/DIS 8102-1, Electrical requirements for lifts, escalators and moving walks - Part 1: Electromagnetic compatibility with regard to emission - 5/17/2018, \$71.00

ISO/DIS 8102-2, Electrical requirements for lifts, escalators and moving walks - Part 2: Electromagnetic compatibility with regard to immunity - 5/17/2018, \$71.00

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

ISO/DIS 35102, Petroleum and natural gas industries - Arctic operations - Escape, evacuation and rescue from offshore installations - 7/14/2018, \$155.00

OTHER

ISO/DIS 18218-2, Leather - Determination of ethoxylated alkylphenols - Part 2: Indirect method - 5/17/2018, \$62.00

PLASTICS (TC 61)

- ISO/DIS 13975, Plastics - Determination of the ultimate anaerobic biodegradation of plastic materials in controlled slurry digestion systems - Method by measurement of biogas production - 5/17/2018, \$62.00
- ISO/DIS 15512, Plastics - Determination of water content - 5/19/2018, \$107.00
- ISO/DIS 17556, Plastics - Determination of the ultimate aerobic biodegradability of plastic materials in soil by measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved - 5/17/2018, \$88.00
- ISO/DIS 21475, Plastics - Methods of exposure to determine the wavelength dependent degradation using spectrally dispersed radiation - 5/17/2018, \$62.00
- ISO/DIS 21760-1, Adhesives for organic electronic devices - Determination of water vapour transmission rate - Part 1: Adhesive film preparation method - 5/19/2018, \$53.00
- ISO/DIS 21760-2, Adhesives for organic electronic devices - Determination of water vapour transmission rate - Part 2: Edge seal method - 5/19/2018, \$40.00

POWDER METALLURGY (TC 119)

- ISO/DIS 4499-2, Hardmetals - Metallographic determination of microstructure - Part 2: Measurement of WC grain size - 7/15/2018, \$71.00

ROAD VEHICLES (TC 22)

- ISO/DIS 6469-1, Electrically propelled road vehicles - Safety specifications - Part 1: Rechargeable energy storage system (RESS) - 5/19/2018, \$93.00
- ISO/DIS 8820-11, Road vehicles - Fuse-links - Part 11: Fuse-links with tabs (blade type) Type M (medium-high current) - 5/19/2018, \$62.00

ROLLING BEARINGS (TC 4)

- ISO/DIS 13012-1, Rolling bearings - Accessories for sleeve type linear ball bearings - Part 1: Boundary dimensions, geometrical product specifications (GPS) and tolerances for series 1 and 3 - 5/18/2018, \$93.00
- ISO/DIS 13012-2, Rolling bearings - Accessories for sleeve type linear ball bearings - Part 2: Boundary dimensions, geometrical product specifications (GPS) and tolerances for series 5 - 5/18/2018, \$71.00

RUBBER AND RUBBER PRODUCTS (TC 45)

- ISO/DIS 24698-1, Rubber, raw - Determination of bound acrylonitrile content in acrylonitrile-butadiene rubber (NBR) - Part 1: Combustion (Dumas) method - 5/18/2018, \$46.00
- ISO/DIS 24698-2, Rubber, raw - Determination of bound acrylonitrile content in acrylonitrile-butadiene rubber (NBR) - Part 2: Kjeldahl method - 5/18/2018, \$53.00

STEEL (TC 17)

- ISO/DIS 11484, Steel products - Employers qualification system of non-destructive testing (NDT) personnel - 11/9/2029, \$71.00

STERILIZATION OF HEALTH CARE PRODUCTS (TC 198)

- ISO/DIS 14160, Sterilization of health care products - Liquid chemical sterilizing agents for single-use medical devices utilizing animal tissues and their derivatives - Requirements for characterization, development, validation and routine control of a sterilization process for medical devices - 5/20/2018, \$119.00

TEXTILES (TC 38)

- ISO/DIS 2370, Textiles - Determination of fineness of flax fibres - Permeametric methods - 7/15/2018, \$77.00
- ISO/DIS 1833-18, Textiles - Quantitative chemical analysis - Part 18: Mixtures of silk with other protein fibres (method using sulfuric acid) - 5/20/2018, \$33.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)

- ISO/DIS 2965, Materials used as cigarette papers, filter plug wrap and filter joining paper, including materials having an oriented permeable zone - Determination of air permeability - 11/2/2010, \$88.00
- ISO/DIS 20714, E-liquid - Determination of nicotine, propylene glycol and glycerol in liquids used in electronic nicotine delivery devices - Gas chromatographic method - 5/20/2018, \$40.00

TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

- ISO/DIS 17515-3, Intelligent transport systems - Evolved-universal terrestrial radio access network - Part 3: LTE-V2X - 5/17/2018, \$102.00

WATER QUALITY (TC 147)

- ISO/DIS 21115, Water quality - Determination of acute toxicity of water samples and chemicals to a fish gill cell-line (RTgill-W1) - 5/20/2018, \$112.00

WELDING AND ALLIED PROCESSES (TC 44)

- ISO/DIS 14174, Welding consumables - Fluxes for submerged arc welding and electroslag welding - Classification - 5/17/2018, \$71.00
- ISO/DIS 24598, Welding consumables - Solid wire electrodes, tubular cored electrodes and electrode-flux combinations for submerged arc welding of creep-resisting steels - Classification - 5/17/2018, \$71.00

ISO/IEC JTC 1, Information Technology

- ISO/IEC DIS 8825-8, Information technology - ASN.1 encoding rules - Part 8: Specification of JavaScript Object Notation Encoding Rules (JER) - 5/17/2018, \$102.00

IEC Standards

- 3/1361/DC, Proposed revision of IEC 60152 ED1.0, Identification by hour numbers of the phase conductors of 3-phase electric systems, 018/6/8/
- 3/1359/DC, Proposed revision of IEC 81346-1 ED1.0, Industrial systems, installations and equipment and industrial products - Structuring principles and reference designations - Part 1: Basic rules, 018/6/8/
- 3/1360/DC, Proposed revision of IEC 61666 ED2.0, Industrial systems, installations and equipment and industrial products - Identification of terminals within a system, 018/6/8/
- 15/833/CDV, IEC 62677-3-103 ED1: Heat-shrinkable low and medium voltage moulded shapes - Part 3: Specification for individual materials - Sheet 103: Heat-shrinkable, polyolefin, conductive moulded shapes for medium voltage applications, 2018/7/20
- 20/1808/CD, IEC 60840 ED5: Power cables with extruded insulation and their accessories for rated voltages above 30 kV (Um = 36 kV) up to 150 kV (Um = 170 kV) - Test methods and requirements, 2018/7/20
- 33/616/FDIS, IEC 60358-4 ED1: Coupling capacitors and capacitor dividers - Part 4: DC and AC single-phase capacitor dividers, 018/6/8/

- 34/508/CDV, IEC 63128 ED1: Lighting control interface for dimming - Analogue voltage dimming interface for electronic light source controlgear, 2018/7/20
- 34A/2086/FDIS, IEC 62612/AMD2 ED1: Amendment 2 - Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements, 018/6/8/
- 45B/903/DTS, IEC TS 63050 ED1: Radiation protection instrumentation - Dosimeters for pulsed fields of ionizing radiation, 2018/7/20
- 47/2468/CDV, IEC 60749-18 ED2: Semiconductor devices - Mechanical and climatic test methods - Part 18: Ionizing radiation (total dose), 2018/7/20
- 47F/308/CDV, IEC 62047-31 ED1: Semiconductor devices - Micro-electromechanical devices - Part 31: Four-point bending test method for interfacial adhesion energy of layered MEMS materials, 2018/7/20
- 48B/2653/NP, PNW 48B-2653: IEC 63171-5/ED.1: Connectors for electrical and electronic equipment - Product requirements - Part x-y: Detail specification for circular connectors with up to 8 ways, screw-locking, free and fixed connectors for data transmission up to 2000MHz with current carrying capacity, 2018/7/20
- 48B/2649A/NP, PNW 48B-2649: IEC 63171-4/ED.1 Connector for electrical and electronic equipment - Detail specification for 2-way, shielded and unshielded, free and fixed connectors for data transmission up to 2000MHz with current carrying capability, 2018/7/20
- 48B/2652/DPAS, IEC PAS 60512-27-200 ED1: Connectors for electrical and electronic equipment - Tests and measurement - Part 27-200: Additional specifications for signal integrity tests up to 2 000 MHz on IEC 60603-7 series connectors - Tests 27a to 27g, 2018/6/22
- 49/1277/CDV, IEC 62884-4 ED1: Measurement techniques of piezoelectric, dielectric and electrostatic oscillators - Part 4: Short-term frequency stability test methods, 2018/7/20
- 55/1647/CDV, IEC 60317-2 ED5: Specifications for particular types of winding wires - Part 2: Solderable polyurethane enamelled round copper wire, class 130, with a bonding layer, 2018/7/20
- 61J/696/CDV, IEC 62784/AMD1 ED1: Vacuum cleaners and dust extractors providing equipment protection level Dc for the collection of combustible dusts - Particular requirements, 2018/7/20
- 62D/1576/CDV, IEC 60601-2-31 ED3: Medical electrical equipment - Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source, 2018/7/20
- 68/596/CDV, IEC 60404-7 ED2: Magnetic materials - Part 7: Method of measurement of the coercivity (up to 160 kA/m) of magnetic materials in an open magnetic circuit, 2018/7/20
- 68/601/CD, IEC 60404-8-5 ED2: Magnetic materials - Part 8-5: Specifications for individual materials - Electrical steel strip and sheet with specified mechanical properties and magnetic permeability, 2018/8/17
- 68/597/CDV, IEC 60404-9 ED2: Magnetic materials - Part 9: Methods of determination of the geometrical characteristics of electrical steel strip and sheet, 2018/7/20
- 69/593/NP, PNW 69-593: Electrical characteristics test methods of EDLC Module for Electric road vehicles, 2018/7/20
- 76/601/CD, IEC 60825-2 ED4: Safety of laser products - Part 2: Safety of optical fibre communication systems (OFCS), 2018/7/20
- 80/888/FDIS, IEC 61993-2 ED3: Maritime navigation and radiocommunication equipment and systems - Automatic identification systems (AIS) - Part 2: Class A shipborne equipment of the automatic identification system (AIS) - Operational and performance requirements, methods of test and required test results, 018/6/8/
- 82/1408/CDV, IEC 60904-11 ED1: Photovoltaic devices - Part 11: Measurement of light-induced degradation of crystalline silicon solar cells, 2018/7/20
- 86A/1858/CDV, IEC 60794-2-11 ED3: Optical fibre cables - Part 2-11: Indoor optical fibre cables - Detailed specification for simplex and duplex cables for use in premises cabling, 2018/7/20
- 86A/1859/CDV, IEC 60794-2-31 ED3: Optical fibre cables - Part 2-31: Indoor cables - Detailed specification for optical fibre ribbon cables for use in premises cabling, 2018/7/20
- 86A/1857/CDV, IEC 60794-2-21 ED3: Optical fibre cables - Part 2-21: Indoor optical fibre cables - Detailed specification for multi-fibre optical distribution cables for use in premises cabling, 2018/7/20
- 86C/1524/CD, IEC TR 62343-6-11 ED1: Dynamic modules - Part 6-11: Design guide - Software and hardware interface of multicast optical switches, 2018/7/20
- 88/681/CD, IEC TS 61400-25-7 ED1: Wind energy generation systems - Part 25-71: Communications for monitoring and control of wind power plants - Configuration description language, 2018/7/20
- 100/3103/FDIS, IEC 60728-113 ED1: Cable networks for television signals, sound signals and interactive services - Part 113: Optical systems for broadcast signal transmissions loaded with digital channels only (TA 5), 018/6/8/
- 104/797/CDV, IEC 60068-2-67/AMD1 ED1: Environmental testing - Part 2-67: Tests - Test Cy: Damp heat, steady state, accelerated test primarily intended for components, 2018/7/20
- 104/799/CDV, IEC 60721-3-4 ED3: Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weatherprotected locations, 2018/7/20
- 110/980/Q, Proposed technical corrigendum to IEC 62341-6-3 Ed. 2: Organic light emitting diode (OLED) displays - Part 6-3: Measuring methods of image quality, 018/6/8/
- JTC1-SC41/32/CDV, ISO/IEC 21823-1 ED1: Information technology - Internet of Things (IoT) - Interoperability for Internet of Things Systems - Part 1: Framework, 2018/7/20



Newly Published ISO & IEC Standards

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

ISO Standards

ISO/IEC JTC 1 Technical Reports

[ISO/IEC TR 29110-5-1-4:2018](#), Software and systems engineering - Lifecycle profiles for very small entities (VSEs) - Part 5-1-4: Software engineering: Management and engineering guidelines: Generic profile group: Advanced profile, \$232.00

AGRICULTURAL FOOD PRODUCTS (TC 34)

[ISO 13301:2018](#), Sensory analysis - Methodology - General guidance for measuring odour, flavour and taste detection thresholds by a three-alternative forced-choice (3-AFC) procedure, \$162.00

[ISO 16649-1:2018](#), Microbiology of the food chain - Horizontal method for the enumeration of beta-glucuronidase-positive *Escherichia coli* - Part 1: Colony-count technique at 44 degrees C using membranes and 5-bromo-4-chloro-3-indolyl beta-D-glucuronide, \$68.00

AIRCRAFT AND SPACE VEHICLES (TC 20)

[ISO 16726:2018](#), Space systems - Human-life activity support systems and equipment integration in space flight - Techno-medical requirements for space vehicle human habitation environments - Requirements for the air quality affected by harmful chemical contaminants, \$68.00

CONTROL AND SAFETY DEVICES FOR NON INDUSTRIAL GAS-FIRED APPLIANCES AND SYSTEMS (TC 161)

[ISO 23551-4:2018](#), Safety and control devices for gas burners and gas-burning appliances - Particular requirements - Part 4: Valve-improving systems for automatic shut-off valves, \$162.00

CYCLES (TC 149)

[ISO 6742-2/Amd1:2018](#), Cycles - Lighting and retro-reflective devices - Part 2: Retro-reflective devices - Amendment 1, \$19.00

DENTISTRY (TC 106)

[ISO 6872/Amd1:2018](#), Dentistry - Ceramic materials - Amendment 1, \$19.00

FACILITIES MANAGEMENT (TC 267)

[ISO 41001:2018](#), Facility management - Management systems - Requirements with guidance for use, \$185.00

FERROUS METAL PIPES AND METALLIC FITTINGS (TC 5)

[ISO 49/Amd1:2018](#), Malleable cast iron fittings threaded to ISO 7-1 - Amendment 1: Chemical composition of the zinc coating - adjustment to actual requirements regarding hazardous substances, \$19.00

FINE CERAMICS (TC 206)

[ISO 19604:2018](#), Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at high temperature - Determination of stress-rupture time diagram under constant tensile loading, \$103.00

FLUID POWER SYSTEMS (TC 131)

[ISO 5597:2018](#), Hydraulic fluid power - Cylinders - Dimensions and tolerances of housings for single-acting piston and rod seals in reciprocating applications, \$103.00

GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)

[ISO 19165-1:2018](#), Geographic information - Preservation of digital data and metadata - Part 1: Fundamentals, \$185.00

HEALTH INFORMATICS (TC 215)

[ISO 17117-1:2018](#), Health informatics - Terminological resources - Part 1: Characteristics, \$162.00

INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

[ISO 8000-115:2018](#), Data quality - Part 115: Master data: Exchange of quality identifiers: Syntactic, semantic and resolution requirements, \$45.00

INTERNAL COMBUSTION ENGINES (TC 70)

[ISO 8178-6:2018](#), Reciprocating internal combustion engines - Exhaust emission measurement - Part 6: Report of measuring results and test, \$162.00

PLASTICS (TC 61)

[ISO 21844:2018](#), Cellular plastic - Cellulose foam thermal insulation - Material specification, \$45.00

PROJECT, PROGRAMME AND PORTFOLIO MANAGEMENT (TC 258)

[ISO 21508:2018](#), Earned value management in project and programme management, \$138.00

ISO Technical Reports

CLEAN COOKSTOVES AND CLEAN COOKING SOLUTIONS (TC 285)

[ISO/TR 21276:2018](#), Clean cookstoves and clean cooking solutions - Vocabulary, \$45.00

MECHANICAL TESTING OF METALS (TC 164)

[ISO/TR 12112:2018](#), Metallic materials - Principles and designs for multiaxial fatigue testing, \$162.00

TRADITIONAL CHINESE MEDICINE (TC 249)

[ISO/TR 23022:2018](#), Traditional Chinese medicine - Controlled vocabulary on Japanese Kampo formulas and the indication codes for the products, \$232.00

ISO Technical Specifications**MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)**

[ISO/TS 35105:2018](#), Petroleum and natural gas industries - Arctic operations - Material requirements for arctic operations, \$138.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 30134-2/Amd1:2018](#), Information technology - Data centres - Key performance indicators - Part 2: Power usage effectiveness (PUE) - Amendment 1, \$19.00

[ISO/IEC 23091-1:2018](#), Information technology - Coding-independent code points - Part 1: Systems, \$45.00

[ISO/IEC 29110-3-2:2018](#), Systems and software engineering - Lifecycle profiles for Very Small Entities (VSEs) - Part 3-2: Conformity certification scheme, \$138.00

[ISO/IEC 14776-454:2018](#), Information technology - Small computer system interface (SCSI) - Part 454: SCSI Primary Commands - 4 (SPC-4), FREE

[ISO/IEC/IEEE 8802-A/Amd1:2018](#), Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part A: Overview and architecture - Amendment 1: Allocation of Uniform Resource Name (URN) values in IEEE 802® standards, \$19.00

[ISO/IEC/IEEE 8802-1AC:2018](#), Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part 1AC: Media access control (MAC) service definition, \$185.00

[ISO/IEC TS 19216:2018](#), Programming Languages - C++ Extensions for Networking, \$232.00

[ISO/IEC TS 22237-1:2018](#), Information technology - Data centre facilities and infrastructures - Part 1: General concepts, \$138.00

[ISO/IEC TS 22237-2:2018](#), Information technology - Data centre facilities and infrastructures - Part 2: Building construction, \$138.00

[ISO/IEC TS 22237-3:2018](#), Information technology - Data centre facilities and infrastructures - Part 3: Power distribution, \$162.00

[ISO/IEC TS 22237-4:2018](#), Information technology - Data centre facilities and infrastructures - Part 4: Environmental control, \$138.00

[ISO/IEC TS 22237-5:2018](#), Information technology - Data centre facilities and infrastructures - Part 5: Telecommunications cabling infrastructure, \$162.00

[ISO/IEC TS 22237-6:2018](#), Information technology - Data centre facilities and infrastructures - Part 6: Security systems, \$162.00

[ISO/IEC TS 22237-7:2018](#), Information technology - Data centre facilities and infrastructures - Part 7: Management and operational information, \$185.00

[ISO/IEC/IEEE 8802-21:2018](#), Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 21: Media independent services framework, \$232.00

[ISO/IEC/IEEE 8802-21-1:2018](#), Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Part 21-1: Media independent services, \$232.00

IEC Standards**AUDIO, VIDEO AND MULTIMEDIA SYSTEMS AND EQUIPMENT (TC 100)**

[IEC 60268-3 Ed. 5.0 en:2018](#), Sound system equipment - Part 3: Amplifiers, \$352.00

[S+ IEC 60268-3 Ed. 5.0 en:2018 \(Redline version\)](#), Sound system equipment - Part 3: Amplifiers, \$457.00

CAPACITORS AND RESISTORS FOR ELECTRONIC EQUIPMENT (TC 40)

[IEC 60286-5 Ed. 3.0 en:2018](#), Packaging of components for automatic handling - Part 5: Matrix trays, \$235.00

[S+ IEC 60286-5 Ed. 3.0 en:2018 \(Redline version\)](#), Packaging of components for automatic handling - Part 5: Matrix trays, \$305.00

ELECTRIC WELDING (TC 26)

[IEC 60974-9 Ed. 2.0 b:2018](#), Arc welding equipment - Part 9: Installation and use, \$199.00

[S+ IEC 60974-9 Ed. 2.0 en:2018 \(Redline version\)](#), Arc welding equipment - Part 9: Installation and use, \$259.00

ENVIRONMENTAL CONDITIONS, CLASSIFICATION AND METHODS OF TEST (TC 104)

[IEC 60068-2-10 Amd.1 Ed. 6.0 b:2018](#), Amendment 1 - Environmental testing - Part 2-10: Tests - Test J and guidance: Mould growth, \$12.00

[IEC 60068-2-10 Ed. 6.1 b:2018](#), Environmental testing - Part 2-10: Tests - Test J and guidance: Mould growth, \$322.00

[IEC 60068-2-74 Amd.1 Ed. 1.0 b:2018](#), Amendment 1 - Environmental testing - Part 2-74: Tests - Test Xc: Fluid contamination, \$23.00

[IEC 60068-2-74 Ed. 1.1 b:2018](#), Environmental testing - Part 2-74: Tests - Test Xc: Fluid contamination, \$141.00

FIBRE OPTICS (TC 86)

[IEC 61290-4-3 Ed. 2.0 b:2018](#), Optical amplifiers - Test methods - Part 4-3: Power transient parameters - Single channel optical amplifiers in output power control, \$199.00

[IEC 62343-3-4 Ed. 1.0 b:2018](#), Dynamic modules - Part 3-4: Performance specification templates - Multicast optical switches, \$117.00

INDUSTRIAL-PROCESS MEASUREMENT AND CONTROL (TC 65)

[IEC 62714-1 Ed. 2.0 b:2018](#), Engineering data exchange format for use in industrial automation systems engineering - Automation Markup Language - Part 1: Architecture and general requirements, \$352.00

[S+ IEC 62714-1 Ed. 2.0 en:2018 \(Redline version\)](#), Engineering data exchange format for use in industrial automation systems engineering - Automation Markup Language - Part 1: Architecture and general requirements, \$457.00

LAMPS AND RELATED EQUIPMENT (TC 34)

[IEC 61167 Ed. 4.0 b:2018](#), Metal halide lamps - Performance specification, \$410.00

ROTATING MACHINERY (TC 2)

[IEC 60034-4-1 Ed. 1.0 b:2018](#), Rotating electrical machines - Part 4-1: Methods for determining electrically excited synchronous machine quantities from tests, \$352.00

SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES (TC 61)

[IEC 60335-2-27 Amd.2 Ed. 5.0 b:2015](#), Amendment 2 - Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation, \$47.00

[IEC 60335-2-27 Ed. 5.2 b:2015](#), Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation, \$352.00

[IEC 60335-2-27 Amd.2 Ed. 5.0 b cor.2:2016](#), Corrigendum 2 - Amendment 2 - Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation, \$0.00

[IEC 60335-2-27 Amd.2 Ed. 5.0 b cor.1:2015](#), Corrigendum 1 - Amendment 2 - Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation, \$0.00

Registration of Organization Names in the United States

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

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

PUBLIC REVIEW

Antech Imaging Services

Public Review: March 9 to June 1, 2018

South Carolina Law Enforcement Division (SLED)

Public Review: April 27 to July 23, 2018

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

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

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

Proposed Foreign Government Regulations

Call for Comment

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

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

To register for Notify U.S., please visit <http://www.nist.gov/notifyus/>.

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

For further information about the USA TBT Inquiry Point, please visit: <https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point>

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

Information Concerning

American National Standards

Call for Members

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

The InterNational Committee for Information Technology Standards (INCITS), an ANSI accredited SDO, is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal de jure IT standards. INCITS' mission is to promote the effective use of Information and Communication Technology through standardization in a way that balances the interests of all stakeholders and increases the global competitiveness of the member organizations.

The INCITS Executive Board serves as the consensus body with oversight of its 40+ Technical Committees. Additionally, the INCITS Executive Board has the international leadership role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

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

Membership in all interest categories is always welcome; however, the INCITS Executive Board seeks to broaden its membership base in the following categories:

- Service Providers
- Users
- Standards Development Organizations and Consortia
- Academic Institutions

Society of Cable Telecommunications

ANSI Accredited Standards Developer

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

SCTE is currently seeking to broaden the membership base of its 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 a materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at www.scte.org or by e-mail from standards@scte.org.

NSF Designation Change

The initial designation of this NSF standard was listed as NSF 244-3 during the development stage, but was changed at the approval stage to ANSI/NSF 244-2018 (i1r15), Supplemental Microbiological Water Treatment Systems – Filtration (new standard).

ANSI Accredited Standards Developers

Approval of Accreditation as an ANSI ASD

American Renewable Energy Standards and Certification Association (ARESCA)

ANSI's Executive Standards Council has approved the American Renewable Energy Standards and Certification Association (ARESCA), a new ANSI member in 2017, as an ANSI Accredited Standards Developer (ASD) under its proposed operating procedures for documenting consensus on ARESKA-sponsored American National Standards, effective May 1, 2018. For additional information, please contact: Mr. Dan Brake, President, ARESKA, 256 Farrell Farm Road, Norwich, VT 05055; phone: 561.373.6850; e-mail: dbrake@aresca.us.

Approval of Reaccreditation

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

ANSI's Executive Standards Council has approved the reaccreditation of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), an ANSI Member and Accredited Standards Developer, under its recently revised Procedures for ASHRAE Standards Actions for documenting consensus on ASHRAE-sponsored American National Standards, effective May 1, 2018. For additional information, please contact: Ms. Tanisha Meyers-Lisle, Procedures Administrator, ASHRAE, 1791 Tullie Circle, NE, Atlanta, GA 30329; phone: 678.539.1111; e-mail: TMeyers-Lisle@ashrae.org.

Withdrawal of ASD Accreditation

Association for Information and Image Management (AIIM)

The Association for Information and Image Management (AIIM) has requested the formal withdrawal of its accreditation as a developer of American National Standards. Consequently, as every American National Standard (ANS) must have an accredited sponsor, the following AIIM-sponsored standards are withdrawn as ANS:

ANSI/AIIM 22-2017: Standard Recommended Practice – Strategy Markup Language – Part 2: Performance Plans and Reports

ANSI/AIIM/ISO 14289-1-2016: Document Management Applications – Electronic Document File Format Enhancement for Accessibility – Part 1: Use of ISO 32000-2 (PDF/UA-1)

ANSI/AIIM/ISO 17469-1-2015: Strategy Markup Language (StratML) – Part 1: StratML Core Elements

ANSI/AIIM 25-2012: Assessing Trusted Systems for Compliance with Industry Standards and Best Practices

ANSI/AIIM/ISO 10198-1999 (R2010): Micrographics – Rotary Camera for 16mm Microfilm – Mechanical and Optical Characteristics

ANSI/AIIM/ISO 6198-1999 (R2010): Micrographics – Readers for Transparent Microforms – Performance Characteristics

ANSI/AIIM/ISO 10197-2000 (R2011): Micrographics – Readers-Printers for Transparent Microforms – Characteristics

ANSI/AIIM MS23-2004 (R2010): Standard Recommended Practice – Production, Inspection, and Quality Assurance of First-Generation, Silver Microforms of Documents

ANSI/AIIM/CGATS/ISO 19005-1-2005: Document Management – Electronic Document File Format for Long-Term Preservation – Part 1: Use of PDF 1.4 (PDF/A-1)

In addition, all AIIM-sponsored Technical Reports Registered with ANSI and registered projects are formally withdrawn.

These actions are taken, effective April 27, 2018. For additional information, please contact: Ms. Betsy Fanning, 3PDF Consortium, 3855 SW 153rd Drive, Beaverton, OR 97003; phone: 571.218.9817; e-mail: betsy.fanning@3pdfconsortium.org.

U.S. Technical Advisory Groups

Approval of TAG Accreditation

U.S. TAG to ISO TC 309 – Governance of Organizations

Approval of TAG Accreditation

ANSI's Executive Standards Council (ExSC) has formally approved the accreditation of the U.S. Technical Advisory Group to ISO TC 309, Governance of Organizations under its proposed operating procedures and with the InterNational Committee for Information Technology Standards (ASC INCITS) serving as TAG Administrator, effective May 1, 2018. For additional information, please contact: Ms. Jennifer Garner, Vice-President, INCITS Standards Programs, INCITS/Information Technology Industry Council, 1101 K Street, NW, Suite 610, Washington, DC 20005; phone: 202.626.5737; e-mail: jgarner@itic.org.

U.S. TAG to ISO PC 318 – Community Scale Resource Oriented Sanitation Treatment Systems

ANSI's Executive Standards Council (ExSC) has formally approved the accreditation of the U.S. Technical Advisory Group to ISO PC 318, Community Scale Resource Oriented Sanitation Treatment Systems under the Model Operating Procedures for U.S. Technical Advisory Groups to ANSI for ISO Activities as contained in Annex A of the ANSI International Procedures, and with ANSI (with funding from the Bill and Melinda Gates Foundation) serving as TAG Administrator, effective May 1, 2018. For additional information, please contact: Ms. Sally Seitz, Sr. Program Manager, ANSI, 25 West 43rd Street, 4th Floor, New York, NY 10036; phone: 212.642.4918; e-mail: sseitz@ansi.org.

BSR/ESD S541-201x**3.0 REFERENCED PUBLICATIONS**

Unless otherwise specified, the following documents of the latest issue, revision, or amendment form a part of this standard to the extent specified herein:

ESD ADV1.0, Glossary¹

ESD TR20.20, ESD Control Program Handbook²

ANSI/ESD S8.1, Symbols, ESD Awareness²

ANSI/ESD STM11.11, Surface Resistance Measurement of Static Dissipative Planar Materials²

ANSI/ESD STM11.12, Volume Resistance Measurement of Static Dissipative Planar Materials²

ANSI/ESD STM11.13, Two-Point Resistance Measurement of Static Dissipative Materials²

ANSI/ESD STM11.31, Bags²

~~MIL-STD-2073-1, Standard Practice for Military Packaging²~~

~~MIL-STD-129, Military Marking for Shipment and Storage³~~

6.0 PACKAGING APPLICATION REQUIREMENTS

Any organization complying with ANSI/ESD S20.20 must have a documented packaging plan that addresses the packaging requirements for ESDS both inside and outside of the ESD protected area (EPA). Transportation of ESDS items requires packaging that provides protection from electrostatic hazards in the transportation or storage system. In the case of an EPA designed with continuous grounding of all conductors and dissipative items (including personnel), packaging may not be necessary. Refer to Table 1, Figures 1 and 2, and Annex A for more information.

~~Additional protection in excess of the requirements of this standard are at the discretion of the implementing organization.~~

6.1 Inside an EPA

Packaging, when used within an EPA, shall be:

- Low charging (see 7.1)
- Dissipative or conductive for intimate contact with ESDS items.

~~Additional protection in excess of the requirements of this standard are at the discretion of the implementing organization.~~

Table 1. ESD Protective Packaging Requirements by Location

Property	Inside EPA* (when used)	Outside EPA (UPA)
Low Charging	Required	Required
Dissipative or Conductive Resistance	Required	Required
Discharge Shielding	Optional	Required

~~*An EPA may be designed so that packaging may not be required. If used, low charging and Dissipative/Conductive materials are required.~~

¹ EOS/ESD Association, Inc., 7900 Turin Road, Bldg. 3, Rome, NY 13440; 315-339-6937; www.esda.org

² Naval Air Warfare Center Aircraft Division, Highway 547, Lakehurst, NJ 08733-5100

³ Chief, Logistics Support Activity, Packaging, Storage, and Containerization Center, Attn: AMXLS-AT-P, 11 Hap Arnold Boulevard, Tobyhanna, PA 18466-5097

6.3 Tailoring

This document, or portions thereof, may not apply to all applications. Tailoring is accomplished by evaluating the applicability of each requirement for the specific application. Upon completion of the evaluation, requirements may be added, modified or deleted outside the limits of this standard. Tailoring decisions, including rationale and technical justifications, shall be documented in the ESD control program plan.

Table 2. Summary of ESD Protective Properties

Property	Function
Low Charging	User defined level that will ensure that ESDS items devices will not be charged excessively. <u>(produces unacceptable risk of discharge)</u> .
Dissipative or Conductive Resistance	Provides an electrical path for charge to dissipate from the package.
Electric Field Shielding	Attenuates electrical fields
Discharge Shielding	Protects packaged items from the effects of static discharge that are external to the package and limits current flow through package.

7.1 Low Charging Material Property

- Similar materials tend to charge less than dissimilar materials. Coating the package interior and the contained device with the same material ~~may will~~ reduce charge accumulation.
- Reduction in the amount of relative motion between the package and contained ESDS item will reduce the amount of electrostatic charge caused by triboelectrification
- Some antistat coatings are not permanent and can degrade over time and while in-use.

NOTE: Antistats ~~may often~~ transfer and outgas from low charging packaging materials and become a source of contamination on ESDS items and critical surfaces. An evaluation of the impact of contamination may be needed during the packaging selection process. Some forms of contamination may lead to component current leakage.

7.2 Resistance Material Property

Most normal or conventional packaging materials are electrically insulative, and insulative materials can retain charge. Reducing the electrical resistance of a packaging material provides a path for charge to dissipate from the package. Specific amounts of resistance are useful for different purposes. Packaging can be classified by the lowest resistance part of its construction. The resistance classifications are illustrated in Figure 3.

NOTE: There is no correlation between resistance measurements and the ability of a material to be low charging.

NOTE: The lower the surface resistance, the higher the risk of charged device model (CDM) damage.

7.3 Shielding

7.3.1 Electrostatic Discharge Shielding

Electrostatic discharge shielding materials are capable of attenuating an electrostatic discharge when formed into a container such as a bag. See Table 3 for the test method and required shielding limits.

ESD DS541-2018**7.3.2 Electric Field Shielding**

~~As used in this document, electric field shielding can be obtained through the use of volume conductive materials.~~ While no specific test methods are provided, the end user is encouraged to evaluate electric field shielding concepts using practical methods such as monitoring interior package electric field penetration to determine packaging suitability. See Annex H for clarification.

NOTE: Electric field shielding does not necessarily imply EMI/RFI/EMP shielding.

8.2 MATERIAL IDENTIFICATION**8.2.1 ESD Protective Symbol**

ESD protective packaging shall be marked with the ESD protective symbol as described in ANSI/ESD S8.1., ~~or MIL-STD-2073-1` and MIL-STD-129 for military applications.~~

Table 3. Test Methods and Limits for Electrostatic Protective Packaging

Material Property	Test Method	Method Description	Limits
Low Charging	ESD ADV11.2	Tribocharging of tubes, planar materials, bags, unit packs (vibration)	User defined
Resistance			
Conductive	ANSI/ESD STM11.11	Surface resistance of planar materials	$< 1 \times 10^4$ ohm
	ANSI/ESD STM11.12	Volume resistance of planar materials	$< 1 \times 10^4$ ohm
	ANSI ESD STM11.13	Two-point resistance measurement	$< 1 \times 10^4$ ohm
Dissipative	ANSI/ESD STM11.11	Surface resistance of planar materials	$\geq 1 \times 10^4$ to $< 1 \times 10^{11}$ ohm
	ANSI/ESD STM11.12	Volume resistance of planar materials	$\geq 1 \times 10^4$ to $< 1 \times 10^{11}$ ohm
	ANSI/ESD STM11.13	Two-point resistance measurement	$\geq 1 \times 10^4$ to $< 1 \times 10^{11}$ ohm
Discharge Shielding	ANSI/ESD STM11.31	ESD Shielding Bags	< 20 nJ

ANNEX E (INFORMATIVE) – ESD PACKAGING AND MATERIAL TYPES**E.1 Adhesive Tape**

Tape designed to be low charging when unwound from the roll or removed from packaging or devices. It may also be static dissipative. Tape made with a low resistance conductive layer is intended to provide shielding or to allow bonding between other conductive items in the work environment. Tape is sometimes printed with the ESD protection symbol to differentiate it from conventional tape. Labels also are in this category as they have an adhesive component. Specific properties may be imparted into the label material to provide low charging and static dissipative characteristics.

E.2 Bags

Electrostatic protective bags are typically formed from flexible plastic, which has been modified with antistat, static dissipative ~~and~~/or conductive materials. Conductive bags are extruded plastic combined with conductive materials and exhibit the same properties on both surfaces. Dissipative bags are extruded from dissipative plastic combined with or coated with chemical antistat and exhibit the same properties on both surfaces. Static discharge ~~Shielding-shielding~~ bags are made from metallized plastic laminated to dissipative plastic. The metallization and plastic form a shield against discharge and limits electric fields. Other constructions are used for bags including moisture barrier protection.

E.11 Labels

~~Labels, used for warning and tracking purposes, should be low charging when separated from release liners and applied to a static sensitive device. The applied label should also be static dissipative.~~

SUMMARY OF CHANGES FOR ESDA-JEDEC JS-002-2018(LB)

3.0 DEFINITIONS

C_{Small}: Device to CDM field plate capacitance for an integrated circuit or discrete semiconductor at or below which it has been determined that CDM testing is not required if specified conditions are met.

5.0 REQUIRED EQUIPMENT

5.2.1 Cable Assemblies

Cable assemblies with combined internal tester cable and external cable total loss of no more than 2 dB at frequencies up to 9.5 GHz and a nominal 50 ohm impedance.

6.5 CDM Tester Qualification/Re-Qualification Procedure

6.5.1 CDM Tester Qualification/Re-Qualification Procedure

The intent of the qualification / requalification procedure is to determine the field plate voltage needed for each test condition setting (125 – 1000) in Table 3 to produce peak current in the ranges corresponding to Tables ~~1 and 2~~, and therefore corresponding to the classification levels as specified in Table 3.

Two alternative procedures for how to qualify and routinely check the CDM test system are introduced in Annex H. These procedures are based on generally available CDM test systems and offer two methods for adjusting the field plate voltage to meet the waveform parameters of Tables ~~1 or 2~~.

CDM test system manufacturers, or test system operators, may develop alternate qualification procedures from the two procedures in Annex H, as long as they result in waveforms which meet the requirements of Tables ~~1 or 2~~ for the various test conditions.

It is recommended that settings determined from this qualification procedure be recorded for a particular test system, oscilloscope BW and polarity. This allows for detection of drift over time on the system, which may indicate a larger issue with the system. See Section H.3 for examples.

7.0 CDM ESD TESTING REQUIREMENTS AND PROCEDURES

7.1 Tester and Device Handling Preparation

7.1.2 ESD damage prevention procedures shall be used before, during, and after CDM and post parametric testing.

NOTE: See the latest revision of ANSI/ESD S20.20, JESD625, ~~or IEC61340-5-1~~ or company-specific handling procedures for guidance.~~for guidance.~~

7.1.3 Devices shall be clean before testing. If needed, cleaning should be completed in compliance with company-approved procedures.

NOTE: Isopropanol (isopropyl alcohol) is typically used for cleaning.

7.1.4 The CDM tester probe and field plate / dielectric shall be clean and dry before testing. Cleaning may be performed periodically or based on waveform acceptance using isopropanol (isopropyl alcohol) with a minimum isopropanol percentage of 70%.

~~NOTE: See the latest revision of ANSI/ESD S20.20, JESD625, or IEC61340-5-1 for guidance.~~

7.4 CDM Test Recording / Reporting Guidelines

7.4.1 CDM Test Recording

The CDM testing procedure for a particular product shall be recorded and stored per each company's data retention procedure. ~~Product CDM test results (including package information) shall be reported and be made available in the product reliability report.~~ Information regarding tester waveform parameters should be available upon request; refer to Annex ~~GH~~.3 for more information on waveform parameter recording.

7.4.2 CDM Reporting Guidelines

Product CDM test results (including package information) shall be reported and be made available in the product reliability report.

For purposes of ensuring safe handling information for manufacturing control in an ESD protected area, it is highly recommended that publicly available product datasheets report CDM classifications.

7.5 Testing of Devices in Small Packages

Integrated circuits and discrete semiconductors (ICDS) in very small packages are very difficult to test for CDM and seldom fail CDM testing due to their small capacitance. It is not possible to specify a ~~a~~ package dimension size below which CDM testing is not needed as different technologies, design styles, and protection strategies have different susceptibilities to charged device events. In the absence of other information, all ICDS shall be tested. However, Annex C defines an optional procedure for establishing an integrated circuit capacitance C_{Small} for a specific technology and design flow. For devices with capacitance below C_{Small} , ~~which~~ CDM testing is no longer required. ~~for a specific technology and design flow. ICDS not tested because the~~with capacitance is below C_{Small} and ~~which~~ satisfying the ~~requirement~~ requirements of Annex C shall be considered to have a CDM passing level of TC 750 (Classification Level C2b in Table 3).

ANNEX A (NORMATIVE) – VERIFICATION MODULE (METAL DISC) SPECIFICATIONS AND CLEANING GUIDELINES FOR VERIFICATION MODULES AND TESTERS

A.1 Tester Verification Modules and Field Plate Dielectric

The verification modules (metal discs) shall be made of brass, plated with nickel or gold / nickel, and may optionally have a gold flash coating over the nickel. They shall be manufactured to the dimensions specified in Table 4 and shall be verified once before the initial use by either the manufacturer or user.

NOTE: Caution ~~shall~~ should be exercised during the manufacture of the discs so that they are free from "burrs". If the perimeter of the disc has "burrs", arcing may occur which may alter the results.

ANNEX C (NORMATIVE) – TESTING OF SMALL PACKAGE INTEGRATED CIRCUITS AND DISCRETE SEMICONDUCTORS (ICDS)

This annex describes a procedure for setting a capacitance limit C_{Small} , below which small package integrated circuits and discrete semiconductors no longer need to be tested for CDM. ICDS in very small packages are very difficult to test, due to the challenge of handling small devices. Very small ICDS also have very low capacitance to surroundings, including during CDM testing. With ~~at~~ their small capacitance very little charge is transferred during a CDM event, either in a factory environment or during CDM testing. Small package ICDS therefore seldom fail during CDM testing. ~~For these reasons there is a considerable desire to set a size limit below which CDM testing is no longer needed.~~ This does not, however, mean that there is no CDM risk for small package ICDS. The charge transferred during a small package CDM event may be small but the peak currents remain high, usually over an amp since the RLC equivalent circuit of a CDM event results in a very narrow, but still high current pulse. It is very difficult to set a minimum package dimension or capacitance for CDM testing because CDM failure levels depend on a wide variety of variables, including those listed below.

- Capacitance between the ICDS and the field plate

- The technology used to fabricate the device
 - Advanced low voltage technologies have thin gate oxides with low breakdown voltage and may be more susceptible to CDM damage without a proper protection scheme
 - High voltage technologies have diffusions which can be subject to CDM damage
- ESD protection circuits used in the device
- General ESD protection strategy used
- Design style used to design the device
- Thoroughness of ESD design rule checks
- Package type which can influence inductance in the CDM current path

C.1 Procedure for Determining C_{Small}

The following procedure may be used to determine a limit, C_{small} , at and below which CDM testing is not required for a particular integrated circuit technology.

- Choose at least 5 ICDS designs from a technology, with varying package sizes
 - The requirements for circuits to be considered from the same technology are given in Section C.2
- Measure the capacitance between each ICDS substrate, usually the ground pin, and the CDM tester's field plate when the ICDS is in the position for CDM testing, using the procedure in Annex B for measuring the capacitance of the verification modules.
 - Packages shall be at least 4 times the size of the vacuum hole in the dielectric layer or the metal field plate, whichever is larger. If the package is less than 4 times the size of the vacuum hole a test fixture which holds the package against the dielectric should be used. At this time, there is no universally recognized method for testing CDM capability on packages that are less than 4 times the size of the vacuum holes. Techniques including mechanical methods for holding the package made of FR4 with the package not over vacuum holes, or packaging die in a different package, have been used.
 - A separate test fixture may be used for measuring the capacitance if it uses the same thickness and material for the field plate dielectric layer as the CDM tester
- Perform CDM testing at TC 1000 for 3 samples as per Section 7.3.3 for each of the 5 ICDS designs.
- The ICDS capacitance, at which all ICDS with that capacitance and lower all pass CDM TC 1000, is C_{Small} .

NOTE: To ensure there is no air space between the integrated circuit and the dielectric layer, and also no air space between the dielectric layer and the metallic field plate, the use of vacuum is recommended.

ICDS with substrate to CDM tester field plate capacitance equal to or less than C_{Small} do not need to be tested for CDM if the following conditions are met:

- The ICDS has passed HBM according to requirements of the technology. This indicates the expected protection circuit is present.
- The ICDS uses the same technology, as defined in C.2, as used to determine C_{Small}
- ICDS devices not tested because their capacitance is below C_{Small} and satisfy the above requirement shall be considered to have a CDM passing level of TC 750 (Classification Level C2b).

C.2 ICDS Technology Requirements

ICDS are considered to be from the same technology if the following conditions are met:

- The ICDS must use the same wafer fabrication flow
- All ICDS must use the same ESD protection circuits and ESD design rules.
- All ICDS must have their substrate to CDM tester field plate capacitance measured using the procedures in Annex B
 - A separate test fixture which simulates the CDM tester field plate and dielectric may be used

- Calculated substrate to field plate capacitance may be used if the calculation procedure has been verified with measurements using the procedures in Annex B.

J.3 ESDA/JEDEC JS-002-2017 (LB): Summary by Section

3.0 Definitions – Definition for C_{small} was added.

5.2.1 Cable Assemblies – The frequency value was changed to 5 GHz.

Sub-sections 7.1.3 and 7.1.4 were added to the document to clarify cleaning of devices and testers.

7.4 CDM Test Recording / Reporting Guidelines – This section was divided into two subsections - 7.4.1 CDM Test Recording and 7.4.2 CDM Reporting Guidelines.

7.5 Testing of Devices in Small Packages – This section was added to the document.

Annexes

C – A new normative annex was created.

Subsequent annexes were re-numbered accordingly.

4.2.2.3 Compact Fluorescent Lamps

Compact fluorescent lamps (CFLs) are used primarily for downlight, wall wash, and general illumination applications. For new commercial construction, most applications using compact fluorescent lamps have replaced them with LED lamps. For residential new construction, CFL downlights are still a low-cost option.

The compact fluorescent system consists of two components, a lamp and a ballast to drive it, similar to linear fluorescent. In some cases the lamp and ballast are integrated into one component for use in installations designed for Edison base or candelabra base incandescent lamps. Non-integrated lamps are available in 2-pin and 4-pin bases with a bent tube or spiral format. Bent tubes can range from one tube to four in most applications. Integrated lamps may have a visible spiral shape, or the tubes may be located behind a shroud to mimic an A-lamp, reflector, or candelabra lamp in appearance. Lamps with longer tubes are often called "biax" lamps and are used for general illumination in 2-ft by 2-ft recessed troffers and linear systems.

Light distribution from CFLs is generally lambertian in nature; reflector systems to provide directionality to the emitted light. However, the larger form factor of the tubes relative to the size of the reflector system makes for decreased photometric performance compared to that of point-source lighting systems such as incandescent or LED, and therefore CFLs do not work as well for controlled beam applications. Average lamp life ranges from 6,000 hours for A-lamp replacements with integrated ballasts to 24,000 hours for long-life biax lamps. Most 2- and 4-pin G24q base lamps have an average life of 10,000 hours, based on 3 hours per start. CFL life is similar to that of linear fluorescent given the same hours of operation and frequency of igniting an arc in the tube. Correlated color temperatures include 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, and 6500 K, and are fixed (cannot be color tuned). Most CFLs are only available with a CRI of 82. CFL efficacy ranges from 50 to 100 lumens/watt, with most below 75 lumens/watt. LED lamps are increasingly being utilized in place of CFLs due to lamp life, efficacy, and optical design flexibility.

Comments on NECA 121-201x, Standard for Installing Nonmetallic-Sheated Cable (Type NM-B) and Underground Feeder and Branch Circuit Cable (Type UF)

E: editorial, G: General, T: Technical Note: Please do not re-size table

ID: Company with comment # (do not automate comment #)

Page	Line	Clause	E/G	Organization	Comment (rationale)	Proposed change (specific; add, delete. From-to)	Resolution (SME ONLY)
17	20, 21	8.1.1	E	GWM	Figure 8.1.1 is also labeled "Figure 5: Cable passing through floors."	Delete "Figure 5: Cable passing through floors" from graphic.	Accepted.
18	7, 8	8.1.2	E	GWM	Figure 8.1.2 is also labeled "Figure 6: Cable through bored holes."	Delete "Figure 6: Cable through bored holes" from graphic.	Accepted.
19	15, 16	8.1.4	E	GWM	Figure 8.1.4 is also labeled "Figure 8: Bushings or grommets metal framing members."	Delete "Figure 8: Bushings or grommets metal framing members" from graphic. Additionally, revise caption to read, "Bushings or grommets in metal framing members" for readability.	Accepted.
22	2, 3	8.2.1	E	GWM	Figure 8.2.1.2 is also labeled "Figure 9: Flat cables not stapled on edge."	Delete "Figure 9: Flat cables not stapled on edge" from graphic.	Accepted.
25	28, 29	8.4.1	E	GWM	Figure 8.4.1 is also labeled "Figure 13: Type NM cable connectors."	Delete "Figure 13: Type NM cable connectors" from graphic.	Accepted.
28	5, 6	9.1	E	GWM	Figure 9.1 is also labeled "Figure 18: Conductor reidentification."	Delete "Figure 18: Conductor reidentification" from graphic.	Accepted.
28	17, 18	9.2	E	GWM	Figure 9.2 is also labeled "Figure 19: Switch leg identification."	Delete "Figure 19: Switch leg identification" from graphic.	Accepted.
31	2, 3	10.3	E	GWM	Figure 10.3.1 is also labeled "Figure 21: Using linesman's pliers to cut NM cable."	Delete "Figure 21: Using linesman's pliers to cut NM cable" from graphic. Also, relabel Figure 10.3.1 to be Figure 10.3 for consistency with other Figures.	Accepted.
32	25	10.4	E	GWM	Delete the comma between the words "Check" and "conductors" for readability.		Accepted.
41	13	310.14(B)(3)(c)	E	UL	Code reference incorrect	310.15(B)(3)(c)	Accepted.

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[Note – the changes are illustrated below using ~~strikeout~~ for proposed removal of existing text and grey highlights to indicate the proposed revised text. ONLY the highlighted text and strikeout text is within the scope of this ballot. Rationale Statements are in **RED** and only used to add clarity; these statements will NOT be in the finished publication]

NSF International Standard/ American National Standard –

Food equipment

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5 Design and construction

This section contains design and construction requirements for equipment covered within the scope of this Standard.

5.1 General sanitation

•

5.1.3 Food zones shall be readily accessible and easily cleanable or shall be designed for in-place cleaning when a readily accessible design is not feasible.

•

5.2.1.3 Lesser radii may be used only when necessary to ensure proper functioning of parts such as:

- sealing ring grooves
- precision operating parts

~~provided they are easily cleanable.~~

***Rationale:** as pointed out in a comment from approval ballot 59i7r1, the topic of ‘easily cleanable’ is already addressed in section 5.1.3. Rather than adding clarity, this awkwardly placed reiteration of the phrase adds ambiguity by explicitly setting this requirement for lesser radii and implicitly setting this requirement for sealing ring grooves and precision operating parts. If it is agreed this statement should be removed, this boilerplate language will likewise be balloted in a subsequent votes for other Standards including but not limited to Standards 4 and 59.*

DRAFT PDS-02 CHANGES TO DRAFT PDS-01 OF BSR/RESNET/ICC 301-2014 ADDENDUM F-201X

~~3.2 Definitions~~

~~**Approved Tester**— An individual who, by virtue of training and examination, has demonstrated competence in the performance of on-site testing in accordance with requirements equivalent to Sections 802 and 803 of the *Mortgage Industry National Home Energy Rating Systems Standards ANSI/RESNET/ICC 380-2016* and who has been approved by an Approved Rating Provider to conduct such tests.~~

~~Table 4.2.2(1) Notes~~

~~(e) Tested envelope leakage shall be determined and documented using the on-site inspection protocol as specified by requirements equivalent to Section 802 of the *Mortgage Industry National Home Energy Rating Systems Standards ANSI/RESNET/ICC 380-2016* by an Approved Tester.~~

~~(o) Tested duct leakage shall be determined and documented by an Approved Tester using the protocols equivalent to those specified in Section 803 of the *Mortgage Industry National Home Energy Rating Systems Standards ANSI/RESNET/ICC 380-2016*.~~

~~**5.1.4.1.3.** Confirmed Ratings shall be subjected to Quality Assurance requirements equivalent to Section 900 of the *Mortgage Industry National Home Energy Rating Systems Standard adopted by an Approved Rating Provider*.~~

~~**5.1.4.2.1.** For the set of Rated Homes, all Minimum Rated Features shall be field-verified through inspection and testing of a single home in the set, or distributed across multiple homes in the set, in accordance with requirements equivalent to Section 600 of the *Mortgage Industry National Home Energy Rating Systems Standard*.~~

~~**5.1.4.2.3.** Sampled Ratings shall be subjected to Quality Assurance requirements equivalent to Section 900 of the *Mortgage Industry National Home Energy Rating Systems Standard adopted by an Approved Rating Provider*.~~

Normative Appendix A

A-1. Insulation

In order to meet the requirements of a Grade I or Grade II insulation rating, the insulation material shall be installed in accordance with the minimum installation requirements of this Appendix and the requirements specified by ASTM standards C727, C1015, C1743, C1320, and C1321, ~~and ASTM WK41440~~ as described below in the Insulation Grading section.

Installations not complying with the minimum installation requirements of this Appendix, ~~and the relevant ASTM standard for the type insulation,~~ ~~and or not complying with~~ the Grade I or Grade II coverage requirements shall be considered Grade III installations. Grade III installations shall be recorded and shall be modeled as specified by Section 4.2.2.2 of this Standard.

A-1.1 Minimum General Installation Requirements:

1. Insulation shall be installed to manufacturers' recommendations ~~and industry standards~~.
2. Insulation shall be integral to or on the interior to or exterior side ~~to or exterior side~~ and in substantial and permanent contact with the primary air barrier.
3. No air spaces shall be allowed between different insulation types or systems.

Exception: When claiming the R-value of an enclosed reflective air space in accordance with ~~the ASHRAE Handbook of Fundamentals~~ 90.1-2016 Section A9-4 (or addendum ac to the 2013 edition) or ASTM C 1224.

(4. and 5. of draft PDS-01 remains unchanged)

A-1.2 Minimum Specific Application Requirements:

1. Insulation installed in framed floor assemblies shall be in substantial and permanent contact with the subfloor.

Exception: The floor framing-cavity insulation shall be permitted to be in contact with the topside of sheathing or continuous insulation installed on the bottom side of floor framing where combined with insulation that meets or exceeds the minimum wood frame wall R-value in Table 402.1.2 of the 2015 International Energy Conservation Code (IECC) and that extends from the bottom to the top of all perimeter floor framing members.

The cavity insulation between floor joists, beams or other horizontal floor supports that create cavities under the subfloor shall be permitted to be in direct contact with any additional continuous insulation attached to the underside of the horizontal supports. The combination of both cavity and continuous insulation shall meet or exceed the minimum required floor R value in table 402.1.2 of the 2015 International Energy Conservation Code, (IECC). Instances of reflective insulation system installed beneath hydronic floors are not required to meet this standard.

2. For rim or band joist applications, insulation shall be in substantial and permanent contact with rim or band joist framing and tightly fitted to intersecting solid floor joists or extend continuously through open web floor trusses; interior sheathing or air barrier is not required provided there is an air barrier on the exterior side or the insulation material is installed as an air barrier material.
3. Air permeable insulation installed in ventilated attics and vented sloped roofs shall have an effective air barrier (wind block, air chute, or eave baffle) securely fastened and installed at the eave or soffit edge vent of every cavity. The effective air barrier shall extend up and beyond the surface of the insulation or to the ridge vent ~~that extends up and beyond the surface of the insulation or to the ridge vent to prevent air movement through the insulation.~~

A-1.3 Minimum Specific Material Requirements:

A-1.3.1 Insulated Sheathing:

1. If used as an air barrier, Edges and joints shall be durably taped or otherwise air sealed in accordance with the manufacturer's recommendations.
2. Edges not supported directly on sheathing or framing shall be tightly fitted to one another without substantial gaps.
3. Sheathing shall be carefully fitted and durably taped or otherwise air sealed around obstructions in accordance with the manufacturer's recommendations.
4. When two or more layers of insulation are installed the joints shall be staggered. Only the joints of one of the exterior layers shall be required to be durably taped or otherwise air sealed where that layer is designated to be an air-barrier.
5. Where used as an approved water-resistive barrier (WRB), Ssheathing joints, fenestration, and service penetrations shall be durably taped or otherwise air sealed in accordance with the manufacturer's installation instructions and have the proper approvals if used as a Weather Resistive Barrier (WRB).

A-1.3.2 Fibrous Batt Insulation:

(1. and 2. of draft PDS-01 remain unchanged)

3. Faced batts shall be stapled to the face of the studs or side stapled to the studs with no buckling of the stapling tabs or the tabs shall be permitted to be left unstapled. Inset or side stapling of batt insulation shall not be permitted for Grade I installations. Faced batt products without tabs and friction fit products shall not be required to be stapled when installed in vertical walls

(4. and 5. of draft PDS-01 remains unchanged)

A-1.3.3 Blown or Sprayed Fibrous Loose Fill Insulation:

1. Insulation containment fabric or system that is side stapled shall not be stapled more than ½ inch back from the face of the stud.

(2. and 3. Remain unchanged)

4. Blown insulation shall meet the manufacturer's stated recommendations for density and coverage in order to meet the required R value and to minimize or prevent settling. Insulation shall be installed at a density sufficient to prevent settling over time.

5. Insulation shall be enclosed on all six sides.

Exceptions:

a. Air permeable insulation installed on the top side of the ceiling in unconditioned attics shall not require an air barrier on the exterior. Insulation installed in attics and ceilings shall not require an air barrier on the exterior or interior side.

(5.b. and 5.c. of draft PDS-01 remain unchanged)

(6. of draft PDS-01 remains unchanged)

A-1.3.6 Closed-cell spray polyurethane foam (SPF) insulation:

(1. and 2. of draft PDS-01 remains unchanged)

3. Closed-cell Insulation, installed at thicknesses of 1.5 inches thick or more shall be permitted to be an air-impermeable insulation when in-contact with the substrate.

Exception: Thicknesses less than 1.5 inches considered air-impermeable with appropriate ASTM E2178 data (air permeance less than 0.04 cfm/ft²) from manufacturer data sheet or code evaluation report by an authority having jurisdiction or approved source~~ICC-ES Report.~~

A-2.0 Insulation Grading**A-2.1 Grading Criteria for Batt, Loose-fill, Open and Closed Cell Polyurethane Spray Foam Insulation and Insulated Sheathing****A-2.1.1 Grade I (Minor Defects)**

Shall meet ASTM-specified installation requirements in the applicable standards C1015, and C1320, and ASTM WK41440 and shall also meet the following cavity fill requirements:

A-2.1.1.1 Batt or Loose-fill Insulation

When installing batt, or loose-fill insulation, no more than 2% of the total insulated area (cavity) shall be compressed below the thickness required to attain the labeled R-value or contain gaps or voids in the insulation. These areas shall not be missing or compressed more than ½-¾ inch of the specified insulation thickness in any given location. Voids extending from the interior to exterior of the intended insulation areas shall not be permitted.

(A-2.1.1.2 and A-2.1.1.3 of draft PDS-01 remains unchanged)

A-2.1.1.4 Insulated Sheathing

Insulated sheathing insulation installations meeting the minimum installation, application, and material requirements above. Voids exceeding 1/8" through interior to exterior of the intended insulation areas shall not be permitted. Joints and other gaps or separations in sheathing used as an air barrier, vapor retarder or drainage plane shall be taped or sealed.

A-2.1.2 Grade II (Moderate Defects)

Shall meet ASTM-specified installation requirements in ASTM standards C1015, and C1320, ~~and ASTM WK41440~~ and shall also meet the following cavity fill requirements:

A-2.1.2.1 Batt or Loose-fill Insulation

When installing batt, or loose-fill insulation, no more than 15% of the total insulated area (cavity) shall be compressed or contain gaps or voids in the insulation. These areas shall not be missing or compressed more than 3/4 inch of the specified insulation thickness in any given location. Inset staples are allowed for batt insulation. Voids through interior to exterior of the intended insulation areas shall not be permitted.

A-2.1.2.2 Open-Cell Polyurethane Spray Foam Insulation (cavity not filled and not trimmed)

When installing open-cell polyurethane spray foam the average of all thickness measurements shall be greater than the specified thickness required to obtain the specified R-value. No more than 15% of the insulated area shall contain voids ~~or be more than 1 inch below the specified thickness~~. The minimum thickness shall not be less than ~~1.53/4~~ inches below the specified thickness at any point. Voids extending from the interior to the exterior of the intended insulation areas shall not be permitted.

A-2.1.2.3 Closed-Cell Polyurethane Spray Foam

When installing closed-cell polyurethane spray foam the average of all thickness measurements shall be greater than the specified thickness required to obtain the specified R-value. No more than 15% of the insulated area shall contain voids ~~or be greater than 1/2 inch below the specified thickness~~. The minimum ~~installed~~ thickness shall not be less than ~~1.3/4~~ inch below the specified thickness at any point. Voids extending from the interior to exterior of the intended insulation areas shall not be permitted.

A-2.1.3 Grade III (Substantial Defects)

Installations not complying with the minimum installation requirements in ASTM standards C1015, and C1320, ~~and ASTM WK41440~~ and Grade I or Grade II cavity fill requirements shall be considered a Grade III installation.

Grade III installations shall be recorded and shall be modeled as specified by Section 4.2.2.2.2 of this Standard.

(A-2.2 of draft PDS-01 remains unchanged)

A-2.3 Reflective/Radiant Grading Criteria

Regarding thermal performance claims or R-values:

1. R-value claims for the air space adjacent to a reflective insulation product shall be based on average cavity depth (where not less than 1/2"), heat flow direction which represents the application (wall, ceiling or floor), temperature of the airspace surfaces relative to the specific wall assembly, location of the airspace in the assembly, and design climate conditions.
2. When utilizing R-values claims for the air space adjacent to a reflective insulation product ~~from the ASHRAE Handbook of Fundamentals~~, the enclosed airspaces shall be sealed cavities which do not to allow air flow in or out of the cavity.
3. Where utilizing R-values based on testing in accordance with ASTM C1224, the air-space shall be enclosed on all 6 sides by building components installed in the field in a manner consistent with the materials and methods used in the tested assembly, including sealing of joints between the enclosing building components if used. All other R-value claims by the manufacturer for the assembly including the airspace shall be based on ASTM C1224, the Standard Specification of Reflective Insulation. The assembly that is tested for thermal resistance shall be representative of the field assembly.
4. Reflective airspaces behind cladding or otherwise located to the exterior side of the air barrier layer for the assembly shall not claim R-values based on having an airspace.

A-2.3.1 Reflective Insulation in Ceilings, Walls and Floors

Reflective insulation products include types with multiple layers, reflective bubble, and reflective foam – refer to the manufacturer’s instructions for the product’s installation details.

1. The products shall be permitted to be either face or side (inset) stapled and shall be permanently attached to the framing member;
2. When side or inset stapled, reflective insulation shall be installed at the depth in the cavity to attain the required airspace(s). Refer to manufacturer’s installation details for the specific application, including required airspace dimensions. Where the cavity is partitioned to provide two or more airspaces that are each claimed for R-value contribution, the attachment of the reflective material separating the spaces shall be sealed to the framing to prevent air-exchange between the two or more airspaces;

(3., 4., 5. 6. And 7. of draft PDS-01 remains unchanged)

8. Reflective airspaces behind cladding or otherwise located to the exterior side of the air barrier layer for the assembly shall not claim R-values based on having an air-space.

A-2.3.1.1 Grade I (Minor Defects)

Shall meet the minimum installation requirements in ASTM standard C727 and shall also the following area coverage requirements:

2% or less of the area is not insulated such that the building envelope exterior sheathing (wall) is visible from the building’s interior and that air leakage is not evident between the sheathing and radiant barrier.

A-2.3.1.2 Grade II (Moderate to Frequent Defects)

Shall meet the minimum installation requirements in ASTM standard C727 and shall also the following area coverage requirements:

Greater than 2% and less than 10% of the area which is available for insulation is not insulated such that the building envelope exterior sheathing (wall) is visible from the building’s interior and that air leakage is not evident between the sheathing and radiant barrier.

(A-2.3.1.3 of draft PDS-01 remains unchanged)

(A-2.3.2 of draft PDS-01 remains unchanged)

A-2.3.3 Interior Attic Radiation Control Coatings (IRCCs)

IRCC materials are a liquid applied with an emittance of 0.25 or less.

(A-2.3.3.1, A-2.3.3.2 and A-2.3.3.3 of draft PDS-01 remains unchanged)

A-3.0 Normative References:

ASTM WK41440: New Guide for Installation of Spray Polyurethane Foam Insulation in the Building Envelope

(All other Normative References remain unchanged.)

A300 (Part 2) Soil Management a. Assessment, b. Modification, c. Fertilization, and d. Drainage

BSR A300 (Part 2) – 201x Revision Draft 4 Version 1

For Tree Care Operations –

Tree, Shrub, and Other Woody Plant Management

Standard

Practices

Soil Management a. Assessment, b. Modification, c. Fertilization, and d. Drainage

- 1 ANSI A300 Standards – Scope, purpose, and application
- 11 Part 2 – Soil Management *a. Assessment, b. Modification, c. Fertilization, and d. Drainage* standards
- 12 Normative references
- 13 Soil management objectives
- 14 Soil management specifications
- 15 Soil management practices
- 16 Soil management assessment
- 17 Soil modification
- 18 Soil fertilization
- 19 Soil drainage
- 20 Definitions

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A300Part2-Soil-Drft4-V1-30dayPR 4.16.18

Foreword This foreword will not be considered part of the revised will not be part of the revised A300 (Part 3)-20xx standard.

ANSI A300 standards are intended to guide work practices for the care of trees, palms, shrubs, and other woody landscape plants. They apply to arborists, horticulturists, landscape architects, and other professionals who provide for or supervise the management of these plants for property owners, property managers, businesses, government agencies, utilities, and others who use these services. The standard does not apply to agriculture, horticultural production, or silviculture, except where explicitly noted otherwise.

These standards should be used to develop specifications for work assignments; however, they are not intended to be used as work specifications in and of themselves. Effective specifications must include measurable criteria, and must account for the variable characteristics of landscape plants and the individual management objectives of their owners.

The Tree Care Industry Association (TCIA) oversees the Accredited Standards Committee (ASC) on Tree, Shrub, and Other Woody Plant Management Operations – Standard Practices, A300 (ASC A300), which writes the ANSI A300 Standards. TCIA is an ANSI-accredited Standards Developing Organization (SDO), and is secretariat of the ANSI A300 standards. ANSI requires that approved standards be developed according to accepted principles, and that they be reviewed and, if necessary, revised every five years.

Prior to 1991, various industry associations and practitioners developed their own standards and recommendations for tree care practices. Recognizing the need for a standardized, scientific approach, green industry associations, government agencies and tree care companies agreed to develop consensus for an official American National Standard.

Since 1991, ASC A300 has met regularly to write new, and review and revise existing ANSI A300 standards. The committee includes industry representatives with broad knowledge and technical expertise from residential and commercial tree care, utility, municipal and federal sectors, landscape and nursery industries, and other interested organizations.

ANSI A300 Standards are divided into multiple parts, each focusing on a specific aspect of woody plant management (e.g. Pruning, Soil Management, Supplemental Support Systems, etc.). The ANSI A300 standards unify and take authoritative precedence over all previously existing tree care industry standards.

This draft is a public review document. The public review period starts on April 27, 2018, and ends on May 27, 2018. This document is not approved as a draft for trial use.

How to file a public review comment: Official public comments must be entered on the TCIA website portal at www.tcia.org/A300comments before the deadline of 11:59 PM Eastern Standard Time (EST) May 27, 2018 in order to be considered, no exceptions will be made for late comments. You will be asked to register to gain access. Responses to official comments will be provided. Comments may be forwarded to ASC A300 members and/or the TCIA secretary, however comments that are forwarded to ASC A300 members or the TCIA Secretary and are not entered online will not be recorded as official comments and a response will not be provided. If you require an official response, you must post your comments on the TCIA website portal.

Information requests regarding this document must be forwarded to: rrouse@tcia.org, A300 Secretary, c/o Tree Care Industry Association, Inc., 136 Harvey Road - Suite 101, Londonderry, NH, 03053.

Tim Bushnell, Chair (Sherrill Tree)
 Richard Rathjens, Vice-Chair (Davey Tree Experts)
 Bob Rouse, Secretary (Tree Care Industry Association, Inc.)
 Amy Tetreault, Assistant Secretary (Tree Care Industry Association, Inc.)

Organizations Represented

AmericanHort (formerly ANLA)
 American Society of Consulting Arborists

 American Society of Landscape Architects
 Asplundh Tree Expert Company
 Bartlett Tree Expert Company

Name of Representative

Craig Regelbrugge
 Rick Gessner
 Beth Palys
 Susan Cahill
 Geoff Kempter
 Wayne Dubin
 Dr. Thomas Smiley (Alt.)

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Davey Tree Expert Company

Chris Klimas

International Society of Arboriculture

Dr. Richard Rathjens (Alt.)

Professional Grounds Management Society

Dr. Richard Hauer

National Association of Landscape Professionals
(formerly PLANET)

Alex Julius (Alt.)

Society of Commercial Arborists

Gene Pouly

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Mark Hoenigman (Alt.)

Tree Care Industry Association

Rex Bishop

Tree Care Industry Association
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ASC A300 Part 2 Subgroup Chair:

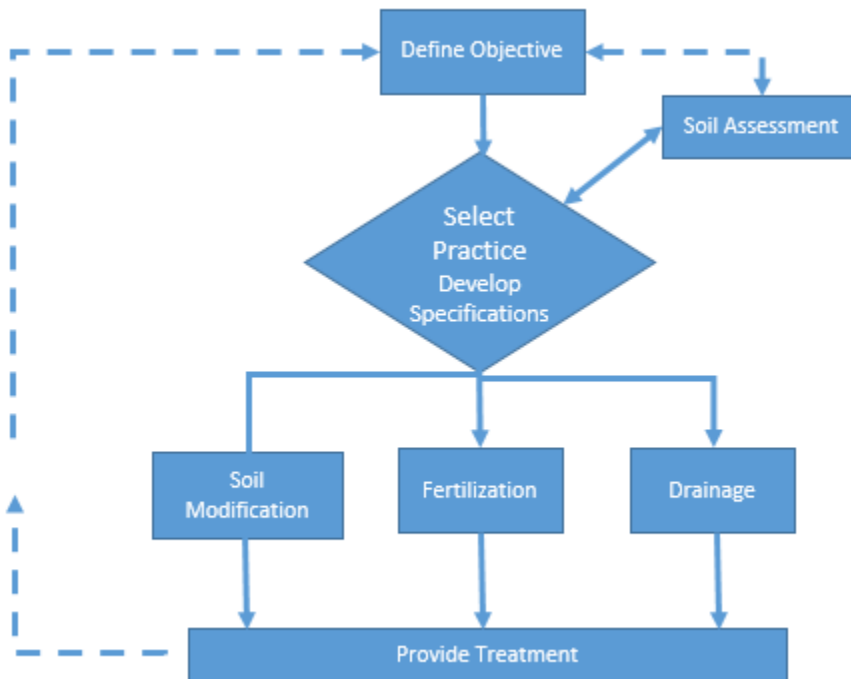
Dr. Richard Rathjens

Mission: To develop consensus performance standards for the professional management of trees, shrubs and other woody plants.

Vision: ANSI A300 standards will be the foundation for work specifications, training materials, quality protocols, and regulations for the management of trees, shrubs, palms, and other woody landscape plants.

The 30-day public review is limited to the proposed changes to the following subclauses:

Figure 1: The following flowchart is the recommended procedure for soil management operations:



14. Soil management specifications

14.1 Prior to making recommendations or developing specifications, the plant, site and/or soil ~~should~~ shall be assessed.

14.2 Specifications for soil assessment and/or management should include:

16 Soil management assessment

~~16.1 Soil should be assessed prior to conducting soil management practices.~~

17.3 Soil tilling (cultivation)

17.3.3 Pneumatic soil ~~loosening~~ tilling should be considered the preferred method to mitigate compacted soil within the root zones of plants.

20. Definitions This clause will be considered part of the ANSI A300 (Part 2)-2017 standard.

20.2 **anaerobic:** ~~Living or functioning in~~ Pertaining to the absence of oxygen.

20.4 **berm:** (1) a large raised soil area (measured in feet) on which plants are installed; (2) a temporary, small ring of soil (measured in inches) around a newly installed plant used to retain water, also referred to as a tree ring.

20.42 **soil injection:** Using pneumatic or hydraulic means to apply an amendment or fertilizer into the soil.

BSR/UL 923, Standard for Microwave Cooking Appliances

1. Safety of Smart Enabled Microwave Cooking Appliances

SUPPLEMENT SC - SAFETY OF SMART ENABLED MICROWAVE COOKING APPLIANCES

SC1 Scope

SC1.1 These requirements apply to microwave ovens intended to receive and respond to communication signals or data relating to power billing rate, demand response, or communication signals from a remote user interface, such as a smart phone or computer. The microwave ovens response may include remote start or stop, or programmed sequences of operation.

SC1.2 Appliances covered by SC1.1 are commonly identified as "smart" appliances or "smart enabled" and are intended to interact with the "Smart Grid," as described by the US Energy Independence and Security Act of 2007, or other communication networks not identified as "Smart Grid."

SC1.3 These requirements do not address the integrity of any output signal or data to the network devices or interoperability with other devices.

SC1.4 These requirements supplement those specified in the body of this standard.

SC1.5 These requirements contemplate "smart grid" technology as described by the US Energy Independence and Security Act of 2007 that is integral with the appliance or incorporated as an accessory (wired to the appliance or wireless with a corresponding appliance receiver) on the appliance or in the same occupancy as the appliance.

SC1.6 These requirements encompass accessory devices to which multiple appliances may communicate and be smart enabled by providing direction for investigation of such devices in addition to the requirements of standards generally applicable to those devices.

SC1.7 These requirements do not apply to communication network devices that control appliances via simple power on-off, building wiring devices, panelboard mounted devices or utility meters.

SC2 General

SC2.1 Controls

SC2.1.1 Controls that respond to external communication signals or data shall comply with the construction and performance requirements of the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, [UL 60730-1](#), and tested as an operating control utilizing the parameters specified in Table SC2.1. If the control also incorporates protective functions, these control functions shall be evaluated to the requirements for protective controls.

Table SC2.1

Operating control parameters

Information	Operating control requirements
Operating ambient	As specified by the device manufacturer and verified during the Normal Temperature test, Section 41, of the appliance
Endurance testing for power switching devices	A) 100,000 cycles for automatic, self-resetting operating controls B) 6,000 cycles for manual, non-self-resetting operating controls
Overvoltage category	Overvoltage category II
Pollution degree	2 for controlled environment per 2.12

SC2.1.2 With respect to SC2.1.1, the requirement is not applicable to controls located in low voltage circuits where the maximum power available does not exceed 15 W. This does not exempt the control from investigation for compliance with Functional Safety, Section SC3.

SC2.1.3 With respect to SC2.1.1, compliance with the Standard for Solid-State Controls for Appliances, [UL 244A](#), taking into account criteria comparable to that specified in Table SC2.1 is considered to fulfill this requirement.

SC2.1.4 With respect to SC2.1.1, a communication device that is not integral with the appliance control (e.g. on a separate printed wiring board), and does not incorporate Class B safety functionalities, may alternatively comply with the Standard for Information Technology Equipment Safety - Part 1: General Requirements, [UL 60950-1](#).

SC2.1.5 For the purposes of application of the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, [UL 60730-1](#), Electromagnetic Compatibility (EMC) - Emission is not applicable to controls, which are integral with the appliance or incorporated as an accessory (wired or wireless) on the appliance or in the same occupancy as the appliance.

SC2.1.6 With respect to the Endurance Testing indicated in Table SC2.1, the control shall remain operational and comply with the Electric Strength of the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, [UL 60730-1](#).

SC2.1.7 When the control enclosure forms part of the overall appliance enclosure, the enclosure material shall have a flammability rating in accordance with Polymeric Material, Section 12.

SC2.2 Separation of circuits

SC2.2.1 The separation of communication circuits from power and control circuits shall be evaluated for risk of electric shock in accordance with 32.3.

SC2.2.2 With respect to SC2.2.1, compliance with the separation of circuits requirements of the following standards are considered to fulfill this requirement:

- a) the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, [UL 60730-1](#) or
- b) the Standard for Information Technology Equipment Safety - Part 1: General Requirements, [UL 60950-1](#).

SC2.3 Communication and display devices

SC2.3.1 A communication or display device, such as a router or monitor, provided as an accessory for use with the appliance, shall comply with the Standard for Information Technology Equipment Safety - Part 1: General Requirements, [UL 60950-1](#).

SC2.3.2 The power supply cord of an external communication or display device shall comply with this standard or with the Standard for Information Technology Equipment Safety - Part 1: General Requirements, [UL 60950-1](#), except Types NISP-2, NISPE-2, NISPT-2 are not allowed.

SC2.3.3 With respect to SC2.3.2, the requirement is not applicable to external communication or display devices powered via connection to communication or data ports on the appliance which are located in low voltage, Class 2, SELV or PELV circuits.

SC2.3.4 If the external communication or display device is grounded via bonding with the appliance enclosure, the bonding requirements of the appliance standard shall be applied.

SC2.3.5 Grounding connections for external communication or display devices shall be made before power connections and shall break only after power connections are broken ("make first, break last").

SC2.3.6 Functional grounding shall not be relied upon for equipment grounding or bonding. Functional grounding is grounding of a point in an appliance, which is necessary for a purpose other than safety, such as surge suppression or electromagnetic-compatibility filters.

SC2.3.7 When power, other than Class 2, SELV or PELV energy, is supplied to an external communication or display device by an interconnecting supply cord, it shall comply with 12.1.1 of this standard and be supplied with a bushing(s) and strain relief as described in Supply Connections - Cord-Connected Appliances, Section 13.2.

SC2.3.8 Provisions for field wiring of interconnecting power conductors to an external communication or display device shall comply with Electrical Supply Connectors - Supply Connections - Permanently-Connected Appliances, Section 13.1.

SC2.3.9 Class 2 power wiring may be in accordance with the wiring method requirements of Article 725 of the National Electrical Code, NFPA 70.

SC2.3.10 A connector employed for field wiring shall have appropriate voltage, temperature, and material ratings suitable for the intended use and comply with the Standard for Insulated Multi-Pole Splicing Wire Connectors, [UL 2459](#).

SC2.4 Communication conductors and cables

SC2.4.1 External communication conductors and cables shall comply with the Standard for Information Technology Equipment Safety - Part 1: General Requirements, [UL 60950-1](#).

SC2.4.2 Communication conductors and cables within the appliance shall be evaluated as internal wiring in accordance with this appliance standard.

SC2.5 Communication connectors

SC2.5.1 Communication connectors and data ports accessible to the user and service personnel shall comply with the Standard for Information Technology Equipment Safety - Part 1: General Requirements, [UL 60950-1](#). Otherwise, communication connectors and data ports shall be evaluated in accordance with this appliance standard.

SC2.5.2 With the exception of communication-on-power-line technology, an appliance plug, flatiron plug, jumbo appliance plug, motor attachment plug or other conventional power cord connectors, such as NEMA or IEC standardized configurations, shall not be used for communication circuit connections.

SC2.6 Smart enabled or remote operation

SC2.6.1 Any functionality enabled in response to external communication or data signals shall be considered when determining the normal and abnormal conditions of the appliance.

SC2.6.2 The appliance shall include a means for the consumer to override any power reduction commands or remote operation commands. This means shall be local, i.e. provided on the appliance itself.

SC2.6.3 A control on the appliance shall be manually adjusted to the setting for smart enabled operation or remote operation before the appliance can be operated in this mode. This adjustment means shall be local, i.e. provided on the appliance itself.

SC3 Functional Safety

SC3.1 Controls actuated in response to external communication or data signals shall not introduce a hazardous operating condition or a state that may lead to a hazardous operating condition.

SC3.2 With respect to SC3.1, the control shall not:

- a) Render inoperative any Type 2, Class B or C functionality of any control within the appliance;

b) Alter the response or expected performance of any Type 2, Class B or C functionality of any control within the appliance.

c) Alter the response or expected performance of user actuation of controls, movement of doors, covers, lids, locking and/or interlocking mechanisms that function to limit user exposure to hazardous electrical parts, hazardous moving parts, hazardous hot parts, heated cavities or radiation;

Exception: If the altered response or performance does not introduce a hazardous condition (e.g. a rotating part stops more quickly), this requirement is not applicable.

d) Enable remote operation to allow starting or restarting of the cooking mode (microwave, convection, bake, etc) or self-cleaning function of the appliance, see SC3.6 for Exception;

e) Alter the order of appliance control response in a manner that forces a protective control to operate where normally an operating control would respond; or

f) Supersede the response of any protective control such as temperature limiting or door interlocking functions etc. Examples of protective control functions include temperature limiting and interlocking functions.

SC3.3 Compliance with SC3.1 shall be determined using methods appropriate for determining the performance and reliability of protective control functions in accordance with the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, [UL 60730-1](#).

SC3.4 With respect to SC3.3, compliance with the Standard for Tests for Safety-Related Controls Employing Solid- State Devices, [UL 991](#) and, if software is relied upon for protective functions, the Standard for Software in Programmable Components, [UL 1998](#), is considered to fulfill this requirement.

SC3.5 With respect to SC3.3, the performance and reliability evaluation is not required if it is obvious from examination of circuit diagram(s) that the control operates wholly independent of the appliance protective control(s) and therefore is incapable of adversely affecting their operation.

SC3.6 With respect to SC3.2(d), remote operation is permitted for operations, usually “unattended”, such as microwave operation, convection, baking, steaming, etc, under the following conditions:

a) The user manually sets the control at the appliance to enable remote operation. Examples for initiating this setting include, but are not limited to, pressing a button, pressing and holding a button, or activating a switch or latch, set-up and connection to a local WiFi network, etc. Once remote operation is enabled, the user may repeatedly use remote functions regardless of door openings or local use of the appliance.

b) Self- clean can be activated remotely if both the self-clean mode is programmed (pressing the Self-clean button) and the “remote mode” are set at the physical appliance. The door shall immediately lock when the self-clean mode is selected before the user can activate this function remotely.

c) Remote cancellation of any unattended cooking mode or changes to an on-going cooking mode by the user is allowed.

d) Remote uploading of proprietary cooking algorithms by the user is allowed. However, reprogramming of any protective function is prohibited.

SC4 Resistance to Electro Magnetic Phenomena (Immunity)

SC4.1 The appliance protective control functions shall remain operable when subjected to conducted or radiated emissions from integral communication circuitry of the smart enabled control or any accessory thereof.

SC4.2 Compliance with SC4.1 is determined using the communication circuit source(s) adjusted to its maximum factory setting(s) in addition to any intermediate settings that are determined to present a risk to the acceptable operation of the protective control function. The protective control function shall be tested in

accordance with the Electromagnetic Compatibility (EMC) Requirements - Immunity, Clauses H.26.4 through H.26.14 of the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, UL 60730-1, as appropriate.

SC4.3 With respect to SC4.2, if it is determined that the source within the appliance or its accessory(ies) produces emissions addressed by the standard test conditions for the Electromagnetic Compatibility (EMC) Requirements - Immunity of the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, UL 60730-1, it is not necessary to repeat the tests.

SC5 Marking and Instructions

SC5.1 Accessory devices shall be marked with the manufacturer's name (or symbol), a part or catalog number, and electrical ratings. Literature packaged with the accessory shall identify the appliance(s) for which it is intended to be used. Additional literature or markings may be required, as appropriate, when the requirements of the Standard for Automatic Controls for Household and Similar Use, Part 1: General Requirements, UL 60730-1 or the Standard for Information Technology Equipment Safety - Part 1: General Requirements, UL 60950-1 are applied.

SC5.2 With respect to SC5.1, accessories not affecting compliance of the appliance with Functional Safety, Section SC3 need not identify the intended appliances.

SC5.3 With respect to SC5.1, battery operated devices may be marked with information identifying the appropriate battery(ies) in lieu of electrical ratings.

SC5.4 All electrical and communication cable connections shall be identified for their purpose.

SC5.5 Literature packaged with the appliance shall identify the intended accessory device(s). A specific part or catalog number is not required if the manufacturer identifies a "family" of devices and limits the identification of devices within that family to those which are investigated in combination with the appliance.

SC5.6 With respect to SC5.5, accessories not affecting compliance of the appliance with Functional Safety, Section SC3 need not be identified.

SC5.7 The manual means of actuating smart-enabled operation of the appliance shall be clearly indicated via marking adjacent to the user actuator. See SC2.6.3.

SC5.8 User instructions provided with the appliance shall identify accessories, their method of connection, operation and any precautions to be taken in their use. The means to enable smart-enabled operation shall be identified, including an illustration depicting the location of the actuating means with information on how to enable or disable the function.

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

1. Alarm Verification Labeling

~~79-880.1(b)~~ 80.1(b) (13) The following information shall be included:

"WARNING"

"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."

Information 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.

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

^a 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, ~~the maximum (alarm) loads indicated in 51.2.5 - 51.2.6 are~~ is to be applied for 4 minutes. The battery terminal voltage of the discharge battery and the voltage of all output circuits ~~is~~ are 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. 2: The secondary power source of a household carbon monoxide system 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.~~

51.2.5 The maximum alarm load is to be applied for 4 minutes for fire alarm conditions.

51.2.6 Where a combination system includes carbon monoxide signaling, the following

load(s) are to be applied, as applicable to achieve minimum 12 hours of carbon monoxide audible alarm:

a) The product is to be placed in a carbon monoxide alarm condition and the maximum carbon monoxide alarm load is to be applied for 12 hours when the secondary power source (battery) of the product supplies power for the carbon monoxide audible alarm signal specified in 41.3.2.1;

b) The product is to be placed in a carbon monoxide alarm condition and the maximum carbon monoxide alarm load is to be applied for 4 minutes when all of the following conditions are met:

1) the secondary power source (battery) of the product does not supply power for the carbon monoxide audible alarm signal(s) specified in 41.3.2;

2) the interconnected product(s) employing the audible device(s) signaling the carbon monoxide audible alarm signal specified in 41.3.2.1 individually meet the 24 hour normal standby period followed by the 12 hour alarm period requirements; and

3) the carbon monoxide audible alarm signal specified in 41.3.2.1 is maintained for the 12 hour period independent of the control panel (product) maintaining secondary power after the standby period specified in 51.2.3.

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BSR/UL 1283, Standard for Safety for Electromagnetic Interference Filters**1. Additional requirements for overload testing when integral over temperature protection is provided.****PROPOSAL****29 Overload**

29.2.1 For a filter with integral over temperature protection, the following tests shall be performed:

- a) One sample with the integral over temperature protection ~~shall be~~ left in the circuit, and the product cooled to the lowest rated ambient temperature rating, shall be subjected to an ~~the~~ overload current ~~is to be of~~ 135% of the current rating of the maximum size branch circuit to which the filter can be properly connected. The overload test current is to be applied for 1 h for test currents up to 81 A and 2 h for test currents greater than 81 A, or until the over temperature protection opens the circuit. ~~The test shall be conducted on three samples.~~ A thermocouple shall be placed on the over temperature protection and the maximum temperature measured. The condition of the over temperature protection after the test shall be observed and shall not show any evidence of damaged. The maximum temperatures measured shall be less than or equal to the Functioning Temperature of the over temperature protection device with a tolerance of +5°C (+9°F);
- b) One sample with the integral over temperature protection shunted out or removed from the circuit, the overload current is to be 150% of the current rating of the over temperature protection. The overload test current is to be applied for 1 h for test currents up to 81 A and 2 h for test currents greater than 81 A. The product shall not show evidence of ignition, sealant leakage, cracking, breakage, or similar physical damage.

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BSR/UL 1998, Standard for Safety for Software in Programmable Components

1. Clarification of Scope

1.1 These requirements apply to ~~non-networked~~ embedded microprocessor software residing in programmable components whose failure is capable of resulting in a risk of fire, electric shock, or injury to persons.

1.7 These requirements are not intended to address cybersecurity. Risks associated with unauthorized access or attack through a network shall be addressed in the product standard or other referenced standard such as the Standard for Software Cybersecurity for Network-Connectable Products, Part 1: General Requirements, UL 2900-1.

~~2.27 NON-NETWORKED EMBEDDED SOFTWARE~~ - Embedded software that ~~executes on a single microprocessor/microcontroller or on redundant microprocessors/microcontrollers residing in the same physical enclosure.~~

2. Clarification of Process Definition and Risk Analysis

4.3 The software process shall ~~begin with~~ include a risk analysis in accordance with the requirements of Section 3, Risk Analysis. The risk analysis shall be traceable to the Programmable Component and Software Requirements Specification (see Section 12.6).

3. Clarification of Variable Initialization

6.7 All variables shall be set to initial values before being used by any instruction. If a design, implementation, or verification tool is responsible for ensuring that variables are set to initial values, the tool's qualification shall include verification of this (see Section 5).

4. Clarification Regarding Use of Volatile Memory for Program Execution and Data Storage During Operation

7.10 Supervisory and critical sections of software shall be resident in non-volatile memory. If supervisory and critical sections of software are transferred to volatile memory during operation, risks associated with the transfer and execution of software from volatile memory shall be considered in Section 3, Risk Analysis.

7.12 Fixed or one-time changing data used for critical and supervisory sections of software shall reside in non-volatile memory. If fixed or one-time changing data used for critical and supervisory sections of software are transferred to volatile memory during operation, risks associated with the transfer and access of this data from volatile memory shall be considered in Section 3, Risk Analysis.

5. Addition of Consideration of Programmable Component Errata as a Potential Cause of Microelectronic Hardware Failures

8.3 Analysis of possible combinations of microelectronic hardware failures, software faults, and other events that are capable of resulting in a risk shall be conducted. This includes, for example, microelectronic hardware failures that cause software faults that are capable of resulting in a risk.

8.4 When available from the programmable component vendor or other sources (e.g. the user community), the manufacturer shall provide erratum for the precise revision/version of the programmable component that the manufacturer intends to use. For each identified error in the erratum, the following evidence shall be provided:

a) The error has been fixed, tested, and approved for distribution by the programmable component vendor in a new release that has been incorporated into the manufacturer's version of the programmable component, or

b) Feature(s) affected by the error have not been used by the manufacturer in the development of safety-related software and do not lead to a risk.

15.4 Documentation shall include sufficient information to identify each item that is investigated with the software. For example, identification of software elements shall include the version number, release number, and date. Microelectronic hardware elements shall include the component vendor, part number and revision level of the programmable component die, if available.

6. Clarification of Requirements for User Cancellation

10.8 If required to do so by the product safety requirements, The software shall provide for user cancellation of the current operation and return the programmable component to an RA state.

7. Clarification of Requirements for Unique Identifier

2.61 UNIQUE IDENTIFIER - ~~An encoded A~~ value that distinctively characterizes each individual version or revision of a manufacturer's critical and supervisory sections of software.

15.1 Software shall be traceable to contain a unique identifier ~~stored in non-volatile memory~~.

15.2 The unique identifier shall reflect changes that have been made to be computed as a function of the critical and supervisory sections of the software.

15.3 Each time a change or patch is incorporated in the critical or supervisory sections of software, a new unique identifier shall be assigned.

8. Clarification of Applicability of Appendix A

A1 Scope

A1.1 Appendix A is to be considered normative when so stated by a product standard, directive, or regulation. Appendix A is otherwise to be considered informative.

A1.2 Table A2.1 of this appendix provides examples of acceptable measures for microelectronic hardware failure modes consistent with the requirements in Automatic Electrical Controls for Household and Similar Use, Part 1, IEC 60730-1/IEC 730-1:1993.

A2 Examples of Acceptable Measures for Microelectronic Hardware Failure Modes

A2.2 Other measures not specified in Table A2.1 are permitted if they can be shown to detect faults/error conditions specified in Table A2.1.

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BSR/UL 2459, Standard for Safety Insulated Multi-Pole Splicing Wire Connectors

1. Minimum Spacings Table 4

~~Table 4A - Minimum spacings for the United States~~~~(See Clause 4.4.1.)~~

Voltage involved, V	Through air, mm (in)	Over surface, mm (in)
0 - 125	1.6 (1/16)	3.2 (1/8)
126 - 600	3.2 (1/8)	4.8 (3/16)

~~Table 4B - Minimum spacings for Canada~~~~(See Clause 4.4.1.)~~

Voltage involved, V	Through air, mm (in)	Over surface, mm (in)
0 - 250	1.2 (3/64)	1.2 (3/64)
251 - 600	3.2 (1/8)	3.2 (1/8)

4.4 Spacings

4.4.1 In the United States the minimum spacings on a connector shall be as specified in Table 4A. In Canada the minimum spacings on a connector shall be as specified in Table 4B. Minimum spacings on a connector shall be as specified in Table 4. Spacings shall be measured between the following:

- (a) uninsulated live parts of opposite polarity; and
- (b) an uninsulated live part and a dead metal part that is likely to be grounded or is accessible to contact when the device is installed as intended, including a metal surface on which the device is mounted in the intended manner.

Table 4 - Minimum spacings

(See Clause 4.4.1.)

<u>Voltage involved, V</u>	<u>Through air and over surface, mm (in)</u>
<u>0 - 30</u>	<u>0.8 (1/32)</u>
<u>31 - 250</u>	<u>1.2 (3/64)</u>
<u>251 - 600</u>	<u>3.2 (1/8)</u>

2. Intermateability of Connectors

1.2A The dimensions of these connectors are not defined in any national or international technical standard, as such, mating connectors are identified and tested with compatible mating part (or parts, if multiple exist) and are to be of the same manufacturer.

3. Use of Multi-Pole Splicing Wire Connectors as Disconnects in LED Applications

1.3 These requirements also cover luminaire disconnects that are used;

- a) internal to luminaires to facilitate replacement of the ballast or LED driver, or
- b) for LED retrofit applications where connected on the line side of the LED driver.

Luminaire disconnects are not to be directly attached to the branch circuit conductors for the purpose of interrupting (making and breaking) branch circuit conductors. Luminaire disconnects may have one or more conductors per contact.

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