

## Contents

### American National Standards

<b>Call for Comment on Standards Proposals .....</b>	<b>2</b>
<b>Call for Members (ANS Consensus Bodies) .....</b>	<b>11</b>
<b>Final Actions .....</b>	<b>16</b>
<b>Project Initiation Notification System (PINS) .....</b>	<b>18</b>
<b>ANS Maintained Under Continuous Maintenance .....</b>	<b>19</b>
<b>ANSI-Accredited Standards Developers Contact Information .....</b>	<b>20</b>

### International Standards

<b>ISO and IEC Draft Standards .....</b>	<b>21</b>
<b>Proposed Foreign Government Regulations .....</b>	<b>23</b>
<b>Information Concerning .....</b>	<b>24</b>

## 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: February 9, 2020

### AARST (American Association of Radon Scientists and Technologists)

#### Revision

BSR/AARST MS-PC-202x, Performance Specifications for Instrumentation Systems Designed to Measure Radon Gas in Air (revision of ANSI/AARST MS-PC-2015)

This standard specifies minimum performance criteria and testing procedures for instruments and/or systems designed to quantify the concentration of <sup>222</sup>Rn gas in air. These are consistent but general performance criteria applicable to the wide variety of radon measurement devices used for indoor measurements, primarily in residential environments or buildings not associated with the possession or handling of radioactive materials.

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [StandardsAssist@gmail.com](mailto:StandardsAssist@gmail.com)

### UL (Underwriters Laboratories, Inc.)

#### Revision

BSR/UL 67-202x, Standard for Safety for Panelboards (revision of ANSI/UL 67-2019)

This proposal covers the addition of requirements from Article 230.71 of the 2020 Edition of the National Electrical Code (NEC).

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

BSR/UL 94-202x, Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances (revision of ANSI/UL 94-2018)

This proposal covers the following topics: (1) Clarification for HB Test in Paragraph 7.7.1 and (2) Final classification when testing UL 94V or 5V.

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

BSR/UL 508A-202x, Standard for Safety for Industrial Control Panels (revision of ANSI/UL 508A-2018)

(16) Color coding.

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

BSR/UL 746C-202x, Standard for Safety for Polymeric Materials - Use in Electrical Equipment Evaluations (revision of ANSI/UL 746C-2018)

This proposal covers the inclusion of a Weathering Test Program for Non-Enclosure/Elastomeric/Film Materials in Sections 25, 26, 57, and 58.

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

BSR/UL 1773-202x, Standard for Safety for Termination Boxes (revision of ANSI/UL 1773-2018)

This proposal covers an increase voltage threshold to 1000 Volts and an expansion of requirements for Insulation Materials. An earlier version of this proposal was posted UL's CSDS for ballot on November 1, 2019.

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

## Comment Deadline: February 24, 2020

### AAFS (American Academy of Forensic Sciences)

#### ***New Standard***

BSR/ASB STD 098-202x, Standard for Mass Spectral Data Acceptance in Forensic Toxicology (new standard)

This document provides criteria for the acceptance of mass spectral analyses of small molecules (compounds with an atomic weight of less than 800 daltons) in laboratories conducting any of the following forensic toxicology subdisciplines: postmortem forensic toxicology, human performance toxicology (e.g., drug-facilitated crimes and driving-under-the-influence of alcohol or drugs), non-regulated employment drug testing, court-ordered toxicology (e.g., probation and parole, drug courts, child services), and general forensic toxicology (non-lethal poisonings or intoxications). The document provides minimum requirements for acquiring data on single- or multiple-stage mass spectrometers using nominal or high-resolution mass spectrometers. It also provides instruction on the evaluation of mass spectral data when conducting acquisitions in full-scan mode, selected ion monitoring, multiple-stage analyses, or when using high-resolution mass analyzers. Criteria, requirements and instructions in this document are not intended for the area of breath alcohol toxicology. Further, it is not intended to address the use of matrix assisted laser desorption, inductively coupled plasma, or ion mobility mass spectrometry. It is also not intended to provide criteria for analyte identification in forensic toxicology laboratories.

Single copy price: Free

Document and comments template can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/>

Order from: Document will be provided electronically on AAFS Standards Board website free of charge

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [asb@aaafs.org](mailto:asb@aaafs.org)

BSR/ASB STD 113-202x, Standard for Identification Criteria in Forensic Toxicology. (new standard)

This document sets minimum criteria, based on a point system, for the identification of an analyte during forensic toxicology testing. The document provides a mechanism for laboratories to evaluate each analytical technique to determine if their testing regimen is sufficient to meet or exceed the minimum points required for identification. This document does not address identification of low-molecular-weight analytes (e.g., ethanol, carbon monoxide, cyanide) or metals.

Single copy price: Free

Order from: Document will be provided electronically on AAFS Standards Board website free of charge

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [asb@aaafs.org](mailto:asb@aaafs.org)

BSR/ASB Std 133-202x, Standard for Age Estimation in Forensic Anthropology (new standard)

Age is one of several biological parameters that can be estimated from skeletal material or radiographic images. This standard provides procedures for the estimation of age from skeletal material or radiographic images. This standard includes the estimation of age-at-death from skeletal remains and can also be applied to skeletal development from living individuals. Specific methods and techniques are not included in the standard.

Single copy price: Free

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [asb@aaafs.org](mailto:asb@aaafs.org)

### ASTM (ASTM International)

#### ***New Standard***

BSR/ASTM WK57078-202x, Specification for MRS-Rated Metric- and Inch-Sized Crosslinked Polyethylene (PEX) Pipe (new standard)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM WK60578-202x, Test Method for Walkway Friction Testing (new standard)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

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

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM WK64005-202x, Specification for Determining Flammability of Materials for Recreational Camping Tents and Warning Labels for Associated Hazards (new standard)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

## **ASTM (ASTM International)**

### ***Reaffirmation***

BSR/ASTM D1785-2017 (R202x), Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120 (reaffirmation of ANSI/ASTM D1785-2017)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM D2683-2017 (R202x), Specification for Socket-Type Polyethylene Fittings for Outside Diameter-Controlled Polyethylene Pipe and Tubing (reaffirmation of ANSI/ASTM D2683-2017)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F431-1999 (R202x), Specification for Air Performance Measurement Plenum Chamber for Vacuum Cleaners (reaffirmation of ANSI/ASTM F431-1999 (R2013))

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F683-2014 (R202x), Practice for Selection and Application of Thermal Insulation for Piping and Machinery (reaffirmation of ANSI/ASTM F683-2014)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F906-1985 (R202x), Specification for Letters and Numerals for Ships (reaffirmation of ANSI/ASTM F906-1985 (R2014))

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1130-2000 (R202x), Practice for Inspecting the Coating System of a Ship (reaffirmation of ANSI/ASTM F1130-2000 (R2014))

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1138-1998 (R202x), Specification for Spray Shields for Mechanical Joints (reaffirmation of ANSI/ASTM F1138-1998 (R2014))

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1179-1997 (R202x), Practice for Inspection Procedure for Use of Anaerobic Thread Locking Compounds with Studs (reaffirmation of ANSI/ASTM F1179-1997 (R2014))

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1321-2014 (R202x), Guide for Conducting a Stability Test (Lightweight Survey and Inclining Experiment) to Determine the Light Ship Displacement and Centers of Gravity of a Vessel (reaffirmation of ANSI/ASTM F1321-2014)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1323-2014 (R202x), Specification for Shipboard Incinerators (reaffirmation of ANSI/ASTM F1323-2014)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1733-2018 (R202x), Specification for Butt Heat Fusion Polyamide (PA) Plastic Fitting for Polyamide (PA) Plastic Pipe and Tubing (reaffirmation of ANSI/ASTM F1733-2018)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F2191-2013 (R202x), Specification for Packing Material, Graphitic or Carbon Braided Yarn (reaffirmation of ANSI/ASTM F2191-2013)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F2806-2017 (R202x), Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe (Metric SDR-PR) (reaffirmation of ANSI/ASTM F2806-2017)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F3034-2017 (R202x), Specification for Billets Made by Winding Molten Extruded Stress-Rated High Density Polyethylene (HDPE) (reaffirmation of ANSI/ASTM F3034-2017)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F3052-2014 (R202x), Guide for Conducting Small Boat Stability Test (Deadweight Survey and Air Inclining Experiment) to Determine Lightcraft Weight and Centers of Gravity of a Small Craft (reaffirmation of ANSI/ASTM F3052-2014)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

## **ASTM (ASTM International)**

### ***Revision***

BSR/ASTM F400-202x, Consumer Safety Specification for Lighters (revision of ANSI/ASTM F400-2019)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F876-202x, Specification for Crosslinked Polyethylene (PEX) Tubing (revision of ANSI/ASTM F876-2019A)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F1948-202x, Specification for Metallic Mechanical Fittings for Use on Outside Diameter Controlled Thermoplastic Gas Distribution Pipe and Tubing (revision of ANSI/ASTM F1948-2019)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F2441-202x, Practice for Labeling of Backpacking and Mountaineering Tents and Bivouac Sacks (revision of ANSI/ASTM F2441-2012 (R2018))

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F2788-202x, Specification for Metric and Inch-sized Crosslinked Polyethylene (PEX) Pipe (revision of ANSI/ASTM F2788-2019a)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F2829-202x, Specification for Metric- and Inch-Sized Crosslinked Polyethylene (PEX) Pipe Systems (revision of ANSI/ASTM F2829-2017)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F2845-202x, Test Method for Measuring the Dynamic Stiffness (DS) and Cylindrical Coefficient of Restitution (CCOR) of Baseballs and Softballs (revision of ANSI/ASTM F2845-2014)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F3347-202x, Specification for Metal Press Insert Fittings with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-Linked Polyethylene (PEX) Tubing (revision of ANSI/ASTM F3347-2018)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

BSR/ASTM F3348-202x, Specification for Plastic Press Insert Fittings with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-Linked Polyethylene (PEX) Tubing (revision of ANSI/ASTM F3348-2019)

[https://www.astm.org/ANSI\\_SA](https://www.astm.org/ANSI_SA)

Single copy price: Free

Obtain an electronic copy from: [cleonard@astm.org](mailto:cleonard@astm.org)

Order from: Corice Leonard, (610) 832-9744, [accreditation@astm.org](mailto:accreditation@astm.org)

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

## ICC (International Code Council)

### Revision

BSR/ICC 600-202x, Standard for Residential Construction in High Wind Regions (revision of ANSI/ICC 600-2013)

The Standard for Residential Construction in High-Wind Regions will specify prescriptive methodologies of wind-resistant design and construction details for buildings and other structures of wood-framed, steel-framed, concrete, or masonry construction sited in high-wind areas. This standard will provide prescriptive details for walls, floors, roofs, foundations, windows, doors, and other applicable components of construction.

Single copy price: Free

Obtain an electronic copy from: <https://codes.iccsafe.org/category/ICC%20Standards?page=2>

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [inovak@iccsafe.org](mailto:inovak@iccsafe.org)

## IICRC (The Institute of Inspection, Cleaning and Restoration Certification)

### Revision

BSR/IICRC S500-202x, Standard for Professional Water Damage Restoration (revision of ANSI/IICRC S500-2015)

This standard provides a specific set of practical standards for water damage restoration. It does not attempt to teach comprehensive water damage restoration procedures; rather, it provides the foundation for basic principles of proper restoration practices. It does not attempt to include exhaustive performance characteristics or standards for the manufacture or installation of structural components, materials, and contents (personal property).

Single copy price: Free

Obtain an electronic copy from: <https://www.iicrc.org/page/SANSIIICRCS500>

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [mwashington@iicrcnet.org](mailto:mwashington@iicrcnet.org)

## NPPC (National Pork Producers Council)

### Reaffirmation

BSR/GELPP 0001-2002 (R202x), Good Environmental Livestock Production Practices (GELPP) 0001-2002 Concentrated Livestock Operations - General Site Conditions (reaffirmation of ANSI/GELPP 0001-2002 (R2012))

This standard is the first in a series that addresses environmental issues related to livestock production at animal feeding operations (AFO). This standard presents GELPPs related to general site conditions at AFOs. The GELPPs apply to all types of AFOs, including but not limited to those producing hogs, beef cattle, milk (dairies), meat birds and eggs (layers). AFOs that are not included in any of the above species will utilize the most appropriate species' GELPPs.

Single copy price: \$25.00

Obtain an electronic copy from: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

BSR/GELPP 0002-2002 (R202x), Good Environmental Livestock Production Practices (GELPP) 0002-2002 Concentrated Livestock Operations - Production Areas (reaffirmation of ANSI/GELPP 0002-2002 (R2012))

This standard is the second in a series that addresses environmental issues related to livestock production at animal feeding operations (AFO). This standard presents GELPPs related to production areas at AFOs. The GELPPs apply to all types of AFOs including but not limited to those producing hogs, beef cattle, milk (dairies), meat birds and eggs (layers). AFOs that are not included in any of the above species will utilize the most appropriate species' GELPPs.

Single copy price: \$25.00

Obtain an electronic copy from: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)



BSR/GELPP 0003-2002 (R202x), Good Environmental Livestock Production Practices (GELPP) 0003-2002 (reaffirmation of ANSI/GELPP 0003-2002 (R2012))

This standard is the third in a series that addresses environmental issues related to livestock production at animal feeding operations (AFO). This standard presents GELPPs related to outdoor manure storage at AFOs. The GELPPs apply to all types of AFOs, including but not limited to those producing hogs, beef cattle, milk (dairies), meat birds and eggs (layers). AFOs that are not included in any of the above species will utilize the most appropriate species' GELPPs.

Single copy price: \$25.00

Obtain an electronic copy from: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

BSR/GELPP 0004-2002 (R202x), Good Environmental Livestock Production Practices (GELPP) 0004-2002 (reaffirmation of ANSI/GELPP 0004-2002 (R2012))

This standard is the fourth in a series that addresses environmental issues related to livestock production at animal feeding operations (AFO). This standard presents GELPPs related to the utilization of manure and other liquid nutrient contents through land application. The GELPPs apply to the land application of nutrient enriched liquids generated at all types of AFOs, including but not limited to those producing hogs, beef cattle, milk (dairies), meat birds and eggs (layers). AFOs that are not included in any of the above species will utilize the most appropriate species' GELPPs.

Single copy price: \$25.00

Obtain an electronic copy from: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

BSR/GELPP 0005-2002 (R202x), Good Environmental Livestock Production Practices (GELPP) 0005-2002 (reaffirmation of ANSI/GELPP 0005-2002 (R2012))

This standard is the fifth in a series that addresses environmental issues related to livestock production at animal feeding operations (AFO). This standard presents GELPPs related to mortality management at AFOs. The GELPPs apply to all types of AFOs, including but not limited to those producing hogs, beef cattle, milk (dairies), meat birds and eggs (layers). AFOs that are not included in any of the above species will utilize the most appropriate species' GELPPs.

Single copy price: \$25.00

Obtain an electronic copy from: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: [knowledge@kcoe.com](mailto:knowledge@kcoe.com)

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

### ***Reaffirmation***

BSR/UL 363-2011 (R202x), Standard for Safety for Knife Switches (reaffirmation of ANSI/UL 363-2011 (R2015))

This proposal covers the Reaffirmation and Continuance of the Eleventh Edition of the Standard for Knife Switches, UL 363, as an American National Standard.

Single copy price: Free

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

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

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

### ***Revision***

BSR/UL 507-202x, Standard for Safety for Electric Fans (revision of ANSI/UL 507-2018)

This proposal for UL 507 covers: (1) Fans for use in unattended areas.

Single copy price: Free

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

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

Send comments (with optional copy to [psa@ansi.org](mailto:psa@ansi.org)) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: <https://csds.ul.com/Home/ProposalsDefault.aspx>

## 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](mailto:psa@ansi.org).

**Comment Deadline: February 9, 2020**

### **APTech (ASC CGATS) (Association for Print Technologies)**

CGATS TR 012-2020, Graphic Technology - Color Reproduction and Process Control for Packaging Printing (revise technical report)

Outlines the steps necessary to understand and objectively define the color and tone reproduction capabilities (and limitations) of a printing process. These steps include optimization, fingerprinting, process control, and characterization, which provide the information required in the package development workflow defined in ANSI CGATS TR 011. This report also suggests steps that may be taken to control the printing processes to achieve consistent and predictable color.

Single copy price: \$20.00

Order from: [jlinder@aptech.org](mailto:jlinder@aptech.org)

## Correction

### **Retraction**

#### **BSR/UL 961-202x**

Due to an error, Underwriters Laboratories, Inc. is retracting the (reaffirmation of ANSI/UL 961-2014) announced in the call for comment section of Standard Action - December 20, 2019. A corrected notice will be published in the near future.

# 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.

---

## **AARST (American Association of Radon Scientists and Technologists)**

**Contact:** Gary Hodgden

**Phone:** (202) 830-1110

**E-mail:** StandardsAssist@gmail.com

**Office:** 527 Justice Street  
Hendersonville, NC 28739

BSR/AARST MS-PC-202x, Performance Specifications for  
Instrumentation Systems Designed to Measure Radon Gas in Air  
(revision of ANSI/AARST MS-PC-2015)

# Call for Members (ANS Consensus Bodies)

## ***NEMA OS-1, Sheet-Steel Outlet Boxes, Device Boxes, Covers, and Box Supports – Call for Consensus Body Voting Members in the General Interest and User categories***

NEMA is seeking stakeholders in the General Interest and User categories to join the consensus body (voting group) for NEMA OS-1. The scope of NEMA OS-1 is:

This standards publication covers those general-purpose metal outlet boxes, device boxes, covers, and supports that are widely used by the consumer. These items (covered by UL 514A) are designed to facilitate the pulling of wires, to protect and facilitate wiring splices and taps, to provide a means of mounting and protecting wiring devices, and to provide a connection for rigid conduit, electrical metallic tubing, armored cable, metal clad cable, nonmetallic sheathed cable, flexible metallic conduit and knob-and-tube wiring systems.

For more information, please contact: **Muhammad Ali, CStd, Program Manager**, 703.841.3288 or [muhammad.ali@nema.org](mailto:muhammad.ali@nema.org).

## ***NEMA OS-2, Nonmetallic Outlet Boxes, Device Boxes, Covers, and Box Supports – Call for Consensus Body Voting Members in the General Interest and User categories***

NEMA is seeking stakeholders in the General Interest and User categories to join the consensus body (voting group) for NEMA OS-2. The scope of NEMA OS-2 is:

This standards publication covers those general-purpose nonmetallic outlet boxes, device boxes, covers, and supports that are widely used by the consumer. These items (covered by UL 514C) are designed to facilitate the pulling of wires, to protect and facilitate wiring splices and taps, to provide a means of mounting and protecting wiring devices, and to provide a connection for nonmetallic sheathed cable, nonmetallic tubing (loom), rigid nonmetallic conduit, and electrical nonmetallic tubing or other approved raceways.

For more information, please contact: **Muhammad Ali, CStd, Program Manager**, 703.841.3288 or [muhammad.ali@nema.org](mailto:muhammad.ali@nema.org).

# Call for Members (ANS Consensus Bodies)

## National Council for Prescription Drug Programs (NCPDP)

Enrollment in the 2020 Consensus Group opens Monday, January 13, 2020 and closes on Friday, February 14, 2020 at 8:00 p.m. Eastern Time. Information concerning the Consensus Group registration process is available by contacting:

Kitty Krempin

National Council for Prescription Drug Programs

9240 East Raintree Drive

Scottsdale, AZ 85260

Phone: (480) 296-4584

E-mail: [kkrempin@ncdpd.org](mailto:kkrempin@ncdpd.org)

### Standards:

Audit Transaction Standard – supports an electronic audit transaction that facilitates requests, responses, and final outcomes transmissions for both “Desk Top” claim audits and for in-store audit notices.

Batch Standard Subrogation - provides a uniform approach to efficiently process post-payment subrogation claims and eliminate the numerous custom formats used in the industry today.

Benefit Integration Standard - supports the communication of accumulator data (such as deductible and out of pocket) between Benefit Partners to administer integrated benefits for a member.

Billing Unit Standard - provides a consistent and well-defined billing unit for use in pharmacy transactions. This results in time savings and accuracy in billing and reimbursement.

Financial Information Reporting Standard – provides a process whereby financial information is moved from one PBM to another when a patient changes benefit plans.

Formulary and Benefit Standard – provides a standard means for pharmacy benefit payers (including health plans and Pharmacy Benefit Managers) to communicate formulary and benefit information to prescribers via technology vendor systems.

Manufacturer Rebate Standard – provides a standardized format for the electronic submission of rebate information from Pharmacy Management Organizations (PMOs) to Pharmaceutical Industry Contracting Organizations (PICOs).

Medicaid Subrogation Standard – provides guidelines for the process whereby a Medicaid agency can communicate to a processor for reimbursement. The state has reimbursed the pharmacy provider for covered services and now is pursuing reimbursement from other payers for these services.

Medical Rebates Data Submission Standard – provides a standardized format for health plans' rebate submissions to multiple manufacturers throughout the industry. Implementation of the medical also eliminates the need for manufacturers to create internal mapping processes to standardize unique data formats from each health plan or third party administrator.

Post Adjudication Standard – provides a format for supplying detailed drug or utilization claim information after the claim has been adjudicated.

Prescription Drug Monitoring Programs (PDMP) Reporting Standard – developed to report controlled substance and other required drug information to assist healthcare providers to deter prescription drug abuse to ensure access for patients with valid medical needs.

Prescription Transfer Standard – developed to create file formats for the purpose of electronically transferring prescriptions between pharmacies.

Prior Authorization Transfer Standard – developed to define the file format and correct usage for electronically transferring existing prior authorization data between payer/processors when transitioning clients, performing system database or platform changes, or other scenarios where an existing prior authorization record is stored in one location and needs to be moved to another.

Product Identifiers Standard – developed to provide a standard for consistent formatting and utilization of product identifiers in healthcare and to provide clarification for maintenance of these specific product identifiers.

Real-Time Prescription Benefit Standard – developed a real-time pharmacy benefit inquiry from a provider EMR application to: leverage pharmacy industry standards and technology infrastructure, to deliver an accurate, pharmacy specific, “Patient Pay Amount” for a proposed medication and quantity and to collaboratively align stakeholders.

Retiree Drug Subsidy Standard – developed to assist in the automation of summarized drug cost and related data transfer from one processor/pharmacy benefit manager to another processor/ pharmacy benefit manager for continuation of the CMS Retiree Drug Subsidy (RDS) cost data reporting by the receiving entity.

SCRIPT Standard – developed for transmitting prescription information electronically between prescribers, providers, and other entities.

Specialized Standard – developed for transmitting information electronically between prescribers, providers, and other entities. The standard addresses the electronic transmission of census information about a patient between a facility and a pharmacy, medication therapy management transactions between providers, payers, pharmacies, and other entities. It will include other transactions for electronic exchanges between these entities in the future.

Specialty Pharmacy Data Reporting Standard - provides a standardized format for the data submitted by specialty pharmacy to drug manufacturers/others to support programs and agreements between the parties.

State Medicaid Provider File Standard - developed a standard by which state Medicaid agencies or other entities could communicate their provider data with the MCOs/PBMs in a consistent and streamlined manner.

Telecommunication Standard – developed a standardized format for electronic communication of claims and other transactions between pharmacy providers, insurance carriers, third-party administrators, and other responsible parties.

Uniform Healthcare Payer Data Standard – developed a standard format for pharmacy claim data to support the reporting requirements of claim data to states or their designees.

## **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](mailto: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.

---

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

### ***New Standard***

ANSI/ASB Std 106-2020, Wildlife Forensic-Protein Serology Method for Taxonomic Identification (new standard): 1/6/2020

## **AGMA (American Gear Manufacturers Association)**

### ***Withdrawal***

ANSI/AGMA 2007-C00-2017, Gears - Surface Temper Etch Inspection after Grinding (withdrawal of ANSI/AGMA 2007-C00-2017): 12/31/2019

## **APA (APA - The Engineered Wood Association)**

### ***Revision***

ANSI/ASD PRG 320-2020, Standard for Performance-Rated Cross- Laminated Timber (revision of ANSI/APA PRG 320-2018): 1/6/2020

## **APPA (APPA - Leadership in Educational Facilities)**

### ***New Standard***

ANSI/APPA TCO 1000-2-2020, Total Cost of Ownership for Facilities Asset Management (TCO) - Part 2: Implementation and Data Elements (new standard): 1/3/2020

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

### ***Reaffirmation***

ANSI/ASA S12.42-2010 (R2020), Standard Methods for the Measurement of Insertion Loss of Hearing Protection Devices in Continuous or Impulsive Noise Using Microphone-in-Real-Ear or Acoustic Test Fixture Procedures (reaffirmation of ANSI/ASA S12.42-2010): 1/6/2020

ANSI/ASA S12.60-2009/Part 2 (R2020), Acoustical Performance Criteria, Design Requirements, and Guidelines for Schools, Part 2: Relocatable Classroom Factors (reaffirmation of ANSI/ASA S12.60-2009/Part 2 (R2014)): 1/6/2020

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

### ***Reaffirmation***

ANSI/ASA S2.31-1979 (R2020), Methods for the Experimental Determination of Mechanical Mobility, Part I: Basic Definitions and Transducers (reaffirmation of ANSI/ASA S2.31-1979 (R2014)): 1/6/2020

ANSI/ASA S2.32-1982 (R2020), Methods for the Experimental Determination of Mechanical Mobility, Part 2: Measurements Using Single-Point Translational Excitation (reaffirmation of ANSI/ASA S2.32-1982 (R2014)): 1/6/2020

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

### ***Revision***

ANSI/ASME B18.12-2020, Glossary of Terms for Mechanical Fasteners (revision of ANSI/ASME B18.12-2012): 1/6/2020

## **AWS (American Welding Society)**

### ***New Standard***

ANSI/AWS C4.7/C4.7M-2020, Recommended Practices for Oxyacetylene Welding of Steel (new standard): 1/7/2020

## **B11 (B11 Standards, Inc.)**

### ***Reaffirmation***

ANSI B11.16 (MPIF 47)-2003 (R2020), Safety Requirements for Powder / Metal Compacting Presses (reaffirmation and redesignation of ANSI B11.16 (MPIF 47)-2003): 1/6/2020

## **CSA (CSA America Standards Inc.)**

### ***Revision***

ANSI Z21.91-2019, Ventless Firebox Enclosures for Gas-Fired Unvented Gas Log Type Room Heaters (revision of ANSI Z21.91-2001 (R2005)): 12/30/2019

## **HL7 (Health Level Seven)**

### ***Reaffirmation***

ANSI/HL7 SAIF CANON, R2-2014 (R2019), HL7 Service-Aware Interoperability Framework: Canonical Definition Specification, Release 2 (reaffirmation of ANSI/HL7 SAIF CANON, R2-2014): 12/30/2019

## **Home Innovation (Home Innovation Research Labs)**

### ***Revision***

ANSI/ICC 700-2020, National Green Building Standard (revision of ANSI/ICC/ASHRAE 700-2015): 1/6/2020

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

### ***New Standard***

ANSI/IES LM-63-2020, Approved Method: Standard File Format for the Electronic Transfer of Photometric Data and Related Information (new standard): 1/6/2020



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

### ***New Standard***

ANSI INCITS 502-2019, Information technology - SCSI Primary Commands - 5 (SPC-5) (new standard): 12/31/2019

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

### ***Revision***

ANSI C136.32-2020, Standard for Roadway and Area Lighting Equipment Enclosed Setback Luminaires and Directional Floodlights (revision of ANSI C136.32-2012): 1/6/2020

## **NFPA (National Fire Protection Association)**

### ***Revision***

ANSI/NFPA 1126-2021, Standard for the Use of Pyrotechnics before a Proximate Audience (revision of ANSI/NFPA 1126-2016): 12/24/2019

## **NSF (NSF International)**

### ***Revision***

ANSI/NSF 20-2020 (i7r1), Commercial Bulk Milk Dispensing Equipment (revision of ANSI/NSF 20-2016): 1/3/2020

ANSI/NSF 49-2020 (i92r9), Biosafety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019): 12/28/2019

ANSI/NSF 49-2020 (i130r3), Biosafety Cabinetry - Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2018): 1/7/2020

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

### ***Revision***

ANSI/SCTE 109-2020, Test Procedure for Common Path Distortion (CPD) (revision of ANSI/SCTE 109-2016): 1/6/2020

ANSI/SCTE 132-2020, Test Method for Reverse Path (Upstream) Bit Error Rate (revision of ANSI/SCTE 132-2012): 1/6/2020

ANSI/SCTE 231-2020, General Test Procedures for Evaluation of Energy Efficiency Metrics and in Support of Functional Density Metrics (revision of ANSI/SCTE 231-2016): 1/6/2020

ANSI/SCTE 232-2020, Key Performance Metrics: Energy Efficiency & Functional Density of CMTS, CCAP, and Time Server Equipment (revision of ANSI/SCTE 232-2016): 1/6/2020

## **SPRI (Single Ply Roofing Industry)**

### ***Revision***

ANSI/SPRI WD-1-2020, Wind Design Standard Practice for Roofing Assemblies (revision of ANSI/SPRI WD-1-2014): 1/6/2020

## **UAMA (ASC B74) (Unified Abrasives Manufacturers' Association)**

### ***Reaffirmation***

ANSI B74.14-2007 (R2020), Methods of Chemical Analysis of Aluminum Oxide Abrasive Grain and Abrasive Crude (reaffirmation of ANSI B74.14-2007 (R2013)): 1/6/2020

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

### ***New Standard***

ANSI/UL 2849-2020, Standard for Safety for Electrical Systems for eBikes (new standard): 1/2/2020

### ***Reaffirmation***

ANSI/UL 1738-2014 (R2020), Standard for Venting Systems for Gas-Burning Appliances, Categories II, III, and IV (reaffirmation of ANSI/UL 1738-2014): 1/6/2020

### ***Revision***

ANSI/UL 127-2020, Standard for Safety for Factory-Built Fireplaces (revision of ANSI/UL 127-2015): 1/8/2020

ANSI/UL 217-2020, Standard for Safety for Smoke Alarms (revision of ANSI/UL 217-2016): 1/2/2020

ANSI/UL 737-2020, Standard for Safety for Fireplace Stoves (revision of ANSI/UL 737-2011 (R2015)): 1/8/2020

ANSI/UL 1482-2020, Standard for Safety for Solid-Fuel Type Room Heaters (revision of ANSI/UL 1482-2011 (R2015)): 1/8/2020

ANSI/UL 1581-2020, Standard for Safety for Reference Standard for Electrical Wires, Cables, and Flexible Cords (revision of ANSI/UL 1581-2019): 1/6/2020

ANSI/UL 1647-2019, Standard for Safety for Motor-Operated Massage and Exercise Machines (revision of ANSI/UL 1647-2018): 12/4/2019

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

### ***New Standard***

ANSI/VITA 40-2020, Status Indicator Standard (new standard): 1/7/2020

# Project Initiation Notification System (PINS)

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

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

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

---

## NFPA (National Fire Protection Association)

Contact: Dawn Michele Bellis, (617) 984-7246, [dbellis@nfpa.org](mailto:dbellis@nfpa.org)  
One Batterymarch Park, Quincy, MA 02169

### Revision

BSR/NFPA 70-202x, National Electrical Code® (revision of ANSI/NFPA 70-2020)

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

Project Need: Public interest and need.

This Code covers the installation and removal of electrical conductors, equipment, and raceways; signaling and communications conductors, equipment, and raceways; and optical fiber cables and raceways for the following: (1) Public and private premises, including buildings, structures, mobile homes, recreational vehicles, and floating buildings; (2) Yards, lots, parking lots, carnivals, and industrial substations; (3) Installations of conductors and equipment that connect to the supply of electricity; and (4) Installations used by the electric utility, such as office buildings, warehouses, garages, machine shops, and recreational buildings, that are not an integral part of a generating plant, substation, or control center.

# 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)
- ITI (InterNational Committee for Information Technology Standards)
- MHI (Material Handling Industry)
- NAHBRC (NAHB Research Center, Inc.)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NEMA (National Electrical Manufacturers Association)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network, Inc.)
- SAE (SAE International)
- TCNA (Tile Council of North America)
- TIA (Telecommunications Industry Association)
- UL (Underwriters Laboratories, Inc.)

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](http://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](http://www.ansi.org/publicreview)

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at [psa@ansi.org](mailto: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](mailto:standact@ansi.org).

<b>AAFS</b> American Academy of Forensic Sciences 410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 453-1036 Web: <a href="http://www.aafs.org">www.aafs.org</a>	<b>ASA (ASC S2)</b> Acoustical Society of America 1305 Walt Whitman Road Suite 300 Melville, NY 11747 Phone: (516) 576-2341 Web: <a href="http://www.acousticalsociety.org">www.acousticalsociety.org</a>	<b>Home Innovation</b> Home Innovation Research Labs 400 Prince George's Boulevard Upper Marlboro, MD 20774-8731 Phone: (301) 430-6314 Web: <a href="http://www.HomeInnovation.com">www.HomeInnovation.com</a>	<b>NPPC</b> National Pork Producers Council c/o Praedium Ventures, LLC P.O. Box 7598 Urbandale, IA 50323 Phone: (515) 362-7555 Web: <a href="http://www.nppc.org">www.nppc.org</a>
<b>AARST</b> American Association of Radon Scientists and Technologists 527 Justice Street Hendersonville, NC 28739 Phone: (202) 830-1110 Web: <a href="http://www.aarst.org">www.aarst.org</a>	<b>ASME</b> American Society of Mechanical Engineers Two Park Avenue M/S 6-2B New York, NY 10016-5990 Phone: (212) 591-8489 Web: <a href="http://www.asme.org">www.asme.org</a>	<b>ICC</b> International Code Council 4051 Flossmoor Road Country Club Hills, IL 60478 Phone: (888) 422-7233 Web: <a href="http://www.iccsafe.org">www.iccsafe.org</a>	<b>NSF</b> NSF International 789 N. Dixboro Road Ann Arbor, MI 48105-9723 Phone: (734) 827-3817 Web: <a href="http://www.nsf.org">www.nsf.org</a>
<b>AGMA</b> American Gear Manufacturers Association 1001 N Fairfax Street 5th Floor Alexandria, VA 22314-1587 Phone: (703) 684-0211 Web: <a href="http://www.agma.org">www.agma.org</a>	<b>ASTM</b> ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428-2959 Phone: (610) 832-9744 Web: <a href="http://www.astm.org">www.astm.org</a>	<b>IES</b> Illuminating Engineering Society 120 Wall Street, Floor 17 New York, NY 10005 Phone: (917) 913-0027 Web: <a href="http://www.ies.org">www.ies.org</a>	<b>SCTE</b> Society of Cable Telecommunications Engineers 140 Philips Rd Exton, PA 19341 Phone: (800) 542-5040 Web: <a href="http://www.scte.org">www.scte.org</a>
<b>APA</b> APA - The Engineered Wood Association 7011 South 19th Street Tacoma, WA 98466 Phone: (253) 620-7467 Web: <a href="http://www.apawood.org">www.apawood.org</a>	<b>AWS</b> American Welding Society 8669 NW 36th Street Suite #130 Miami, FL 33166-6672 Phone: (800) 443-9353 Web: <a href="http://www.aws.org">www.aws.org</a>	<b>IICRC</b> The Institute of Inspection, Cleaning and Restoration Certification 4043 South Eastern Avenue Las Vegas, NV 89119 Phone: (702) 430-9829 Web: <a href="http://www.thecleantrust.org">www.thecleantrust.org</a>	<b>SPRI</b> Single Ply Roofing Industry 465 Waverley Oaks Road Suite 421 Waltham, MA 02452 Phone: (781) 647-7026 Web: <a href="http://www.spri.org">www.spri.org</a>
<b>APPA</b> APPA - Leadership in Educational Facilities 1643 Prince Street Alexandria, VA 22314 Phone: (703) 542-3846 Web: <a href="http://www.appa.org">www.appa.org</a>	<b>B11</b> B11 Standards, Inc. PO Box 690905 Houston, TX 77269-0905 Phone: (832) 446-6999 Web: <a href="https://www.b11standards.org">https://www.b11standards.org</a>	<b>ITI (INCITS)</b> InterNational Committee for Information Technology Standards 700 K Street NW Suite 600 Washington, DC 20001 Phone: (202) 737-8888 Web: <a href="http://www.incits.org">www.incits.org</a>	<b>UAMA (ASC B74)</b> Unified Abrasives Manufacturers' Association 30200 Detroit Road Cleveland, OH 44145-1967 Phone: (440) 899-0010 Web: <a href="http://www.uama.org">www.uama.org</a>
<b>APTech (ASC CGATS)</b> Association for Print Technologies 1896 Preston White Drive Reston, VA 20191 Phone: (703) 264-7220 Web: <a href="http://www.printtechnologies.org">www.printtechnologies.org</a>	<b>CSA</b> CSA America Standards Inc. 8501 E. Pleasant Valley Road Cleveland, OH 44131 Phone: (216) 524-4990 Web: <a href="http://www.csagroup.org">www.csagroup.org</a>	<b>NEMA (ASC C136)</b> National Electrical Manufacturers Association 1300 North 17th Street Suite 900 Rosslyn, VA 22209 Phone: (703) 841-3234 Web: <a href="http://www.nema.org">www.nema.org</a>	<b>UL</b> Underwriters Laboratories, Inc. 47173 Benicia Street Fremont, CA 94538 Phone: (510) 319-4271 Web: <a href="http://www.ul.com">www.ul.com</a>
<b>ASA (ASC S12)</b> Acoustical Society of America 1305 Walt Whitman Road Suite 300 Melville, NY 11747 Phone: (631) 390-0215 Web: <a href="http://www.acousticalsociety.org">www.acousticalsociety.org</a>	<b>HL7</b> Health Level Seven 3300 Washtenaw Avenue Suite 227 Ann Arbor, MI 48104 Phone: (734) 677-7777 Web: <a href="http://www.hl7.org">www.hl7.org</a>	<b>NFPA</b> National Fire Protection Association One Batterymarch Park Quincy, MA 02169 Phone: (617) 984-7246 Web: <a href="http://www.nfpa.org">www.nfpa.org</a>	<b>VITA</b> VMEbus International Trade Association (VITA) 929 W. Portobello Avenue Mesa, AZ 85210 Phone: (602) 281-4497 Web: <a href="http://www.vita.com">www.vita.com</a>



# 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](mailto: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](mailto: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](mailto: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

### FOOTWEAR (TC 216)

ISO/DIS 16186, Footwear - Critical substances potentially present in footwear and footwear components - Determination of Dimethylformamide (DMF) in footwear materials - 3/14/2020, \$46.00

### INFORMATION AND DOCUMENTATION (TC 46)

ISO/DIS 690, Information and documentation - Guidelines for bibliographic references and citations to information resources - 3/14/2020, \$175.00

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

ISO/DIS 12625-17, Tissue paper and tissue products - Part 17: Determination of disintegration in water - 3/14/2020, \$62.00

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

ISO 15875-2/DAmD2, Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 2: Pipes - Amendment 2 - 3/14/2020, \$40.00

ISO 15876-2/DAmD1, Plastics piping systems for hot and cold water installations - Polybutene (PB) - Part 2: Pipes - Amendment 1 - 3/14/2020, \$33.00

ISO 15876-3/DAmD1, Plastics piping systems for hot and cold water installations - Polybutene (PB) - Part 3: Fittings - Amendment 1 - 3/14/2020, \$29.00

ISO 15876-5/DAmD1, Plastics piping systems for hot and cold water installations - Polybutene (PB) - Part 5: Fitness for purpose of the system - Amendment 1 - 3/14/2020, \$29.00

ISO 15877-2/DAmD2, Plastics piping systems for hot and cold water installations - Chlorinated poly(vinyl chloride) (PVC-C) - Part 2: Pipes - Amendment 2 - 3/14/2020, \$29.00

ISO 22391-3/DAmD1, Plastics piping systems for hot and cold water installations - Polyethylene of raised temperature resistance (PE-RT) - Part 3: Fittings - Amendment 1 - 3/14/2020, \$29.00

ISO/PWI 15875-5/DAmD1, Plastics piping systems for hot and cold water installations - Crosslinked polyethylene (PE-X) - Part 5: Fitness for purpose of the system - Amendment 1 - 3/14/2020, \$33.00

### TEXTILES (TC 38)

ISO/DIS 105-X19, Textiles - Tests for colour fastness - Part X19: Colour fastness to rubbing (Gakushin test method) - 3/14/2020, \$58.00

## IEC Standards

35/1439/CDV, IEC 62281/AMD1 ED4: Amendment 1: Safety of primary and secondary lithium cells and batteries during transport, 2020/3/27

47A/1091/CD, IEC 62228-7 ED1: Integrated circuits - EMC evaluation of transceivers - Part 7: CXPI transceivers, 2020/3/27

48B/2780/CD, IEC 60352-7 ED2: Solderless connections - Part 7: Spring clamp connections - General requirements, test methods and practical guidance, 2020/3/27

48B/2775/CDV, IEC 60603-7 ED4: Connectors for electronic equipment - Part 7: Detail specification for 8-way, unshielded, free and fixed connectors, 2020/3/27

49/1333/CDV, IEC 63041-3 ED1: Piezoelectric sensors - Part 3: Physical sensors, 2020/3/27

61/5947/CDV, IEC 60335-2-115 ED1: Household and Similar Electrical Appliances - Safety - Part 2-115: Particular requirements for beauty care appliances, 2020/3/27

65B/1164/CDV, IEC 60584-3 ED3: Thermocouples - Part 3: Extension and compensating cables - Tolerances and identification system, 2020/3/27

80/953/CD, IEC 62288 ED3: Maritime navigation and radiocommunication equipment and systems - Presentation of navigation-related information on shipborne navigational displays - General requirements, methods of testing and required test results, 2020/2/28

86/563/CDV, IEC 62496-4-214 ED1: Optical circuit boards - Part 4 -214: Interface standards - Terminated waveguide OCB assembly using a single-row thirty-two-channel symmetric PMT connector, 2020/3/27

86A/1985/CD, IEC 60794-1-219 ED1: Optical fibre cables - Part 1-219: Generic specification - Basic optical cable test procedures - Material compatibility test, Method F19, 2020/3/27

86A/1987/DTR, IEC TR 62362 ED2: Selection of optical fibre cable specifications relative to mechanical, ingress, climatic or electromagnetic characteristics - Guidance, 2020/2/28

100/3343/CDV, IEC 62605 ED3: Multimedia systems and equipment - Multimedia e-publishing and e-books - Interchange format for e-dictionaries Ed.3.0 (TA 10), 2020/3/27

110/1169/CDV, IEC 62595-2-4 ED1: Display lighting unit - Part 2-4: Electro-optical measuring methods of laser module, 2020/3/27

JTC1-SC25/2928/CDV, ISO/IEC 11801-3/AMD1 ED1: Amendment 1 - Information technology - Generic cabling for customer premises - Part 3: Industrial premises, 2020/3/27

# 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](mailto:usatbtep@nist.gov) or [notifyus@nist.gov](mailto: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](mailto:jgarner@itic.org) or visit <http://www.incits.org/participation/membership-info> for more information.

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

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

### Society of Cable Telecommunications

#### ANSI Accredited Standards Developer

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

SCTE is currently seeking to broaden the membership base of its consensus bodies and is interested in new members in all membership categories to participate in new work in 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](http://www.scte.org) or by e-mail from [standards@scte.org](mailto:standards@scte.org).

## International Organization for Standardization (ISO)

### Calls for U.S. TAG Administrator

#### ISO/TC 71/SC 1 – Test Methods for Concrete and ISO/TC 71/SC 3 – Concrete Production and Execution of Concrete Structures

ANSI has been informed that ASTM International, the ANSI-accredited U.S. TAG Administrator for ISO/TC 71/SC 1 and ISO/TC 71/SC 3, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 71/SC 1 and ISO/TC 71/SC 3 operate under the scope of ISO/TC 71:

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

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

#### ISO/TC 74 – Cement and Lime

ANSI has been informed that ASTM International, the ANSI-accredited U.S. TAG Administrator for ISO/TC 74, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 74 operates under the following scope:

Standardization – including definitions, methods of test and specifications – of various kinds of cement, and lime used in building construction and engineering, either for binding together the construction materials or as a constituent part of all kinds of paste, mortar and concrete.

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

## U.S. Technical Advisory Groups

### Approval of TAG Accreditation

#### U.S. Technical Advisory Group (TAG) to ISO TC 34 – Food Products

ANSI's Executive Standards Council (ExSC) has formally approved the accreditation of the U.S. Technical Advisory Group to ISO TC 34, Food products and the appointment of AOAC International as TAG Administrator, effective January 8, 2020. The TAG will operate 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. For additional information, please contact: Deborah McKenzie, Senior Director, Standards and Official Methods, Staff Liaison – Official Methods Board, US TAG to ISO TC 34 Administrator, AOAC International, 2275 Research Boulevard, Suite 300, Rockville, MD 20850; phone: 301.924.7077, ext. 157; e-mail: [DMcKenzie@AOAC.ORG](mailto:DMcKenzie@AOAC.ORG).





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

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

- *ANSI Essential Requirements: Due process requirements for American National Standards* (always current edition): [www.ansi.org/essentialrequirements](http://www.ansi.org/essentialrequirements)
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): [www.ansi.org/standardsaction](http://www.ansi.org/standardsaction)
- Accreditation information – for potential developers of American National Standards (ANS): [www.ansi.org/sdoaccreditation](http://www.ansi.org/sdoaccreditation)
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): [www.ansi.org/asd](http://www.ansi.org/asd)
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: [www.ansi.org/asd](http://www.ansi.org/asd)
- American National Standards Key Steps: [www.ansi.org/anskeysteps](http://www.ansi.org/anskeysteps)
- American National Standards Value: [www.ansi.org/ansvalue](http://www.ansi.org/ansvalue)
- ANS Web Forms for ANSI-Accredited Standards Developers - PINS, BSR8|108, BSR11, Technical Report: [www.ansi.org/PSAWebForms](http://www.ansi.org/PSAWebForms)
- Information about standards Incorporated by Reference (IBR): [www.ansi.org/ibr](http://www.ansi.org/ibr)
- ANSI - Education and Training: [www.standardslearn.org](http://www.standardslearn.org)

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

Please also visit Standards Boost Business at [www.standardsboostbusiness.org](http://www.standardsboostbusiness.org) for resources about why standards matter, testimonials, case studies, FAQs and more.

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

## Proposed Changes and additions to MS-PC

Dear reviewers,

The following series of definitions are the result of work to begin harmonization and improvements to both:

- ANSI/AARST MS-PC *Performance Specifications for Instrumentation Systems Designed to Measure Radon Gas in Air*, and
- ANSI/AARST MS-QA *Radon Measurement Systems Quality Assurance*.

The initial phase of this work entails updates and harmonization for MS-PC.

Access to public review documents and currently published standards: [www.radonstandards.us](http://www.radonstandards.us)

### REQUESTED PROCESS AND FORM FOR FORMAL PUBLIC REVIEW COMMENTS

**Submittals** (MS Word preferred) may be attached by email to [StandardsAssist@gmail.com](mailto:StandardsAssist@gmail.com) or submitted in paper form by fax to (913) 780-2090

- 1) Do not submit marked-up or highlighted copies of the entire document.
- 2) If a new provision is proposed, text of the proposed provision must be submitted in writing. If modification of a provision is proposed, the proposed text must be submitted utilizing the strikeout/underline format.
- 3) For substantiating statements: Be brief. Provide abstract of lengthy substantiation. (If appropriate, full text may be enclosed for project committee reference.)

### REQUESTED FORMAT

Title of Public Review Draft: **MS-PC Proposed Updates 01-2020**

- **Name:** \_\_\_\_\_ Affiliation: \_\_\_\_\_
- **Clause or Subclause:** \_\_\_\_\_
- **Comment/Recommendation:** \_\_\_\_\_
- **Substantiating Statements:** \_\_\_\_\_
- ☐ Check here if your comment is supportive in nature and does not require substantive changes in the current proposal in order to resolve your comment.

**Repeat the five bullet items above for each comment.**

MS-PC 2015	MS-QA 2019
<p><del>Continuous Radon Monitor (CRM)</del>—an electronic device that</p> <p><del>(1) is capable of providing reviewable, numeric measurements of radon concentration averaged over time intervals of 1 hour or less;</del></p> <p><del>(2) has a minimum detectable concentration (MDC) of no greater than 14.8 Bq/m<sup>3</sup> (4 pCi/L) for a 1-hour measurement; and</del></p> <p><del>(3) has a calibration factor of at least 2 counts per hour per 37 Bq/m<sup>3</sup> (0.054 counts per hour [cph] per Bq/m<sup>3</sup> or 2 cph per pCi/L).</del></p>	<p>★ Public review for updating MS-PC</p> <p><b>Continuous Radon Monitor (CRM):</b> An electronic device that</p> <p>(1) is capable of automatically recording <u>a retrievable time series of</u> numeric measurements of radon concentration averaged over time intervals of 1 hour or less;</p> <p>(2) has a <i>minimum detectable concentration</i> (MDC) of no greater than 14.8 Bq/m<sup>3</sup> (4 pCi/L) for a 1-hour measurement; and</p> <p>(3) has a <i>calibration</i> factor of at least 2 counts per hour per 37 Bq/m<sup>3</sup> (0.054 counts per hour [cph] per Bq/m<sup>3</sup> or 2 cph per pCi/L).</p>

<p><del><b>Equilibrating Device</b> — a detector that functions by adsorbing and/or desorbing radon from or to the ambient air until an equilibrium is established between the quantity of adsorbed radon and the radon concentration in the ambient air.</del></p> <p><b>6.3 Equilibrating Methods</b></p> <p><del>This class of device employs a material such as activated charcoal that adsorbs radon from the air until a state of equilibrium is reached between the quantity of adsorbed radon and the concentration of radon in the surrounding air. Once equilibrium is established, radon may exchange between the charcoal and the air. Some of the adsorbed radon may be replaced by moisture from the air and, thus, the quantity of adsorbed radon may decrease after equilibrium is established. If the concentration of radon in the surrounding air decreases once equilibrium has been established, then radon will desorb from the charcoal to maintain the state of equilibrium. Moisture in the air competes with adsorption sites on the charcoal; therefore, less radon is adsorbed when the air contains more moisture (higher relative humidity). Also, less radon is adsorbed at higher temperatures. Therefore, devices using adsorption of radon by activated carbon are subject to effects of moisture and temperature. Device providers may need to take such effects into consideration to meet the requirements of the standard. This class of device can provide a good representation of the average radon concentration during the exposure period as long as there are no large changes in the radon concentration during the exposure. Depending on the design of the device, its response may be significantly influenced by the radon concentration in the air during the last 12 hours or so of the exposure period. Because of the half-life of radon and the time it takes for equilibrium to be established between the adsorbed radon and the radon concentration in the air, this class of device is typically limited to exposure durations from 2 to 7 days. Calibration of an equilibrating device is accomplished through exposures of representative sets of devices in a STAR for various time periods and under various</del></p>	<p>★ Public review for updating MS-PC</p> <p><b>6.3 Charcoal Adsorption Device (CAD) Methods:</b></p> <p>This class of device employs a material such as activated charcoal that adsorbs radon from the air. The amount of radon adsorbed depends on the design of the device, the type of <u>material</u> charcoal, the exposure time and the radon concentration, temperature and relative humidity in the surrounding air. This class of device can provide an accurate representation of the average radon concentration during the exposure period if there are no large changes in radon concentration or the environment (e.g., temperature, humidity) during the exposure. Because of the half-life of radon and the time it takes for radon to adsorb, they are typically limited to exposure durations from 2 to 7 days. <i>Calibration</i> of a charcoal adsorption system is accomplished through exposures of representative sets of devices in a STAR for various time periods and different values of temperature and humidity.</p>
---	--

<p>controlled and monitored conditions of radon concentration, temperature and humidity.</p> <p>Described below are two types of equilibrating devices that differ by the mechanism used to detect radiation from radon and/or its progeny. This standard <b>does not</b> exclude devices with detection mechanisms that may vary from those described here or devices that use an adsorbing material different from activated charcoal.</p>	
	<p>★ Public review for updating MS-PC</p> <p><b>Use this in both standards:</b></p> <p><b>Lower Limit of Detection, Counting Technology (LLD<sub>CT</sub>) Methods (CRM, ATD and CAD):</b> The smallest net count rate at which there is 95% confidence that a signal above background is detected (true positive). The <i>blank</i> count rate and <i>blank</i> counting time are determined by counting a <i>blank</i> sample in the laboratory. For this standard, and for devices that rely on independent event counting technology, this equation by Currie (1968) is used.</p> $LLD_{CT} = 2.71/t_s + 3.29(R_b/t_b + R_b/t_s)^{1/2} \quad (2)$ <p>where LLD<sub>CT</sub> = <i>Lower Limit of Detection</i> (cpm) for counting technology methods  t<sub>s</sub> = Sample counting time (min), or for ATDs, the area of sample scanned (mm<sup>2</sup>)  R<sub>b</sub> = Background or <i>blank</i> count rate (cpm), or for ATDs, the <i>blank</i> sample track density (tracks/mm<sup>2</sup>)  t<sub>b</sub> = Background or <i>blank</i> counting time (min), or for ATDs, the area of <i>blank</i> sample scanned (mm<sup>2</sup>)</p> <p>Note—The LLD for ATD counting systems can use the same formula by using the areas of the plastic counted for <i>blanks</i> and field exposed detectors as surrogates for the background and sample counting times. For CRMs, the sample counting time is the time spent making a radon measurement; the background count rate and counting time are determined when measuring an atmosphere free of radon, such as nitrogen or aged air. For CADs, the sample counting time is the time spent counting the sample in the laboratory.</p>
	<p>★ Public review for updating MS-PC</p> <p>★ <b>Use this in both standards:</b></p>

	<p><b>Lower Limit of Detection, Non-Counting Technology (LLD<sub>NCT</sub>) Methods:</b> The EIC method does not count detected radioactive decay events, but the LLD for such methods is calculated to provide the same assurance: the smallest signal at which there is 95% confidence that a signal above background is detected (true positive). EIC methods use the difference between the two voltage measurements (final subtracted from initial with the uncertainty in each voltage determination being independent of both the concentration and one another). Therefore, the combined variance is given by the sum of the variances in both the initial and final voltage, which follows the traditional root-sum-of-the-squares of sample standard deviations of both measurements. Assuming that both voltage determinations have equal variances, and using the square of sample standard deviation as the variance, results in the combined standard uncertainty in the net voltage of:</p> $\text{Uncertainty in net voltage loss} = \sqrt{s_{vi}^2 + s_{vf}^2} \quad (3)$ <p>If both voltage determinations are assumed to have equal variances (<math>s_v^2</math>), then the uncertainty in net voltage loss given by the combined uncertainty of the two analyses is given by <math>\sqrt{2} * s_v</math></p> <p>If the mean background voltage loss <math>m_b</math> is zero, as there should be zero voltage loss in EICs stored with the sensitive plastic prevented from discharge using a "keeper cap," this reduces to:</p> $\text{LLD}_{\text{NCT}} = 3.29 * \sqrt{2} * s_v \text{ or the familiar} \quad (4)$ $\text{LLD}_{\text{NCT}} = 4.65 * s_v \quad (5)$ <p><i>Superscripts</i></p>
	<p>★ Public review for updating MS-PC</p> <p><b>Batch:</b> The set of material that is considered to be homogenous regarding characteristics that determine the calibration relationship. For example, activated carbon is prepared and sold in batches, which are then used by laboratories to construct devices with that carbon; a single plastic melt is sold to laboratories who manufacture many ATDs from that batch.</p>
	<p>★ Public review for updating MS-PC</p>

	<p><b>Blanks:</b> A type of quality control (QC) check that quantifies detector response due to factors other than the measurement itself. Blanks are devices deployed to measure effects on the measurement result from anything other than the environment tested, i.e., effects caused during storage, shipping, handling and transport. The purpose of blanks for in-control operations is to verify and document the lack of influence of factors encountered outside the measured environment; their records are necessary to support data validity.</p>
	<p>★ Public review for updating MS-PC</p> <p><b>Blind:</b> A type of performance test of the analytical capability of a method in which a sample is not identified as a performance test to the analyst.</p>
	<p>★ Public review for updating MS-PC</p> <p><b>Calibration:</b> To adjust or determine or both, the response or reading of an instrument or device relative to a series of conventionally true values (U.S. DOE 2011).</p>
	<p>★ Public review for updating MS-PC</p> <p><b>Performance Test:</b> A Performance Test, or blind performance test, is a blind spike in which the radon concentration reported by the device user or laboratory is compared by an independent party, such as a chamber or proficiency program, to the established chamber concentration in which the device was exposed. Performance Test criteria historically includes an absolute IRE of no more than 25%. Independent verification is a demonstration of quality that is valuable to third parties such as certification bodies (State or private) and consumers.</p>

## BSR/UL 67, Standard for Safety for Panelboards

### 1. Addition of Requirements from Article 230.71 of the 2020 Edition of the NEC to UL 67

6.4.2 Panelboards ~~with provisions for only a single service disconnect other than meter centers~~ are limited to a single service disconnect in each enclosure and shall be constructed such that, with the service disconnect in the off position, no ungrounded uninsulated live part is exposed to inadvertent contact by persons while servicing any field connected load terminal, including a neutral load terminal, a branch circuit equipment grounding terminal, or the neutral disconnect link. Exposure to inadvertent contact is determined by use of the probe illustrated in Figure 6.1. If restriction to the line-side of the service disconnect is dependent on the installation of field installed service conductors, conductors sized in accordance with 12.1.10 shall be installed in the terminals when determining exposure to inadvertent contact. All live parts of the line side service terminal, including the connector body and pressure screw shall be evaluated.

NOTE: In accordance with the Standard for Electrical Safety in the Workplace, NFPA 70E, an electrically safe work condition should be established prior to working on electrical equipment. Accessibility requirements do not endorse working on energized electrical equipment.

6.4.5 Panelboards marked "Suitable for use as service equipment" or "Suitable for use as service equipment when a single service disconnect is provided" and

- a) Constructed in accordance with 6.7.4 and designed for use interchangeably either with main-terminal or a single service disconnect only, or
- b) Provided with a single service disconnect,

shall be permitted to provide the protection from inadvertent contact in 6.4.2 in a field installable kit when marked in accordance with 34.12.12. See also 34.9.11.

34.9.1 If a panelboard is intended for use as service equipment, and if the panelboard is suitable for such use under all conditions - without the use of handle ties, or the like - when the maximum number of switching devices that it is intended to accommodate has been installed, either at the factory or in the field as allowed in 6.4.2, the panelboard shall be marked in accordance with (a), (b), ~~or (c)~~, or (d) below, as applicable. See 6.4.2.

- a) Suitable only for use as service equipment;
- b) Suitable for use as service equipment; ~~or~~
- c) With the marking specified in either 34.9.2 ~~or 34.9.3~~; or

d) Suitable for use as service equipment when a single service disconnect is provided.

34.9.4 If a panelboard is marked in accordance with 34.9.1, or 34.9.2, ~~or~~ 34.9.3, the marking shall be an integral part of the marking containing the manufacturer's name and the electrical rating, unless it is an integral part of another required marking of the panelboard.

34.9.9 If a panelboard is marked "Suitable for use as service equipment" ,~~or~~ "Suitable for use as service equipment when a single service disconnect is provided" or "Suitable for use as service equipment when not more than six service disconnecting means are provided", the marking "Service Disconnect" shall be provided in the form of pressure sensitive labels in a envelope, or on a card, with instructions to apply near the disconnect handles if the equipment is used as service equipment.

*Exception: If the panelboard is intended for a particular installation in which it is known that it will be used as service equipment, the markings may be applied at the factory manufacturing the panelboard.*

**UL Copyrighted material. Not authorized for further reproduction without prior permission from UL.**



# BSR/UL 94, Standard for Safety for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

## 1. Clarification for HB Test in Paragraph 7.7.1

7.7.1 The following are to be recorded for each specimen:

- a) Whether or not the flame front passed the 25 mm and 100 mm marks.
- b) ~~If the flame front passed the 25 mm mark but ceased before the 100 mm mark, the damaged length, L and elapsed time, t. Deleted~~
- c) If the flame front passed the 100 mm mark, the elapsed time  $t$  between the 25 mm and 100 mm marks.
- d) The calculated linear burning rate.

## 2. Final Classification When Testing UL 94V or 5V

### 8 50W (20 mm) Vertical Burning Test; V-0, V-1, or V-2

(ASTM D 3801 or IEC 60695-11-10)

#### 8.1 Test Criteria

8.1.1 Materials shall be classified V-0, V-1, or V-2 on the basis of results obtained on small bar specimens when tested as described in (8.2.1 - 8.5.6). The final classification shall be the worst classification from both conditions as described in 8.4.

### 9 500 W (125 mm) Vertical Burning Test; 5VA or 5VB

(ASTM D 5048 or IEC 60695-11-20)

#### 9.1 Test criteria

9.1.1 Material shall be classified 5VA or 5VB on the basis of test results obtained on small bar and plaque specimens when tested as described in (9.2.1 - 9.6.5). The final classification shall be the worst classification from both conditions as described in 9.4.

*Exception: For materials that are submitted for a 5VB rating only (i.e., the manufacturer does not seek the 5VA rating), plaque specimens do not need to be tested.*

## BSR/UL 508A, Standard for Safety for Industrial Control Panels

### 16. Color Coding

~~29.1.3 All conductors shall be identified at each termination point corresponding with the wiring diagrams provided with the industrial control panel. Identification methods include letters, numbers, special characters and colored insulation. The identifying number or letter or color insulation or combination, must identify each conductor at its termination points.~~

~~Exception: Wire jumpers installed such that both ends and the entire length of the conductor are clearly and continuously visible without removing components or covers need not be identified.~~

~~66.5.1.1 All current carrying conductors shall be identified at each termination by letter(s), or number(s), or color(s) or a combination thereof of corresponding with the wiring diagrams provided with the industrial control panel in accordance with 29.1.3. Where colors are used, a table identifying the color with the appropriate circuit or location shall be marked inside the door of the control panel or on the wiring diagram, unless the colors are as described in 66.5.2.~~

~~Exception: Wire jumpers installed such that both ends and the entire length of the conductor are clearly and continuously visible without removing components or covers need not be identified.~~

~~66.9.1.1 All current carrying control circuit conductors shall be identified at each termination by letter(s), or number(s), or color(s) or a combination thereof of corresponding with the wiring diagrams provided with the industrial control panel in accordance with 29.1.3. Where colors are used, a table identifying the color with the appropriate circuit or location shall be marked inside the door of the control panel or on the wiring diagram, unless the colors are as described in 66.9.1, 66.9.1.2 and 66.9.1.3. Conductors that remain energized when the disconnecting means is in the "off" position shall comply with 66.9.1.4.~~

~~66.9.1.4 Conductors of excepted circuits, as described in the exception to 66.6.1, that remain energized when main disconnect switch is in the "off" position shall be:~~

~~a) contained in a separate enclosure or~~

~~b) if within the control enclosure, shall be routed separately from all other conductors and, if over 18 inches(460mm) in length, shall be encased in rigid or flexible conduit.~~

## BSR/UL 746C, Standard for Safety for Polymeric Materials – Use in Electrical Equipment Evaluations

### 1. Inclusion of a Weathering Test Program for Non-Enclosure/Elastomeric/Film Materials in Sections 25, 26, 57, and 58

#### 25 Ultraviolet Light Exposure

25.1 A polymeric material used for the enclosure of electrical equipment that will be exposed to an UV weathering source shall be acceptably resistant to degradation when exposed to the test described in 57.1.1 - 57.2.11.

25.2 Table 25.1 summarizes the minimum property retention limitations after UV conditioning for base samples of the material and any colors under consideration. The flammability classification of the material shall not be reduced as a result of 1000 hours of xenon-arc (ASTM G151 and G155), weatherometer conditioning. The average physical property values after UV conditioning shall not be less than 70 percent of the unconditioned value when the standardized small-scale physical tests indicated in Table 25.1 are performed.

*Exception No. 1: Where it is not practical to conduct the Tensile, Izod, or Charpy impact test using the standard specimens, the procedure of 57.2.7–57.2.11 and the impact equipment of Figures 57.1 and 57.2 may be used on representative sections of the equipment's enclosure.*

*Exception No. 2: If the impact value for a material that has been tested in accordance with the requirements in this section has exhibited less than 70 percent retention but at least 25 percent retention of the impact property, it is considered acceptable provided that all of the following results are obtained:*

*a) An unconditioned plaque specimen in the thinnest part thickness complies with the resistance to impact requirement levels shown in Table 25.2, and*

*b) The standard specimens exposed to the 1000-hour xenon-arc UV conditioning have retained at least 80 percent of the 500-hour xenon-arc UV conditioning impact level. As an alternative, this UV conditioning may be conducted for a longer period of time in 500-hour increments providing the final exposure impact level is not less than 80 percent of the previous increment's impact level.*

25.3 When the material is not suitable for impact testing options (mentioned in Table 25.1) due to thickness less than 0.25 mm (0.01 inch) or it is a vulcanized rubber or thermoplastic elastomer (used as non-enclosure or part of the enclosure), alternatively, testing has to be performed for deformation resistance.

Exception No. 1: Where it is not practical to conduct the Tensile, Izod, or Charpy impact test using the standard specimens, the procedure of 57.2.7 - 57.2.11 and the impact equipment of Figures 57.1 and 57.2 may be used on representative sections of the equipment's enclosure.

Exception No. 2: If the impact value for a material that has been tested in accordance with the requirements in this section has exhibited less than 70 percent retention but at least 25 percent retention of the impact property, it is considered acceptable provided that all of the following results are obtained:

a) An unconditioned plaque specimen in the thinnest part thickness complies with the resistance to impact requirement levels shown in Table 25.1 and

b) The standard specimens exposed to the 1000 hour xenon-arc UV conditioning have retained at least 80 percent of the 500 hour xenon-arc UV conditioning impact level. As an alternative, this UV conditioning may be conducted for a longer period of time in 500 hour increments providing the final exposure impact level is not less than 80 percent of the previous increment's impact level.

**Table 25.1**

**Minimum property retention limitations after ultraviolet light and water immersion conditioning**

Property	Ultra-violet light <sup>a</sup>	Water immersion <sup>b</sup>
Flammability Classification	Unchanged	Unchanged
Tensile or Flexural Strength <sup>c</sup>	70 Percent	50 Percent
Tensile, Izod or Charpy Impact <sup>c</sup>	70 Percent	50 Percent
<u>Tensile Strength and Elongation<sup>d</sup></u>	<u>70 percent</u>	<u>50 percent</u>

<sup>a</sup> 1000 hours xenon-arc exposure. See 57.1.1 - 57.2.11.

<sup>b</sup> 7 days at 70°C. See 58.1.

<sup>c</sup> For functional support, the test methods are tensile strength and flexural strength. For Impact Resistance the test methods are Tensile, Izod, or Charpy impact. See Table 57.1.

<sup>d</sup> Alternate testing per 25.3 and 26.1.3 for deformation resistance, the test method is tensile strength and elongation.

## 26 Water Exposure and Immersion

### 26.1 General

26.1.1 A polymeric material ~~used for the enclosure of electrical equipment~~ intended for outdoor installation shall not be appreciably degraded because of exposure to water. The acceptability of the material's resistance to such degradation may be judged by the procedure described in 26.1.2, 58.1 and 58.2.

26.1.3 When the material is not suitable for impact testing options (mentioned in Table 25.1) due to thickness less than 0.25 mm (0.01 inch) or it is a vulcanized rubber or thermoplastic elastomer (used as non-enclosure or part of the enclosure), alternatively, testing has to be performed for deformation resistance.

## 57 Ultraviolet Light Exposure Test

### 57.2 Method

57.2.2 Two sets of specimens for impact and one set for the other properties are to be exposed. ~~One~~ The additional set of impact specimens is to be exposed for a total of 500 hours and ~~the second set~~ all other sets for a total of 1000 hours. After the test exposure, the specimens are to be removed from the test apparatus, examined for signs of deterioration such as crazing or cracking, and retained under conditions of ambient room temperature and atmospheric pressure for not less than 16 hours, nor more than 30 days, before being subjected to flammability and physical tests. As a part of the test program, specimens that have not been exposed to ultraviolet light and water are to be preconditioned in accordance with ASTM D 618, Standard Practice for Conditioning Plastics for Testing, or ISO 291, Plastics - Standard atmospheres for conditioning and testing, at  $23 \pm 2^\circ\text{C}$  and  $50 \pm 10$  percent relative humidity for a minimum of 48 hours and are to be subjected to flammability and physical tests and the results obtained are compared against the specimens that have undergone exposure.

57.2.3 Tensile or flexural strength and flammability tests are to be conducted on specimens no thicker than the corresponding application. The results of Tensile, Izod or Charpy Impact testing of standard specimens in the nominal 3 mm/4 mm (0.12 inch/0.16 inch) thickness can be considered representative of the testing of a reduced thickness provided the non-impact testing of the reduced thickness complies with the requirements of Table 25.1.

**Table 57.1****Physical-property test methods**

Physical-property consideration	Material test method
Functional support	Tensile strength or Flexural strength <sup>a</sup>
Impact resistance	Tensile impact, Izod impact, or Charpy impact
<u>Deformation resistance</u>	<u>Tensile strength and Elongation</u>
<sup>a</sup> The ultraviolet-exposed side is to be in contact with the two loading points when using the three-point loading method.	

**58 Water Exposure and Immersion Test**

58.2 The following properties shall be included in the evaluation (See Table 57.1):

- a) For Functional Support, either
  - 1) Tensile Strength, or
  - 2) Flexural Strength
- b) For Impact Resistance, either
  - 1) Tensile Impact, or
  - 2) Izod Impact, or
  - 3) Charpy Impact.
- c) Flammability, as described in the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94. See 57.2.4.1 For Deformation Resistance (Alternative to Impact Resistance Test).
  - 1) Tensile Strength and Elongation.
- d) Flammability, as described in the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, UL 94. See 57.2.4.1

58.3 Tensile or flexural strength and flammability tests are to be conducted on specimens no thicker than the corresponding application. The results of Tensile, Charpy or Izod or Charpy Impact testing of standard specimens in the nominal 3 mm or 4 mm (0.12 inch or 0.16 inch) thickness can be considered representative of the testing of a

reduced thickness provided the non-impact testing of the reduced thickness complies with the requirements of Table 25.1.

**UL copyrighted material only. Not authorized for further reproduction without prior permission from UL.**

**BSR/UL 1773, Standard for Safety for Termination Boxes****1. Increase Voltage Threshold to 1000 Volts and Expand Requirements for Insulation Materials****Table 15.1**

**Minimum spacings if marked for use on line side of service equipment or rated greater than 100 amperes**

Voltage involved		Between uninsulated live parts of opposite polarity				Between uninsulated live parts and any grounded dead metal			
Greater than	Maximum	Through air,		Over surface,		Through air,		Over surface,	
		inch	(mm)	inches	(mm)	inch	(mm)	inch	(mm)
0	125	1/2	(12.7)	3/4	(19.1)	1/2	(12.7)	1/2	(12.7)
125	250	3/4	(19.1)	1-1/4	(31.8)	1/2	(12.7)	1/2	(12.7)
250	600	1	(25.4)	1-1/2	(38.1)	1/2	(12.7)	1	(25.4)
<del>600</del> 600	1000	1	(25.4)	2	(50.8)	1	(25.4)	1	(25.4)
NOTE - See 14.1 and 28.6.1.									

**UL copyrighted material. Not authorized for further reproduction without prior permission from UL.**



**Table 15.2**

**Minimum spacings if not marked for use on line side of service equipment and rated maximum 100 amperes**

Voltage involved		Between uninsulated live parts of opposite polarity and between an uninsulated live part and an exposed or uninsulated dead metal part other than the enclosure				Between uninsulated live parts and the walls of a metal enclosure, including fittings for conduit or armored cable	
Greater than	Maximum	Through air, <sup>a</sup>		Over surface,		Shortest distance,	
		inch	(mm)	inch	(mm)	inch	(mm)
0	150	1/8	(3.2)	1/4	(6.4)	1/2	(12.7)
150	300	1/4	(6.4)	3/8	(9.5)	1/2	(12.7)
300	600	3/8	(9.5)	1/2	(12.7)	1/2	(12.7)
601 600	1000	1	(25.4)	2	(50.8)	1	(25.4)
<sup>a</sup> The spacing between wiring terminals of opposite polarity shall not be less than 1/4 inch (6.4 mm) in any case if the terminals are in the same plane. A metal piece attached to the enclosure shall be considered to be a part of the enclosure for the purpose of this note if deformation of the enclosure is likely to reduce the spacing between the metal piece and a live part.							

UL copyrighted material. Not authorized for further reproduction without prior permission from UL.