

## CONTENTS

### American National Standards

Project Initiation Notification System (PINS) .....	2
Call for Comment on Standards Proposals .....	44
Final Actions - (Approved ANS) .....	70
Call for Members (ANS Consensus Bodies).....	73
American National Standards (ANS) Announcements.....	79
Accreditation Announcements (Standards Developers).....	80
American National Standards (ANS) Process .....	81
ANS Under Continuous Maintenance .....	82
ANSI-Accredited Standards Developer Contact Information.....	83

### International Standards

ISO Draft Standards.....	86
ISO and IEC Newly Published Standards .....	89
International Electrotechnical Commission (IEC).....	91
International Organization for Standardization (ISO) .....	92

<b>Registration of Organization Names in the United States .....</b>	<b>94</b>
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<b>Proposed Foreign Government Regulations .....</b>	<b>95</b>
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# 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.

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## **AHAM (Association of Home Appliance Manufacturers)**

1111 19th Street N.W., Washington, DC 20036 [www.aham.org](http://www.aham.org)

Contact: Matthew Williams; [mwilliams@aham.org](mailto:mwilliams@aham.org)

### ***National Adoption***

BSR/AHAM 60591-202x, Cooking fume extractors - Methods for measuring performance (national adoption with modifications of IEC 61591)

Stakeholders: Manufacturers of household electric cooktops, testing laboratories; consumers.

Project Need: Adoption of IEC 61591.

Scope: This document applies to cooking-fume extractors incorporating a fan for the recirculation or extraction mode situated in a household kitchen. It can also be used for cooking-fume extractors where the fan is mounted separately from the appliance, but controlled by the appliance when the fan is defined in the technical documentation (e.g., nameplate data) and instructions for installation. This document deals also with down-draft systems arranged beside, behind, or under the cooking appliance. This document defines the main performance characteristics of these appliances, which are of interest to the user, and specifies methods for measuring these characteristics. This document does not specify a classification or ranking for performance.

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

2950 Niles Road, Saint Joseph, MI 49085 <https://www.asabe.org/>

Contact: Carla VanGilder; [vangilder@asabe.org](mailto:vangilder@asabe.org)

***Withdrawal***

ANSI/ASAE S478.1-2012 (R2016), Roll-Over Protective Structures (ROPS) for Compact Utility Tractors (withdrawal of ANSI/ASAE S478.1-2012 (R2016))

Stakeholders: Tractor manufacturers.

Project Need: ASAE S478 is a U.S.-only standard that lacks recognition elsewhere in the world. ISO 12003-1 and ISO 12003-2 provide alternate internationally acceptable and adequate ROPS requirements for small and narrow tractors. One of the 12003 series of standards or ISO 5700 should be used to qualify new agricultural tractor ROPS designs, Further, ASAE S478 is not up-to-date, with obsolete standards referenced and definitions that are no longer consistent.

Scope: The purpose of this Standard is to establish the test and performance requirements of a roll-over protective structure, ROPS, designed for compact utility tractors to minimize the frequency and severity of crushing injury to the operator resulting from accidental tractor upset. This Standard applies to compact utility tractors. It does not preclude the use of extendable or foldable ROPS as long as these ROPS meet the performance requirements of this Standard.

Self-propelled implements are excluded. This Standard does not apply to tractors with mass greater than 1800 kg. Test procedures in this standard are limited to compact utility tractors. This Standard does not apply to tractors generally designed for mowing lawns and gardening work.

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2950 Niles Road, Saint Joseph, MI 49085 <https://www.asabe.org/>

Contact: Carla VanGilder; [vangilder@asabe.org](mailto:vangilder@asabe.org)

***National Adoption***

BSR/ASABE/ISO 12003-1-MONYEAR-202x, Tractors for agriculture and forestry - Roll-over protective structures on narrow tractors - Part 1: Front-mounted ROPS (identical national adoption of ISO 12003-1:2021 and revision of ANSI/ASABE/ISO 12003-1-SEP17)

Stakeholders: Tractor manufacturers.

Project Need: Replacing the U.S. adoption of the 2008 version with the 2021 version of the ISO document.

Scope: This document specifies procedures for both the static and dynamic strength testing of roll-over protective structures (ROPS) front-mounted on narrow tractors. It defines the clearance zone and acceptance conditions for rigid or tiltable, front, two-post ROPS.

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2950 Niles Road, Saint Joseph, MI 49085 <https://www.asabe.org/>

Contact: Carla VanGilder; [vangilder@asabe.org](mailto:vangilder@asabe.org)

***National Adoption***

BSR/ASABE/ISO 12003-2-2008 MONYEAR-202x, Tractors for agriculture and forestry - Roll-over protective structures on narrow tractors - Part 2: Rear-mounted ROPS (identical national adoption of ISO 12003-2:2021 and revision of ANSI/ASABE/ISO 12003-2-2008 SEP2107)

Stakeholders: Tractor manufacturers.

Project Need: Replacing the U.S. adoption of the 2008 version with the 2021 version of the ISO document.

Scope: This document specifies procedures for both the static and dynamic strength testing of roll-over protective structures (ROPS) rear-mounted on narrow tractors. It defines the clearance zone and acceptance conditions for rigid or tiltable, rear, two-post roll bar, frame, and cab ROPS.

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2950 Niles Road, Saint Joseph, MI 49085 <https://www.asabe.org/>

Contact: Carla VanGilder; [vangilder@asabe.org](mailto:vangilder@asabe.org)

**National Adoption**

BSR/ASAE S390.7 (ISO 12934-202x) MONYEAR, Tractors and machinery for agriculture and forestry - Basic types - Vocabulary (identical national adoption of ISO 12934:2021 and revision of ANSI/ASAE S390.6 (ISO 12934:2013)-DEC16)

Stakeholders: United States Federal and State Governments, Association of Equipment Manufacturers (AEM), Farm Equipment Manufacturers Association (FEMA).

Project Need: ISO 12934:2021 has been revised, incorporating the U.S. deviations. Many ISO standards have been adopted as U.S. national standards. To avoid confusion, the U.S. should update the vocabulary to harmonize with the ISO vocabulary.

Scope: This standard provides terms and definitions for agricultural field equipment designed primarily for use in agricultural operations for the production of food and fibre. This document also applies to agricultural tractors used in forestry applications. Purpose-built forestry machines, as defined by ISO 6814, are not included.

**ASPE (American Society of Plumbing Engineers)**

6400 Shafer Court, Rosemont, IL 60018 [www.aspe.org](http://www.aspe.org)

Contact: Gretchen Pienta; [gpienta@aspe.org](mailto:gpienta@aspe.org)

**Reaffirmation**

BSR/WQA/ASPE/NSF S-802-2017 (R202x), Sustainable Water Treatment Media (reaffirmation of ANSI/WQA/ASPE/NSF S-802-2017)

Stakeholders: Water treatment system/product manufacturers.

Project Need: This standard provides much-needed, meaningful product-sustainability performance information to consumers and stakeholders to drive innovation and continual improvement in the sustainability performance of media for drinking-water treatment.

Scope: The media included in the scope of this voluntary product sustainability certification standard include activated carbon and ion exchange resin (or blends thereof) commonly utilized in the treatment of drinking water for any of the following end-use applications: point of use (POU) systems or products, point of entry (POE) systems, commercial/industrial systems, and municipal supplies. The requirements of this standard shall be applicable to all production facilities, owned or controlled by the applicant company, encompassing all phases of production.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

**New Standard**

BSR/ASTM E0620-202x, Standard Practice for Reporting Opinions of Scientific or Technical Experts (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice covers the scope of information to be contained in formal written technical reports which express the opinions of the scientific or technical expert with respect to the study of items that are or may reasonably be expected to be the subject of criminal or civil litigation.

Scope: This practice establishes those elements of the expert's opinion report which will make the report understandable to the intended recipient and focus on the technical aspects germane to the purpose for which the opinion is rendered.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E0678-202x, Standard Practice for Evaluation of Scientific or Technical Data (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is intended to serve as a guideline for the scientific or technical expert in conducting an investigation, which includes analyzing and evaluating facts. In addition, this practice may assist others in understanding and evaluating the work performed.

Scope: Persons engaged in forensic investigations are responsible for identifying significant data. They then analyze and correlate the data and report conclusions and opinions. These opinions should be supported by the data, reported in a form that is understandable to a layman familiar with the incident, and capable of being evaluated by knowledgeable scientists, engineers, or investigators.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E0860-202x, Standard Practice for Examining and Preparing Items that Are or May Become Involved in Criminal or Civil Litigation (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice establishes procedures to be followed to document the nature, state, or condition of items of evidence. It also describes specific actions that are required if planned testing, examination, disassembly, or other actions are likely to alter the nature, state, or condition of the evidence so as to preclude or adversely limit additional examination or testing.

Scope: This practice sets forth guidelines for the examination and testing of actual items or systems (termed "evidence" in this standard) that may have been involved in a specific incident that are or may be reasonably expected to be the subject of civil or criminal litigation.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1020-202x, Standard Practice for Reporting Incidents that May Involve Criminal or Civil Litigation (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is intended to provide a complete written account of the case at hand in such a fashion as to allow another individual to interpret the particulars of the incident.

Scope: This practice covers guidelines for the collection and preservation of information and physical evidence and the preparation of a documentation report relative to any incident(s) involving personal injury, property damage, commercial loss, or criminal acts which may reasonably be expected to be the subject of litigation.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1188-202x, Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Investigator (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is intended for use by any technical investigator when investigating an incident that can be reasonably expected to be the subject of litigation. The intent is to obtain sufficient information and physical items to discover evidence associated with the incident and to preserve it for analysis.

Scope: This practice covers guidelines for the collection and preservation of information and physical items by any technical investigator pertaining to an incident that can be reasonably expected to be the subject of litigation.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1386-202x, Standard Practice for Separation of Ignitable Liquid Residues from Fire Debris Samples by Solvent Extraction (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is useful for preparing extracts from fire debris for later analysis by gas chromatography-mass spectrometry (GC/MS).

Scope: This practice covers the procedure for removing small quantities of ignitable liquid residue from samples of fire debris using solvent to extract the residue.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1388-202x, Standard Practice for Static Headspace Sampling of Vapors from Fire Debris Samples (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is useful for sampling fire debris to screen for the presence of ignitable liquid residues prior to extraction with other techniques. It is most appropriate for sampling light- to medium-range ignitable liquids (such as light oxygenates, lacquer thinners, and other similar volatile compounds or products), and less appropriate for sampling ignitable liquids that have compounds in the heavy range.

Scope: This practice describes the procedure for removing vapor from the headspace of a fire debris container for the purpose of detecting or identifying ignitable liquid residues.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1412-202x, Standard Practice for Separation of Ignitable Liquid Residues from Fire Debris Samples by Passive Headspace Concentration with Activated Charcoal (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is useful for preparing extracts from fire debris for later analysis by gas chromatography-mass spectrometry.

Scope: This practice describes the procedure for separation of small quantities of ignitable liquid residues from samples of fire debris using an adsorbent material to extract the residue from the static headspace above the sample, then eluting the adsorbent with a solvent.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1413-202x, Standard Practice for Separation of Ignitable Liquid Residues from Fire Debris Samples by Dynamic Headspace Concentration onto an Adsorbent Tube (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice is useful for preparing extracts from fire debris for subsequent qualitative analysis by gas chromatography mass spectrometry (see Test Method E1618).

Scope: This practice describes the procedure for the separation of ignitable liquid residues from fire debris samples using dynamic headspace concentration onto an adsorbent tube, with subsequent solvent elution or thermal desorption.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1459-202x, Standard Guide for Physical Evidence Labeling and Related Documentation (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: By following the procedures specified in this guide, any item of physical evidence will have a traceable audit trail by which the origin, past history, treatment, and analysis of the item can be determined.

Scope: This guide describes methods to be used for labeling physical evidence collected during field investigations; received in a forensic laboratory; or isolated, generated, or prepared from items submitted for laboratory examination.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1492-202x, Standard Practice for Receiving, Documenting, Storing, and Retrieving Evidence in a Forensic Science Laboratory (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: Following the procedures outlined in this practice can serve to protect the chain of custody of the evidence while the evidence is at the forensic laboratory.

Scope: This practice describes procedures and techniques for a forensic science laboratory to protect and document the integrity of items of physical evidence with respect to suitability for scientific testing, and admissibility as evidence in litigation.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1588-202x, Standard Practice for Gunshot Residue Analysis by Scanning Electron Microscopy/Energy Dispersive X-Ray Spectrometry (new standard)

Stakeholders: Criminalistics industries.

Project Need: This document will be of use to forensic laboratory personnel who are involved in the analysis of GSR samples by SEM/EDS.

Scope: This practice covers the analysis of gunshot residue (GSR) by scanning electron microscopy/energy-dispersive X-ray spectrometry (SEM/EDS). The analysis is performed using automated software control of both the SEM and EDS systems, to screen the sample for candidate particles that could be associated with GSR. Manual control of the instrument is then used to perform confirmatory analysis and classification of the candidate particles. This practice refers solely to the analysis of electron microscopy stubs.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1610-202x, Standard Guide for Forensic Paint Analysis and Comparison (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is designed to assist the forensic paint examiner in selecting and organizing an analytical scheme for identifying and comparing paints and coatings. The size and condition of the sample(s) will influence the selected analytical scheme.

Scope: Forensic paint analyses and comparisons are typically distinguished by sample size that precludes the application of many standard industrial paint analysis procedures or protocols. The forensic paint examiner must address concerns such as the issues of a case or investigation; sample size, complexity, and condition; environmental effects; and collection methods.



**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1618-202x, Standard Test Method for Ignitable Liquid Residues in Extracts from Fire Debris Samples by Gas Chromatography - Mass Spectrometry (new standard)

Stakeholders: Criminalistics industries.

Project Need: Although this test method is suitable for all samples, it is especially appropriate for extracts that contain high background levels of substrate materials or pyrolysis and combustion products. This test method is also suitable for the identification of single compounds, simple mixtures, or non-petroleum-based ignitable liquids.

Scope: This test method covers the identification of residues of ignitable liquids in extracts from fire debris samples. Extraction procedures are described in the referenced documents.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1732-202x, Standard Terminology Relating to Forensic Science (new standard)

Stakeholders: Terminology industries.

Project Need: This terminology standard includes definitions of terms used in the forensic sciences.

Scope: These terms have particular application to the forensic sciences. In addition, a hierarchy of sources of definitions were used in the development of this terminology. The hierarchy is as follows: Webster's New Collegiate 7th Dictionary; technical dictionaries; and the Compilation of ASTM Standard Definitions. The subcommittee developed a suitable definition after all of the sources in the hierarchy were found wanting.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1843-202x, Standard Guide for Sexual Violence Investigation, Examination, and Evidence Collection Protocol (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This guide outlines procedures requiring the experience of experts in a diversity of fields.

Scope: This guide covers the basic components for the development of a sexual assault investigation protocol, with specific attention to the examination of assault scenes; victims and suspects of sexual assault; the recovery of testimonial, physical, and behavioral evidence; and the preservation and custody of physical evidence.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1967-202x, Standard Test Method for the Automated Determination of Refractive Index of Glass Samples Using the Oil Immersion Method and a Phase Contrast Microscope (new standard)

Stakeholders: Criminalistics industries.

Project Need: It should be recognized that measurement of surface fragments, especially from float glass samples, can result in refractive index values which are different than the refractive index values of fragments from the interior (for example, bulk) of the same broken-glass source.

Scope: This test method covers a procedure for measuring and comparing the refractive index ( $n$ ) at a fixed wavelength ( $\lambda$ ) and temperature (T) (Equation E1967-19\_1) of glass from known sources to recovered fragments from a questioned source.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1968-202x, Standard Practice for Microcrystal Testing in Forensic Analysis for Cocaine (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice describes procedures applicable to the analysis of cocaine using multiple microcrystal tests.

Scope: This technique involves a chemical-precipitation reaction between cocaine and the precipitating reagent. The habit and the aggregation of the crystals formed could be used to distinguish cocaine from other drugs.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E1969-202x, Standard Practice for Microcrystal Testing in Forensic Analysis for Methamphetamine and Amphetamine (new standard)

Stakeholders: Criminalistics industries.

Project Need: This technique involves a chemical-precipitation reaction between methamphetamine or amphetamine and the precipitating reagent. The habit and the aggregation of the crystals formed could be used to distinguish methamphetamine and amphetamine from other drugs, as well as from each other.

Scope: This practice describes procedures applicable to the analysis of methamphetamine and amphetamine using microcrystal tests.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2057-202x, Standard Specifications for Preparation of Laboratory Analysis Requests in Sexual Assault Investigations (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: These specifications outline considerations that will facilitate the analysis of sexual assault evidence by a potentially large group of forensic experts. The request for scientific examination of sexual assault evidence should include a completed sexual-assault medical/nurse evaluation form or a sexual-assault examiner/medical examiner evaluation form, in accordance with the requirements.

Scope: These specifications describe the basic elements of a request for the scientific examination of physical evidence collected in the investigation of a sexual assault.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2123-202x, Standard Practice for Preservation of Evidence in Sexual Violence Investigation (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: The procedures put forth in this standard are designed to preserve sexual violence evidence items during collection, storage, and transmittal for analysis at an appropriate laboratory.

Scope: This practice describes the basic considerations that will help preserve different items or types of sexual-violence-related evidence for subsequent analysis. This practice is designed to be used in conjunction with other specifications, guides, and practices associated with sexual violence examinations that are listed in Section 2.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2124-202x, Standard Specification for Equipment and Supplies in Sexual Violence Investigations (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: Outlined here are the considerations for choosing a variation or optional equipment to be used, in which case all of the types of tools listed in this standard should be included in any examination facility.

Scope: This specification describes the basic instruments used for the medical-legal examination of victims or suspects, or both, in sexual violence investigations.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2125-202x, Standard Practice for Microcrystal Testing in Forensic Analysis for Phencyclidine and Its Analogues (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice describes procedures applicable to the analysis of phencyclidine and its analogues using microcrystal tests.

Scope: This technique involves a chemical-precipitation reaction between the phencyclidine or its analogues and the precipitating reagent. The habit and the aggregation of the crystals formed could be used to distinguish phencyclidine or its analogues from other drugs.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2154-202x, Standard Practice for Separation and Concentration of Ignitable Liquid Residues from Fire Debris Samples by Passive Headspace Concentration with Solid Phase Microextraction (SPME) (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice is suited ideally for screening samples for the presence, relative concentration, and potential class of ignitable liquid residues in fire debris.

Scope: This practice describes the procedure for removing small quantities of ignitable liquid residues from samples of fire debris. An adsorbent material is used to extract the residue from the static headspace above the sample. Then, analytes are thermally desorbed in the injection port of the gas chromatograph (GC).

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2224-202x, Standard Guide for Forensic Analysis of Fibers by Infrared Spectroscopy (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is designed to assist an examiner in the selection of appropriate sample preparation methods for the analysis, comparison, and identification of fibers using IR spectroscopy. IR spectroscopy can provide additional compositional information than that which is obtained using polarized light microscopy alone. The extent to which IR spectral comparison is conducted will vary with specific sample and case evaluations.

Scope: Infrared (IR) spectroscopy is a valuable method of fiber polymer identification and comparison in forensic examinations.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2225-202x, Standard Guide for Forensic Examination of Fabrics and Cordage (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is intended to assist individuals and laboratories that conduct examinations of fabrics and cordage for the purposes of analyzing and comparing types of fabric, cordage, and damage.

Scope: A complete characterization of the fabrics, including their construction and other materials used in the assemblage of a textile (for example, sewing thread), is a critical component of a comprehensive forensic fabric or cordage examination.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2227-202x, Standard Guide for Forensic Examination of Non-Reactive Dyes in Textile Fibers by Thin-Layer Chromatography (new standard)

Stakeholders: Criminalistics industries.

Project Need: The principle of the method is that the dye components are separated by their differential migration caused by a mobile phase flowing through a porous, adsorptive medium.

Scope: Forensic analysis of fiber colorants using TLC should be considered for single-fiber comparisons only when it is not possible to discriminate between the fibers of interest using other techniques, such as comparison microscopy (brightfield and fluorescence) and microspectrophotometry in the visible range.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2228-202x, Standard Guide for Microscopical Examination of Textile Fibers (new standard)

Stakeholders: Criminalistics industries.

Project Need: Microscopical examination is generally a non-destructive, rapid, and reproducible means of determining the microscopic characteristics, optical properties, and generic polymer type of textile fibers.

Scope: This standard describes guidelines for microscopical examinations employed in forensic fiber characterization, identification, and comparison. A microscopical fiber examination can include a variety of light microscopes, such as stereomicroscope, polarized light, comparison, fluorescence, and interference. In certain instances, the scanning electron microscope can yield additional information.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2326-202x, Standard Practice for Education and Training of Seized-Drug Analysts (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice describes prerequisite formal education, training, and continuing professional development for those performing seized-drug analysis. It also describes the kinds of professional documents (for example, texts, manuals, or journals) that should be present in laboratories where analysis of seized drugs is conducted.

Scope: These are minimum standards applicable to those performing seized-drug analyses.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2327-202x, Standard Practice for Quality Assurance of Laboratories Performing Seized-Drug Analysis (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice is to be used by forensic analysts performing seized-drug analysis and promoted/supported by laboratory management.

Scope: This practice covers quality assurance issues in forensic laboratories performing seized-drug analysis including evidence handling, analytical procedures, report writing, method validation, documentation, proficiency testing, audits, and health and safety.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2329-202x, Standard Practice for Identification of Seized Drugs (new standard)

Stakeholders: Criminalistics industries.

Project Need: Listed are a number of analytical techniques for the identification of seized drugs. These techniques are grouped on the basis of their discriminating power. Analytical schemes based on these groupings are described.

Scope: This practice describes minimum criteria for the qualitative analysis (identification) of seized drugs.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2330-202x, Standard Test Method for Determination of Concentrations of Elements in Glass Samples Using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) for Forensic Comparisons (new standard)

Stakeholders: Criminalistics industries.

Project Need: This test method covers a procedure for quantitative determination of the concentrations of magnesium (Mg), aluminum (Al), iron (Fe), titanium (Ti), manganese (Mn), rubidium (Rb), strontium (Sr), zirconium (Zr), barium (Ba), lanthanum (La), cerium (Ce), neodymium (Nd), samarium (Sm), and lead (Pb) in glass samples.

Scope: One objective of a forensic glass examination is to compare glass samples to determine if they can be discriminated using their physical, optical, or chemical properties (for example, color, refractive index (RI), density, elemental composition).

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2451-202x, Standard Practice for Preserving Ignitable Liquids and Ignitable Liquid Residue Extracts from Fire Debris Samples (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice does not attempt to address all the issues regarding the short-term or long-term storage of ignitable liquid samples and ignitable liquid extracts from fire debris samples. The changes that may occur under various storage conditions have not been fully documented.

Scope: This practice describes procedures for preserving residues of ignitable liquids in extracts obtained from fire debris samples and questioned ignitable liquid samples. Extraction procedures are described in the Referenced Documents.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2548-202x, Standard Guide for Sampling Seized Drugs for Qualitative and Quantitative Analysis (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide provides information for the sampling of seized-drug submissions.

Scope: The principal purpose of sampling in the context of this guide is to answer relevant questions about a population by examination of a portion of the population. For example: What is the net weight of the population?

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2549-202x, Standard Practice for Validation of Seized-Drug Analytical Methods (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: It discusses the validation of analytical methods in terms of their part in analytical schemes and in terms of performance characteristics including brief mention of measurement uncertainty and quality control parameters.

Scope: This practice addresses the validation of qualitative and quantitative seized-drug analytical methods.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2678-202x, Standard Guide for Education and Training in Computer Forensics (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This guide will improve and advance computer forensics through the development of model curricula consistent with other forensic science programs.

Scope: With the proliferation of computers and other electronic devices, it is difficult to imagine a crime that could not potentially involve digital evidence. Because of the paucity of degree programs in computer forensics, practitioners have historically relied on practical training through law enforcement or vendor-specific programs, or both.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2808-202x, Standard Guide for Microspectrophotometry in Forensic Paint Analysis (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is designed to assist an analyst in the selection of appropriate sample preparation methods and instrumental parameters for the analysis and comparison of paint pigments and colors. When used for comparison purposes, the goal is to determine whether any meaningful differences exist between the samples.

Scope: This guide deals primarily with color measurements within the visible spectral range but will also include some details concerning measurements in the UV and NIR spectral ranges.



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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2809-202x, Standard Guide for Using Scanning Electron Microscopy/X-Ray Spectrometry in Forensic Paint Examinations (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is intended to advise and assist laboratory analysts in the effective application of scanning electron microscopy to the analysis of paint evidence. It is intended to be applicable to most modern scanning electron microscopes typically used in the forensic laboratory.

Scope: This guide is an outline of methods for scanning electron microscopy (SEM) intended for use by forensic paint examiners. This guide is intended to supplement information presented in Guide E1610.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2825-202x, Standard Guide for Forensic Digital Image Processing (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This guide provides digital-image-processing guidelines to ensure the production of quality forensic imagery for use as evidence in a court of law.

Scope: This guide briefly describes advantages, disadvantages, and potential limitations of each major process.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2881-202x, Standard Test Method for Extraction and Derivatization of Vegetable Oils and Fats from Fire Debris and Liquid Samples with Analysis by Gas Chromatography-Mass Spectrometry (new standard)

Stakeholders: Criminalistics industries.

Project Need: This procedure will also extract animal oils and fats, as these are similar in chemical composition to vegetable oils and fats. In this standard, the phrase "oils and fats" will be used to refer to both animal- and vegetable-derived oils and fats.

Scope: This test method covers the extraction, derivatization, and identification of fatty acids indicative of vegetable oils and fats in fire debris and liquid samples.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2882-202x, Standard Guide for Analysis of Clandestine Drug Laboratory Evidence (new standard)

Stakeholders: Criminalistics industries.

Project Need: This standard provides guidance on the chemical analysis of items and samples related to suspected clandestine drug laboratories. This standard provides general guidance for the analysis of clandestine drug laboratory evidence and is not a substitute for detailed and validated laboratory policies and technical procedures.

Scope: This standard is intended to be used in conjunction with the general requirements for the analysis of seized drugs (Practices E2326, E2327, E2329, and E2549; Guides E2548 and E2329).

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2916-202x, Standard Terminology for Digital and Multimedia Evidence Examination (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This terminology includes general as well as discipline-specific definitions as they apply across the spectrum of image analysis, computer forensics, video analysis, forensic audio, and facial identification.

Scope: This is a compilation of terms and corresponding definitions used in the examination of digital and multimedia evidence to include the areas of computer forensics, image analysis, video analysis, forensic audio, and facial identification.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2917-202x, Standard Practice for Forensic Science Practitioner Training, Continuing Education, and Professional Development Programs (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice provides a framework for extending learning opportunities to promote and achieve higher standards of professional practice in forensic science.

Scope: The use of this practice can help establish training programs designed to achieve competency in targeted disciplines. The standard also describes measures to maintain competency through continuing education/professional development.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2926-202x, Standard Test Method for Forensic Comparison of Glass Using Micro X-ray Fluorescence (-XRF) Spectrometry (new standard)

Stakeholders: Criminalistics industries.

Project Need:  $\mu$ -XRF provides a means of simultaneously detecting major, minor, and trace elemental constituents in small glass fragments such as those frequently examined in forensic case work.

Scope: This test method is for the determination of major, minor, and trace elements present in glass fragments. The elemental composition of a glass fragment can be measured through the use of  $\mu$ -XRF analysis for comparisons of glass.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2927-202x, Standard Test Method for Determination of Trace Elements in Soda-Lime Glass Samples Using Laser Ablation Inductively Coupled Plasma Mass Spectrometry for Forensic Comparisons (new standard)

Stakeholders: Criminalistics industries.

Project Need: The potential of these elements to provide the best discrimination among different sources of soda-lime glasses has been published elsewhere. Silicon (Si) is also monitored for use as a normalization standard. Additional elements may be added as needed: for example, tin (Sn) can be used to monitor the orientation of float glass fragments.

Scope: This test method covers a procedure for the quantitative elemental analysis of the following seventeen elements: lithium (Li), magnesium (Mg), aluminum (Al), potassium (K), calcium (Ca), iron (Fe), titanium (Ti), manganese (Mn), rubidium (Rb), strontium (Sr), zirconium (Zr), barium (Ba), lanthanum (La), cerium (Ce), neodymium (Nd), hafnium (Hf), and lead (Pb) through the use of Laser Ablation Inductively Coupled Plasma Mass Spectrometry (LA-ICP-MS) for the forensic comparison of glass fragments.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2937-202x, Standard Guide for Using Infrared Spectroscopy in Forensic Paint Examinations (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is designed to assist an examiner in the selection of appropriate sample preparation methods and instrumental parameters for the analysis, comparison, or identification of paint binders and pigments.

Scope: This guide applies to the forensic IR analysis of paints and coatings and is intended to supplement information presented in the Forensic Paint Analysis and Comparison Guidelines written by Scientific Working Group on Materials Analysis (SWGMA).

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2997-202x, Standard Test Method for Analysis of Biodiesel Products by Gas Chromatography - Mass Spectrometry (new standard)

Stakeholders: Criminalistics industries.

Project Need: This test method is useful when biodiesel products are suspected as a fuel source in a fire or a fuel product case and the identification of the "bio" portion of the fuel is of interest.

Scope: This test method specifically identifies fatty acid methyl esters and petroleum distillates found in biodiesel products. Derivatization is not necessary to identify FAMES.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2998-202x, Standard Practice for Characterization and Classification of Smokeless Powder (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice describes procedures for characterization and analysis of smokeless powders recovered from explosive incidents; materials, or objects containing gunshot residue when visible grains are present; or bulk samples of powder.

Scope: This practice establishes guidelines for the characterization of smokeless powder which can be used as an explosive for improvised explosive devices or as a propellant, such as for small arms ammunition and for military ordnance.

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E2999-202x, Standard Test Method for Analysis of Organic Compounds in Smokeless Powder by Gas Chromatography-Mass Spectrometry and Fourier Transform Infrared Spectroscopy (new standard)

Stakeholders: Criminalistics industries.

Project Need: This test method is suited for analyzing samples comprised of visible grains (whole or partial) of smokeless powder.

Scope: This test method describes the analysis of organic components in smokeless powders by gas chromatography-mass spectrometry and Fourier transform infrared spectroscopy.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3016-202x, Standard Guide for Establishing Confidence in Digital and Multimedia Evidence Forensic Results by Error Mitigation Analysis (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: It is important for practitioners and stakeholders to understand that digital and multimedia evidence forensic techniques and tools have known limitations, but those limitations have differences from errors and error rates in other forensic disciplines.

Scope: This guide provides a process for recognizing and describing both errors and limitations associated with tools, techniques, and methods used to support digital and multimedia evidence forensics.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3017-202x, Standard Practice for Examining Magnetic Card Readers (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This practice provides information on seizing, acquiring, and analyzing skimming devices capable of acquiring and storing personally identifiable information (PII) in an unauthorized manner.

Scope: Magnetic card readers, when used for illegal purposes, are commonly referred to as skimmers.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3046-202x, Standard Guide for Core Competencies for Mobile Phone Forensics (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This guide provides an outline of the knowledge, skills, and abilities all practitioners of mobile phone forensics should possess. The core competencies provide a basis for training and testing programs. This basis is suitable for certification, competency, and proficiency testing.

Scope: This guide identifies the core competencies necessary for the handling and forensic processing of mobile cellular (cell) telephones (phones). It applies to both first responders and laboratory personnel.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3085-202x, Standard Guide for Fourier Transform Infrared Spectroscopy in Forensic Tape Examinations (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide is designed to assist an examiner in the selection of appropriate sample preparation methods for the analysis, comparison, and identification of pressure-sensitive adhesive (PSA) tapes.

Scope: This guide is intended for examiners with a basic knowledge of the theory and proficiency in the use of infrared spectroscopy as well as experience in the handling and forensic examination of pressure sensitive tapes. Further, this guide is to be used in conjunction with a broader analytical scheme.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3115-202x, Standard Guide for Capturing Facial Images for Use with Facial Recognition Systems (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This guide provides an overview of how to achieve the specifications defined in Annex E of ANSI/NIST-ITL-1-2011, Update 2015, for capturing facial images.

Scope: This guide is intended for use by practitioners who are choosing, setting up, and operating photographic equipment designed to capture facial images for use with an automated Facial Recognition System or used for manual comparisons by a trained facial examiner.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3148-202x, Standard Guide for Postmortem Facial Image Capture (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: The purpose of this document is to provide guidelines for capturing postmortem facial images of human remains in controlled (for example, morgue) and semi-controlled (for example, field) settings to facilitate automated facial recognition (FR) searches or manual facial comparisons that could contribute to forensic investigations.

Scope: The protocols that exist for photographing a decedent's face at autopsy for identification purposes (for example, NAME Forensic Autopsy Performance Standards) do not always result in the capture of facial images that can be used for automated FR searches or manual facial comparisons.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3149-202x, Standard Guide for Facial Image Comparison Feature List for Morphological Analysis (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: This guide provides a standard set of facial components, characteristics, and descriptors to be used as a framework in conjunction with a systematic method of analysis for facial image comparison.

Scope: This guide defines a set of facial components, characteristics, and descriptors to be considered during a morphological facial comparison (see FISWG Best Practices for Facial Image Comparison Feature List for Morphological Analysis).

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3150-202x, Standard Guide for Forensic Audio Laboratory Setup and Maintenance (new standard)

Stakeholders: Digital and Multimedia Evidence industries.

Project Need: In designing and configuring an audio laboratory, it is important to consider the acoustical environment/room of the laboratory, as well as climate control. Other than having a viable location for the laboratory, computer hardware and software applications are the most important components of a laboratory.

Scope: This guide sets forth recommendations for the creation of a forensic audio laboratory space as well as the configuration, verification, and maintenance of the equipment contained within the lab.

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***New Standard***

BSR/ASTM E3189-202x, Standard Practice for Separation of Ignitable Liquid Residues from Fire Debris Samples by Static Headspace Concentration onto an Adsorbent Tube (new standard)

Stakeholders: Criminalistics industries.

Project Need: This practice is suitable for preparing extracts from fire debris samples containing a range of volumes ( $\mu\text{L}$  to  $\text{mL}$ ) of ignitable liquid residues, with sufficient recovery for subsequent qualitative analysis.

Scope: This practice describes the procedure for separation of ignitable liquid residues from fire debris samples using static headspace concentration onto an adsorbent tube, for subsequent solvent elution or thermal desorption.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3197-202x, Standard Terminology Relating to Examination of Fire Debris (new standard)

Stakeholders: Criminalistics industries.

Project Need: These terms have particular application to fire debris analysis. In addition, several sources of definitions were used in the development of this terminology: Hawley's Condensed Chemical Dictionary, fifteenth edition; Kirk's Fire Investigation, fifth edition; The Chemistry and Technology of Petroleum, third edition; Merriam-Webster's Collegiate Dictionary, tenth edition; and Fire Debris Analysis.

Scope: This terminology standard is a compilation of terms and corresponding definitions that are used in fire debris analysis. Some legal or scientific terms that are generally understood or defined adequately in other readily available sources are included.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3233-202x, Standard Practice for Forensic Tape Analysis Training Program (new standard)

Stakeholders: Criminalistics industries.

Project Need: This training practice covers a variety of instrumental methods which can be used in the analysis of tape. Not all laboratories will have access to all of the instrumentation.

Scope: With successful completion of this tape analysis training program, the trainee gains the theoretical knowledge and practical skills necessary to perform, document, and evaluate forensic tape examinations and comparisons.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3234-202x, Standard Practice for Forensic Paint Analysis Training Program (new standard)

Stakeholders: Criminalistics industries.

Project Need: With successful completion of this paint analysis training program, the trainee gains the theoretical knowledge and practical skills necessary to perform, document, and evaluate forensic paint examinations and comparisons.

Scope: The procedures outlined in this standard are grounded in the generally accepted body of knowledge and experience in the field of forensic paint examination and comparison.



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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3245-202x, Standard Guide for Systematic Approach to the Extraction, Analysis, and Classification of Ignitable Liquids and Ignitable Liquid Residues in Fire Debris Samples (new standard)

Stakeholders: Criminalistics industries.

Project Need: This guide addresses evidence handling, extraction methodologies, instrumental analysis techniques, and analytical data interpretation.

Scope: This guide describes a systematic approach to the extraction, analysis, and classification of ignitable liquids and their residues in solid (for example, fire debris) and liquid samples.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3255-202x, Standard Practice for Quality Assurance of Forensic Science Service Providers Performing Forensic Chemical Analysis (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: This practice provides a framework of quality in the processing of evidence, including: maintaining a quality management system; personnel duties, qualifications, training, and education; facility considerations; evidence handling; analytical procedures; instrument and equipment performance; chemicals and reagents; casework documentation and reporting; proficiency and competency testing; method validation and verification; audits; deficiency of analysis; and documentation requirements. Annex A1 – Annex A3 provide additional procedures that are discipline-specific.

Scope: This practice discusses procedures for quality assurance of forensic science service providers performing forensic chemical analysis.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3260-202x, Standard Guide for Forensic Examination and Comparison of Pressure Sensitive Tapes (new standard)

Stakeholders: Criminalistics industries.

Project Need: This standard provides an overview and guidance on the strengths and limitations of various techniques used in the analysis and comparison of pressure-sensitive adhesive tapes. The goal is to provide a consistent approach to forensic tape analysis.

Scope: This guide is intended as an introduction to other standard guides for the forensic examination of pressure-sensitive adhesive tape.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM E3272-202x, Standard Guide for Collection of Soils and Other Geological Evidence for Criminal Forensic Applications (new standard)

Stakeholders: Interdisciplinary Forensic Science Standards industries.

Project Need: It is designed as a resource for professionals whose job responsibilities include the collection and preservation of soil evidence and for forensic scientists to enable them to advise crime scene investigators.

Scope: This standard provides guidance to instruct crime scene professionals in good practices for the documentation, collection, and preservation of soil and other geological evidence for use in criminal investigations.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***Revision***

BSR/ASTM F1337-202x, Standard Practice for Human Systems Integration Program Requirements for Ships and Marine Systems, Equipment, and Facilities (revision of ANSI/ASTM F1337-2010 (R2015))

Stakeholders: General Requirements industries.

Project Need: HSI must be integrated fully with the engineering processes applied to the design, acquisition, and operations of marine systems.

Scope: This practice establishes and defines the processes and associated requirements for incorporating Human Systems Integration (HSI) into all phases of government and commercial ship, offshore structure, and marine system and equipment (referred to as marine system in this standard) acquisition life cycle.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK3494-202x, New Guide for Digital Imaging in Forensic Investigations (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: Many agencies are adopting digital imaging technologies without adequate guidance. Improper digital technologies may result in poor-quality images and documentation.

Scope: This guide covers the requirements and limitations of the utility of digital imaging including any digital image capture, storage, and production in forensic investigations and laboratory analysis.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK15367-202x, New Practice for Practice for Assessment of Contamination at Suspected Clandestine Drug Laboratories (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This standard practice is not intended to supercede the professional judgment of law enforcement personnel in the collection of evidentiary material for criminal proceedings or professional Industrial Hygienists cognizant of sampling theory and operating with specific data quality objectives (DQOs) other than those presented here. This standard practice is not intended to supercede local, state, or federal laws and/or regulations.

Scope: The purpose of this standard practice is to describe good and customary procedures for the assessment and characterization of contamination at suspected clandestine drug laboratories.

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***New Standard***

BSR/ASTM WK22134-202x, New Guide for Structuring Forensic Inquiries into the Source of Items (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: These procedures are applicable whether the examination, analysis, or comparison is of a questioned and a known item or only an inquiry into the origin of questioned items. These procedures include evaluation of the sufficiency of the material (questioned, known, or both) available for examination.

Scope: This guide provides procedures to be used in forensic examinations, analyses, and comparisons involving determination of the source of an item or items, including determining whether two or more items share a common origin.

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***New Standard***

BSR/ASTM WK23009-202x, New Guide for Case Review of Forensic Examinations (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The particular case review methods employed in a given instance may be dictated by agency policy. This Guide is not meant to imply that case reviews are required in all circumstances, but is presented to provide guidance for review of forensic analyses.

Scope: This guide provides procedures that should be used to conduct case reviews of forensic examinations. This guide identifies the minimum set of elements that should be present in all case reviews. Any individual case review may require additional elements or steps based on the nature of the examination performed or the data presented.

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***New Standard***

BSR/ASTM WK25706-202x, New Guide for Training and Continuing Education in Forensic Science (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The document is based on Section 4 of an NIJ report, Education and Training in Forensic Science.

Sections 2 and 3 were the basis for the FEPAC educational standards.

Scope: This document offers guidelines for training, continual professional development, and continuing education for forensic professionals, including content, documentation, and implementation.

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***New Standard***

BSR/ASTM WK56043-202x, New Terminology for Relating to the Examination of Fire Debris (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The standard is needed in order to provide a single source for terms that were developed through consensus. It is anticipated that the standard will be used by practitioners, members of the court (lawyers, judges, jury members), and other interested parties when terms related to fire debris analysis require explanation.

Scope: This is a compilation of terms and corresponding definitions that are used in fire debris analysis. Legal or scientific terms that are generally understood or defined adequately in other readily available sources may not be included.

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***New Standard***

BSR/ASTM WK56743-202x, New Practice for Training in the Forensic Examination of Human Hair by Microscopy (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: There are currently no consensus-based standards available addressing the training of forensic hair examiners. SWGMAT documents are readily available but are not consensus based. This practice will be used to train future hair examiners in both public and private laboratories concerned with the forensic analysis of hair.

Scope: This practice is intended for use by laboratory personnel responsible for training forensic hair examiners to prepare them to perform forensic hair examinations including microscopical human hair comparisons. It contains relevant suggested reading assignments and structured exercises for hands-on practical experience for the trainee.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK56998-202x, New Terminology for the Examination of Explosives (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The standard is needed in order to provide a single source for terms that were developed through consensus. It is anticipated that the standard will be used by practitioners, members of the court (lawyers, judges, jury members), and other interested parties when terms related to explosives and their analysis require explanation.

Scope: This is a compilation of terms and corresponding definitions related to the analysis of explosives. Legal or scientific terms that are generally understood or defined adequately in other readily available sources may not be included.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK58457-202x, New Practice for Training in the Forensic Examination of Gunshot Residue (GSR) using Scanning Electron Microscopy-Energy Dispersive X-ray Spectrometry (SEM-EDS) (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The standard will provide an outline of goals for a comprehensive training program in primer gunshot residue (GSR) analysis by scanning electron microscopy/energy-dispersive x-ray spectrometry (SEM/EDS). The standard would be used by a forensic analysts in Federal, state, and local forensic laboratories in training to perform GSR examinations.

Scope: The primary purpose of this Standard Practice is to facilitate the development and implementation of training programs in crime laboratories or other such analytical entities that participate in the detection, analysis, and classification of primer GSR particles.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK61709-202x, New Practice for Standard Practice for Data Retrieval from Digital CCTV System (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The OSAC-VITAL Subcommittee created this document, because there were at the time four different organizations that provided a guideline/best practice for collecting video evidence from Digital CCTV.

Scope: This document provides procedures that ensure playback while maintaining best quality of evidence for the collection of data from DVRs. It also can aid in the development of SOPs.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK63926-202x, New Guide for Repair and Recovery of Damaged Audio Media (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This guide provides methods for repairing common problems encountered with audio media.

Scope: This guide describes procedures for the handling, repair, and initial recovery of audio data from damaged or contaminated physical media. The procedures in this guide are intended to be performed before any analytical, enhancement, or authentication examinations are conducted to maximize integrity of the data being analyzed.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK65067-202x, New Practice for Assessment of Gas Chromatography and Electron Ionization Mass Spectrometry Data during the Qualitative Analysis of Seized Drugs (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: There is no standard that addresses the evaluation of data and subsequently the criteria that should be used for the acceptance of analytical data generated by these techniques.

Scope: This standard describes procedures to evaluate gas chromatography (GC) and electron ionization mass spectrometry (EI-MS) data generated during the qualitative analysis of seized drugs. This practice also includes a framework for establishing acceptance criteria for GC and EI-MS data comparisons.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK66357-202x, New Guide for Latent Print Evidence Imaging Resolution (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The procedure described in this guide is in accordance with current SWGFAST guidelines [Standard for Friction Ridge Digital Imaging (Latent/Tenprint) ], as well as National Institute of Standards and Technology (NIST) standard (NIST SPECIAL PUBLICATION 500-271, ANSI/NIST-ITL 1-2007 ), which specify 1000 pixels per inch (ppi) at 1:1 as the minimum nominal scanning resolution for latent print evidence.

Scope: This guide provides procedures for verifying that digital cameras and scanners can capture the necessary details in images of latent print evidence. The scope of this guide is to provide recommendations on the resolving power that enables recording of Level 3 details of latent print evidence that are suitable for comparison purposes using a digital camera, a flatbed scanner, or other image capture device. These recommendations take into consideration the minimum resolution requirements for using the photographs for comparison.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK66417-202x, New Guide for Training Guidelines for Video Analysis, Image Analysis and Photography (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This document provides training guidelines and recommendations to assist organizations in designing a training program for forensic video analysts, image analysts, and photographers to ensure competency in the completion of forensic tasks and analyses.

Scope: This document recommends topics and guidelines for training within the disciplines of video analysis, image analysis, and photography as a supplement to Practice E2917.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK67862-202x, New Practice for Forensic Examination and Identification of Intact Explosives (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: There are currently no consensus standards for the forensic analysis of explosives. This is the first in a series of standards to address that gap

Scope: This practice is intended to assist forensic explosive examiners in their evaluation, selection, and application of techniques to identify intact explosives. A foundation for the consistent approach to the analysis of intact explosives is provided by describing methods used to develop discriminatory information. This practice is not intended as a detailed method or rigid scheme but as a guide to the analytical methods commonly used in forensic laboratories.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK67866-202x, New Practice for Crime Scene Investigator Training, Continuing Education, Professional Development, Certification, and Accreditation (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: There is currently no consensus standard that addresses the training, continuing education, or accreditation requirements for crime scene investigators. This standard aims at addressing this gap.

Scope: This practice provides foundational requirements for the training, continuing education, professional development, certification, and accreditation of crime scene investigators/unit(s) to include training criteria to competency, documentation, and implementation of training and continuous development. This information is intended for crime scene investigators to help establish a training framework with program structure and content; for crime scene investigators as they acquire and maintain their knowledge, skills, and abilities; and for forensic science service providers to manage and support the continuous professional development of their employees.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK69622-202x, New Practice for Standard Practice for Report Writing of Forensic Primer Gunshot Residue (pGSR) Analysis by Scanning Electron Microscopy/Energy Dispersive X-Ray Spectrometry (SEM/EDS) (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This document was created by the OSAC GSR subcommittee. It will be used by scientists who conduct GSR analysis by SEM/EDX and report results based on the analyses.

Scope: This standard practice covers the scope of information to be contained in formal, written, technical reports that express the opinion of the scientific or technical expert with respect to pGSR analysis by SEM/EDS.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK69872-202x, New Guide for Standard Guide for Crime Scene Photography (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This guide is intended to increase consistency among forensic photography providers due to the evidentiary and documentary value provided by photographs during many types of investigations.

Scope: This document is intended to be a general guide outlining best practices for all practitioners of crime scene photography. This includes professionals whose job is specifically limited to photography and those who may only encounter the need to photograph a crime scene occasionally.

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***New Standard***

BSR/ASTM WK70035-202x, New Practice for Use of Color in Visual Examination and Forensic Comparison of Soil Sample (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This new standard practice provides instruction for forensic scientists performing soil examinations and color comparisons of soils. It is intended to provide forensic laboratories with information for integration of color in the examination of soil evidence.

Scope: This practice covers visual color determination of soil/geologic material within the context of a forensic examination and is intended for use by laboratory personnel. This practice recommends use of soil color for: the initial screening of soil samples in forensic casework, prioritization of known soil exemplars for detailed analysis, and includes a test method for color determination in the Munsell color system and comparison among samples.



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***New Standard***

BSR/ASTM WK72441-202x, New Guide for Standard Guide for Developing Discipline Specific Methodology for ACE-V (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: ACE-V is an acronym for the Analysis, Comparison, Evaluation and Verification methodology used by forensic practitioners primarily when conducting feature comparisons. This standard aims to establish a framework and minimum requirements for developing discipline-specific standards for the methodology of ACE-V.

Scope: This guide identifies and defines the various phases within the methodology of ACE-V. It specifies minimum general requirements that shall be adhered to for a methodology to be recognized as ACE-V 1.3 This guide does not define any discipline-specific test methods.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK72526-202x, New Practice for Standard Practice for Expert Opinions on the Interpretation of Primer Gunshot Residue (pGSR) Analysis by Scanning Electron Microscopy/Energy Dispersive X-Ray Spectrometry (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The OSAC Subcommittee for Gunshot Residue Analysis has developed a new standard practice for expert opinions on the interpretation of gunshot residue analysis by SEM/EDX. This document was reviewed by the OSAC Chemistry/Instrumental Analysis SAC and resource committees.

Scope: This document applies to persons who present expert opinions regarding primer gunshot residue analysis results. This document defines the range of opinions that are based upon the existence of a body of published scientific literature. This document does not address all possible circumstances that may be encountered when giving an expert opinion.

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***New Standard***

BSR/ASTM WK72597-202x, New Guide for the Microscopical Examination of Human Hair (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This examination guide was originally developed by SWGMAT and then further developed and refined by the OSAC Materials Subcommittee with input from the Legal Resource, Human Factors, Quality Infrastructure, and Statistical Committees of the OSAC. It is intended for use by trace examiners in forensic analysis of hair.

Scope: This document is intended to assist individuals and laboratories by providing standards for the microscopical examination of human hair for the classification and comparison of samples. Forensic hair examiners should be trained in accordance with the ASTM E2917, Standard Practice for Forensic Scientist Practitioner Training, Continuing Education, and Professional Development Programs.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK72630-202x, New Guide for the Development of Electron Ionization Mass Spectral Libraries for the Analysis of Seized Drugs (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The OSAC Subcommittee for Seized Drugs has developed a standard for the development of electron ionization-mass spectral libraries. There is currently no standardized guidance available to address building such specialized spectral collections or to address the variability of quality spectra produced even when nominal instrumental conditions are the same.

Scope: This guide describes minimum criteria for the development of electron ionization-mass spectral libraries. This standard cannot replace knowledge, skills, or abilities acquired through appropriate education, training, and experience (see Practice E2326, Education and Training) and is to be used in conjunction with sound professional judgment by individuals with such discipline-specific knowledge, skills, and abilities

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK72638-202x, New Guide for Intralaboratory Blind Quality Control Programs for Seized-Drug Analysis (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: No standard guidelines exist for seized-drug blind quality control programs. The Guide will be used to assist forensic-science service providers with setting up blind quality control programs. The users are quality managers and other management officials at forensic science service providers.

Scope: This document provides guidelines to develop and implement a blind intralaboratory comparison quality control (BQC) program for seized drug analysis. The BQC program is designed to provide continuous assessment of the performance of laboratories conducting the analysis and identification of seized drugs through the use of blind quality control samples

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK72837-202x, New Guide for Analysis of Forensic Geological Materials by Powder X-Ray Diffraction (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The new draft ASTM document, WK72837, entitled Standard Guide for Analysis of Forensic Geological Materials by Powder X-Ray Diffraction was drafted by consensus of the OSAC-Geological (now Trace) Materials Subcommittee and was approved to be submitted to ASTM by the OSAC Chemistry Scientific Area Committee. The

goals of this document are to describe the scope of application of powder X-ray diffraction to forensic geology.

Scope: This document covers adaptations of powder X-ray diffraction (XRD) methods to the forensic analysis of soils and geological materials (to include rocks, sediments, and materials derived from them such as concrete), to enable non-consumptive identification of solid crystalline materials present as single components or multi-component mixtures. Identification of crystalline geological materials in forensic examinations can itself be probative or can be used as part of a broader analytical scheme for forensic comparison of geological materials or for the purpose of provenance determinations.

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***New Standard***

BSR/ASTM WK72856-202x, New Practice for Standard Practice for the Collection, Preservation, and Analysis of Organic Gunshot Residue (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The OSAC Subcommittee for Gunshot Residue Analysis has developed a new standard practice for the collection, preservation, and analysis of organic gunshot residue. This document was reviewed by the OSAC Chemistry/Instrumental Analysis SAC and resource committee members.

Scope: This standard practice describes procedures for the sampling and preservation of organic gunshot residues (OGSR) recovered from hands, skin, clothing, and other substrates, also instrument conditions for subsequent analysis of samples by gas or liquid chromatography-mass spectrometry (GC-MS or LC-MS), and recommendations for reporting the significance of those findings.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK72932-202x, New Guide for Forensic Glass Analysis and Comparison (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: Currently, there is no over-arching guide for the forensic analysis and comparison of glass and this document would address that gap. This guide will attempt to explain the techniques and technologies that are employed in analyses and comparisons of glass in forensic casework.

Scope: Forensic examination of glass is undertaken to determine one or more of the following: (1) if a particle is glass, (2) the compositional class and product type, (3) if exclusionary differences exist between two or more fragments, and (4) the implications of the presence or absence of exclusionary differences between glass fragments.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK73117-202x, New Practice for a Forensic Explosives Analysis Training Program (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: Currently, there is no consensus standard for training of explosives analysts; this practice is intended to be used by laboratories as a foundation for creating such a training program.

Scope: This practice outlines the structure and content of a training program suitable for use in preparing forensic analysts to perform independent examinations of explosives, which includes explosive materials, explosive residues, and related evidence.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK73482-202x, New Practice for Reporting Results and Opinions of Ignitable Liquids Analysis (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The OSAC Subcommittee for Fire Debris and Explosives has developed a new standard to guide a fire debris analyst how to report results and opinions of the forensic examination and analysis of fire debris and related evidence for the presence of ignitable liquids and ignitable liquid residues.

Scope: This practice covers the information to be contained in formal report writing for the examination and analysis of fire debris and related evidence for the presence of ignitable liquids and ignitable liquid residues. This practice applies to the writing of fire debris reports, which are not normally written in a full formal scientific format, but rather in a condensed format.

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK73484-202x, New Practice for Reporting Results and Opinions of Explosives Analysis (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: The OSAC Subcommittee for Fire Debris and Explosives has developed a new standard to guide an explosives analyst how to report results and opinions of the forensic examination and analysis of intact explosives, post-blast explosive residues, and other material associated with explosive investigations.

Scope: This practice covers the information to be contained in formal report writing for the examination and analysis of intact explosives, post-blast explosive residues, and other material associated with explosive investigations. This practice applies to the writing of explosives reports, which are not normally written in a full formal scientific format, but rather in a condensed format.

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***New Standard***

BSR/ASTM WK73923-202x, New Practice for Establishing an Examination Scheme for Explosive Residues (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This standard will provide laboratory personnel that perform analysis of explosives residues a standardized approach to the analysis of a variety of explosive materials found in post-blast investigations.

Scope: This practice is intended to assist forensic examiners in the evaluation, selection, and application of techniques to identify explosive residues. A foundation for the consistent approach to the analysis of visible and non-visible explosive residues from post-blast or other explosive related scenes is provided by describing methods used to develop discriminatory information following an efficient order of testing.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK74138-202x, New Guide for Using Micro X-ray Fluorescence (-XRF) in Forensic Polymer Examinations (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: OSAC committees are actively working on and submitting consensus standards in analyses of trace materials to supplement the few standards currently approved for several trace disciplines, to include polymer examinations.

Scope: This guide is intended to assist individuals and laboratories that conduct analyses of forensic polymer samples by -XRF. This guide is intended to be applied within the scope of a broader analytical scheme. This guide is intended to advise and assist the analyst in the preparation of polymer samples for -XRF, the collection of data by -XRF, and the interpretation of data resulting from these analyses.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK74632-202x, New Practice for Image Processing to Improve Automated Facial Recognition Search Performance (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: Provides facial examiner guidelines for processing a probe image to maximize the potential that an investigative lead will be included among the candidates returned following a facial recognition system (FRS) search.

Scope: This practice describes the steps to process a probe image to maximize the likelihood that a facial recognition system (FRS) search returns a potential candidate. This process is not suitable for developing source conclusions regarding an image. The practice does not address the necessary steps and processes for that type of examination.

**ASTM (ASTM International)**

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Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK74814-202x, New Guide for Image Comparison Conclusions/Opinions (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: This guide entails the boundaries of the conclusions/opinions that may be reached for image comparisons.

Scope: This guide defines conclusions (called “opinions” in this standard) categories that shall be reached by a practitioner performing comparisons, typically using inductive inference, of people, objects, or scenes depicted in images, regardless of the process by which opinions are reached (that is, the examination methodology).

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK74817-202x, New Guide for Role-Based Training in Facial Comparisons (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: Addresses the specific content of an agencies training program and relevant subject matter to the individual so that, upon completion of training, they will be able to conduct comparisons at the basic level or at the advanced level.

Scope: This guide will provide recommendations for a role-based training to achieve competency in facial comparison tasks. This guide does not purport to address the specific content of an agency’s training program but instead provides an overview of the structure of role-based training and levels of training. This document will not address the specific recommendations for role-based training, such as detailed topics or durations of supervised casework/mentorship programs.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK75150-202x, New Practice for Training in the Forensic Examination of Fire Debris (new standard)

Stakeholders: Forensic Sciences Industry

Project Need: Currently, there is no ASTM Standard that addresses fire-debris analysis training. This document was created within OSAC and is now being moved into ASTM for review and publication.

Scope: This practice outlines the structure and content of a training program suitable for use in preparing forensic analysts to perform independent examinations of fire debris and related evidence for ignitable liquids and their residues. This practice presents the training program in a modular format and includes suggested lessons, reading assignments with full citations, practical exercises, progress monitoring, and trainee evaluations.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK75180-202x, New Guide for Using Pyrolysis Gas Chromatography and Pyrolysis Gas Chromatography-Mass Spectrometry in Forensic Polymer Examinations (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: Currently, no guide is available to forensic chemist that provides information techniques and methods on the forensic analysis of polymers by PGC or PG/CMS methods. OSAC has created this standard to be used by forensic laboratories to provide information to lab personnel on the best practices associated with these techniques.

Scope: This guide provides information and recommendations for the selection and application of various PGC and PGC/MS procedures and methods in the forensic examination of polymeric materials (e.g., fibers, paint, tape). PGC and PGC/MS methods are used for the identification and comparison of the organic components of these materials. Refer to D3452 for further information on the preparation of the pyrolysis system for polymeric analyses.

**ASTM (ASTM International)**

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 [www.astm.org](http://www.astm.org)

Contact: Laura Klineburger; [accreditation@astm.org](mailto:accreditation@astm.org)

***New Standard***

BSR/ASTM WK77530-202x, New Practice for Core Forensic Responsibilities Training (new standard)

Stakeholders: Forensic Sciences industry.

Project Need: ASTM Practice E2917 Section 5.3.1 refers to "core-specific" elements that form a part of discipline-specific training-to-competency programs for forensic science practitioners. The proposed new standard will more fully describe some of these "core-specific" elements by providing training requirements for the core-forensic responsibilities of professional ethics, quality policy, just communications, and cognitive and human factors.

Scope: This practice covers training responsibilities and program objectives for use by laboratory personnel responsible for training forensic science practitioners in the core forensic responsibilities of professional ethics, quality policy, just communications, and cognitive and human factors. This practice outlines required learning objectives, subjects for study, reading assignments, and topics for discussion within each of the core forensic responsibilities.

**AWS (American Welding Society)**

8669 NW 36th Street, Miami, FL 33166-6672 [www.aws.org](http://www.aws.org)

Contact: Rakesh Gupta; [gupta@aws.org](mailto:gupta@aws.org)

***Reaffirmation***

BSR/AWS A9.5-2012 (R202x), Guide for Verification and Validation in Computational Weld Mechanics (reaffirmation of ANSI/AWS A9.5-2012)

Stakeholders: Welding industry.

Project Need: To keep ANSI approval.

Scope: This standard provides guidelines for assessing the capability and accuracy of computational weld mechanics (CWM) models. This standard also provides general guidance for implementing verification and validation (V&V) of computational models for complex systems in weld mechanics.

**AWS (American Welding Society)**

8669 NW 36th Street, Miami, FL 33166-6672 [www.aws.org](http://www.aws.org)

Contact: Stephen Borrero; [sborrero@aws.org](mailto:sborrero@aws.org)

**Revision**

BSR/AWS D1.6/D1.6M-202x, Structural Welding Code - Stainless Steel (revision of ANSI/AWS D1.6/D1.6M-2017-AMD1)

Stakeholders: Structural engineers working with stainless steel, manufacturers, welders, qualifiers, inspectors.

Project Need: Revise the 2017-AMD1 code with new advancements in the industry.

Scope: This code covers the requirements for welding stainless steel structural assemblies.

**BHMA (Builders Hardware Manufacturers Association)**

17 Faulkner Drive, Niantic, CT 06357 [www.buildershardware.com](http://www.buildershardware.com)

Contact: Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

**Revision**

BSR/BHMA A156.10-202x, Standard for Power-Operated Pedestrian Doors (revision of ANSI/BHMA A156.10-2017)

Stakeholders: Public, manufacturers, building owners, architects.

Project Need: Five-year update.

Scope: Requirements in this Standard apply to power-operated doors for pedestrian use which open automatically when approached by pedestrians and some small vehicular traffic or by a knowing act. Included are provisions to reduce the chance of user injury or entrapment. Power-operated doors for industrial or trained traffic are not covered in this Standard.

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

8501 E. Pleasant Valley Road, Cleveland, OH 44131 [www.csagroup.org](http://www.csagroup.org)

Contact: David Zimmerman; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

**New Standard**

BSR Z21.85-202x, Alternative Connection Means for Gas Appliances (new standard)

Stakeholders: Certifiers, gas component manufacturers.

Project Need: There is a need for coverage of alternative connection means.

Scope: This Standard applies to internal quick fastener connection for gas appliances, referred to as an Alternative Connection Means (ACM) in this standard, constructed entirely of new, unused parts and materials. Alternative Connection Means are limited in size up to and including NPS 1 inch (DN 25) diameter and a maximum pressure up to and including ½ psi (3.5 kPa). Alternative Connection Means are intended for the quick assembly of the gas train (i.e., controls and piping) inside an appliance, which is assembled by the appliance manufacturer. Alternative Connection Means are not intended for the direct connection of the appliance to the fuel supply.



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

8501 E. Pleasant Valley Road, Cleveland, OH 44131 [www.csagroup.org](http://www.csagroup.org)

Contact: David Zimmerman; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

**National Adoption**

BSR/CSA/ISO Z23550-202x, Safety and control devices for gas and/or oil burners and appliances - General requirements (national adoption with modifications of ISO 23550)

Stakeholders: Certifiers, gas appliance and component manufacturers.

Project Need: Currently, there is no North American standard for gas-burning systems.

Scope: This document specifies safety, construction, performance and testing requirements for controls for gas burners and gas-burning appliances for use with natural gas, manufactured gas, or liquefied petroleum gas (LPG). This document applies to controls for use at maximum operating pressures up to and including 500 kPa. This document provides the general requirements that are intended to be the basis for the specific control standards found in the ISO 23551 and ISO 23552 series.

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

8501 E. Pleasant Valley Road, Cleveland, OH 44131 [www.csagroup.org](http://www.csagroup.org)

Contact: David Zimmerman; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

**National Adoption**

BSR/CSA/ISO Z23551-4-202x, Safety and control devices for gas burners and gas-burning appliances - Particular requirements - Part 4: Valve-proving systems for automatic shut-off valves (national adoption with modifications of ISO 23551-4)

Stakeholders: Certifiers; gas appliance and component manufacturers.

Project Need: Currently, there is no North American standard for valve-proving systems.

Scope: This document specifies safety, constructional, and performance requirements of valve-proving systems (VPS), intended for use with gas burners and gas-burning appliances. It also describes the test procedures for checking compliance with these requirements and provides information necessary for the purchaser and user. This document is applicable to all types of VPS which are used for the automatic detection of leakage in a gas burner section having at least two valves designed in accordance with ISO 23551-1 and which give a signal if the leakage of one of the valves exceeds the detection limit. This document is applicable to VPS with a maximum working pressure up to and including 500 kPa for use in systems using fuel gases. This document is not applicable to VPSs for use in explosive atmospheres.

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

8501 E. Pleasant Valley Road, Cleveland, OH 44131 [www.csagroup.org](http://www.csagroup.org)

Contact: David Zimmerman; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

**Revision**

BSR/LC 4/CSA 6.32-202x, Press-Connect Metallic Fittings for Use in Fuel Gas Distribution Systems (revision of ANSI/CSA LC 4-2012 (R2021), CSA 6.32-2012 (R2021) and LC4a-2013 (R2021), CSA 6.32a-2013 (R2021))

Stakeholders: Certifiers, manufacturers.

Project Need: Clarification of leakage test method.

Scope: This Standard applies to metallic (copper, steel, stainless steel, and malleable iron) press-connect type fittings, and valves (referred to as "fittings" in this standard, unless otherwise specified) for use with fuel gas systems intended for installation above ground, below ground, indoors, and outdoors. This Standard applies to fuel gas systems rated for operating pressures not exceeding 125 psi (862 kPa). This Standard applies to fittings intended for use with fuel gas systems 3/8 inch through 4 in nominal size.

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

1300 North 17th Street, Rosslyn, VA 22209 [www.nema.org](http://www.nema.org)

Contact: David Richmond; [David.Richmond@nema.org](mailto:David.Richmond@nema.org)

**Revision**

BSR C136.19-202x, Roadway and Area Lighting Equipment - High-Pressure Sodium (HPS) and Retrofit HPS Lamps for Mercury Ballasts - Guide for Selection (revision of ANSI C136.19-2017)

Stakeholders: Utilities, municipalities, authorities having jurisdiction, light source manufacturers.

Project Need: This standard is being revised to update references, bring language in line with other C136 standards, and reflect current industry practices.

Scope: This standard covers the selection of high-pressure sodium lamps recommended for use in roadway and area lighting equipment.

**RVIA (Recreational Vehicle Industry Association)**

1899 Preston White Drive, Reston, VA 20191-4326 [www.rvia.org](http://www.rvia.org)

Contact: Kent Perkins; [kperkins@rvia.org](mailto:kperkins@rvia.org)

**Revision**

BSR/RVIA EGS-1-202x, Standard for Engine Generator Sets for RV Safety Requirements (revision of ANSI/RVIA EGS-1-2018)

Stakeholders: Recreational vehicle manufacturers, RV component manufacturers, and operators of RVs.

Project Need: To provide an opportunity to revise and upgrade minimum safety requirements for the listing of engine generators intended for installation and operation in recreational vehicles.

Scope: This standard sets forth safety requirements and standards for engine generators intended for installation and operation in recreational vehicles and similar mobile applications. It is not intended to apply to emergency or standby generators with integral fuel tanks, welding generators, farm lighting plants, variable speed generators for railroad car installations, military specification engine generators, marine use, or similar specialized equipment. Included in this standard are recommended safety measures for installation, use, and care.

**SPRI (Single Ply Roofing Industry)**

465 Waverley Oaks Road, Waltham, MA 02452 [www.spri.org](http://www.spri.org)

Contact: Linda King; [info@spri.org](mailto:info@spri.org)

**Revision**

BSR/SPRI FX-1-202x, Standard Field Test Procedure for Determining the Withdrawal Resistance of Roofing Fasteners (revision of ANSI/SPRI FX-1-2016)

Stakeholders: Architects, specifiers, roofing system and component manufacturers, contractors.

Project Need: Review and recanvass as per SPRI procedures.

Scope: This standard provides procedures used in the field to test the pullout resistance of all types of fasteners. The data developed from these tests provide the roof system manufacturer, design professional, and other practitioners with pullout resistance values for the specific fastener installed into the load-resisting material of the deck.

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

15 Technology Parkway South, Peachtree Corners, GA 30092 [www.tappi.org](http://www.tappi.org)

Contact: William Millians; [standards@tappi.org](mailto:standards@tappi.org)

**Revision**

BSR/TAPPI T 409 sp-202x, Machine direction of paper and paperboard (revision of ANSI/TAPPI T 409 sp-2015)

Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products; and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To revise existing TAPPI/ANSI standard based on comments received on Draft 1 ballot.

Scope: This Standard Practice describes several procedures for determining the machine direction of most grades of paper and paperboard. Most of the procedures embody the principle that fibers tend to be aligned in the machine direction of the sheet, and this alignment produces observable effects. However, the extent of restraint used in drying can be very important in determining machine direction. Application of the procedures in this Standard Practice to certain grades of paper, such as sheets laminated to film, creped papers, extensible papers (where it is not unusual for the machine direction tensile to be relatively low and the stretch to be relatively high), and papers reinforced with textile materials, usually result in unreliable determinations. Tearing resistance and folding endurance may be used to determine machine direction for paper known to have been made on a cylinder machine. Tearing resistance should not be used for paper made on a fourdrinier machine, and folding endurance should be used only as specified in Section 7.7. During manufacture of paper, cross-flows coming from the headbox and the forming section may cause preferential alignment of fibers at an angle to the machine direction. Since the procedures in Section 7.11 are affected by fiber orientation, differences as great as 15° may be expected for sheets of uncertain orientation.

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

15 Technology Parkway South, Peachtree Corners, GA 30092 [www.tappi.org](http://www.tappi.org)

Contact: William Millians; [standards@tappi.org](mailto:standards@tappi.org)

**Revision**

BSR/TAPPI T 449 om-202x, Bacteriological examination of paper and paperboard (revision of ANSI/TAPPI T 449 om-2014)

Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products; and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To revise existing TAPPI/ANSI standard based on comments received on Draft 1 ballot.

Scope: The following procedure is recommended for the bacteriological examination of paper and paperboard intended for use as single service containers and closures for dairy products. Because of the exacting technique required in bacteriological procedures, reproducible results can be obtained only by a trained technician. All tests should be performed under the appropriate laboratory conditions to ensure quality assurance and safety.

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

929 W. Portobello Avenue, Mesa, AZ 85210 [www.vita.com](http://www.vita.com)

Contact: Jing Kwok; [jing.kwok@vita.com](mailto:jing.kwok@vita.com)

**Revision**

BSR/VITA 46.0-202x, VPX Baseline Standard (revision of ANSI/VITA 46.0-2019)

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

Project Need: Fills the need for a printed circuit module with a high-performance connector for use with high-speed serial fabrics in embedded applications.

Scope: This standard describes VITA 46.0 VPX Baseline Standard; an evolutionary step forward for the provision of high-speed interconnects in harsh environment applications. This revision supports compliance requirements of higher-level Open System Standards, adds guide socket/pin rotations for additional power supply configurations and provides further clarifications to power wafer current ratings.

# Call for Comment on Standards Proposals

## American National Standards

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. e-mail: [psa@ansi.org](mailto:psa@ansi.org)

\* Standard for consumer products

## Comment Deadline: September 5, 2021

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [mweber@ashrae.org](mailto:mweber@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### Addenda

BSR/ASHRAE Addendum 62.1g-202x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2019)

Residential occupancies that are four stories or more were removed from Standard 62.1 with the 2016 version. Some spaces within these buildings may still be under the scope of Standard 62.1 such as common corridors, lobbies, etc. This proposed addendum removes some items related to nontransient occupancies that are now under the scope of Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [mweber@ashrae.org](mailto:mweber@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### Addenda

BSR/ASHRAE Addendum 62.2i-202x, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2019)

Ozone and similar reactive oxygen species are hazardous both directly and through the indoor chemistry they promote. Some products such as electronic air cleaners may produce ozone incidentally. This proposed addendum prohibits intentional production of ozone and similar species and sets limits on the incidental ozone production allowed.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

## Comment Deadline: September 5, 2021

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [rshanley@ashrae.org](mailto:rshanley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE Addendum aa to BSR/ASHRAE Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This addendum adds the zeotropic refrigerant blend R-468C to Tables 4-2 and D-2.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [rshanley@ashrae.org](mailto:rshanley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE Addendum z to BSR/ASHRAE Standard 34-202x, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019)

This addendum adds the zeotropic refrigerant blend R-468B to Tables 4-2 and D-2.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [etoto@ashrae.org](mailto:etoto@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/ICC/IES/USGBC Addendum i to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)

Addendum i adds a new requirement that electric storage water heaters with a tank capacity greater than 20 gallons (75 L) be provided with demand responsive controls in accordance with ANSI/CTA-2045-B.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Emily Toto; [etoto@ashrae.org](mailto:etoto@ashrae.org)

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [etoto@ashrae.org](mailto:etoto@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/IES Addendum aj to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

This addendum clarifies the process for calculating the minimum efficiency of dry-type transformers using the baseline building performance method in Appendix G. The new guidance explains that linear interpolation is to be used when the kVA rating falls between values listed in Table 8.4.4.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

## Comment Deadline: September 5, 2021

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [etoto@ashrae.org](mailto:etoto@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/IES Addendum ak to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

Addendum ak modifies Section G3.1.1 to provide a new threshold at which an HVAC zone is to be modeled separately from the rest of a multizone system within the baseline building. The new values target spaces with high internal equipment loads and occupant densities such as commercial kitchens and auditoriums.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [etoto@ashrae.org](mailto:etoto@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/IES Addendum an to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

This addendum modifies Appendix G requirements related HVAC System Fan operation to remove an existing conflict between the requirements in Table G3.1 (#4) and G3.1.2.4. The new language clarifies that systems not relying on HVAC fans for ventilation are designed to cycle with load rather than occupancy.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [etoto@ashrae.org](mailto:etoto@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/IES Addendum ao to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

Addendum ao proposes changes to the requirements for air curtains and controls. Minor revisions to the language associated with air curtain units in Sections 5.4.3.3, 6.4.3.9, and 10.4.5 are proposed for clarity. Section 10.4.5 is also modified to remove the requirement for jet direction (the angle at which the jet is oriented towards an opening); this information is to be determined from the manufacturer's instructions.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

## Comment Deadline: September 5, 2021

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [rshanley@ashrae.org](mailto:rshanley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/IES Addendum b to BSR/ASHRAE/IES Standard 100-202x, Energy Efficiency in Existing Buildings (addenda to ANSI/ASHRAE/IES Standard 100-2018)

This addendum adds energy efficiency measures to Informative Annex E, "Energy Efficiency Measures."

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Online Comment Database at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

### FM (FM Approvals)

1151 Boston-Providence Turnpike, Norwood, MA 02062 | [josephine.mahnken@fmaprovals.com](mailto:josephine.mahnken@fmaprovals.com), [www.fmglobal.com](http://www.fmglobal.com)

#### **Revision**

BSR/FM 4477-202x, Vegetative Roof Systems (revision of ANSI/FM 4477-2016)

This test standard provides a procedure for evaluating vegetative roof systems for their performance in regard to fire from above and below the structural deck, foot traffic, puncture resistance, and water leakage.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Josephine Mahnken; [josephine.mahnken@fmaprovals.com](mailto:josephine.mahnken@fmaprovals.com)

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [jsnider@nsf.org](mailto:jsnider@nsf.org), [www.nsf.org](http://www.nsf.org)

#### **Revision**

BSR/NSF 14-202x (i120r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2020)

This Standard establishes minimum physical performance and health effects requirements for plastic piping system components and related materials. These criteria were established for the protection of public health and the environment.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Jason Snider; [jsnider@nsf.org](mailto:jsnider@nsf.org)

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [mleslie@nsf.org](mailto:mleslie@nsf.org), [www.nsf.org](http://www.nsf.org)

#### **Revision**

BSR/NSF 330-202x (i12r1), Glossary of Drinking Water Treatment Unit Terminology (revision of ANSI/NSF 330-2020)

This Standard establishes definitions for drinking water treatment units and related components.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Monica Leslie; [mleslie@nsf.org](mailto:mleslie@nsf.org)

## Comment Deadline: September 5, 2021

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [mleslie@nsf.org](mailto:mleslie@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF 401-202x (i25r1), Drinking Water Treatment Units - Emerging Compounds/Incidental Contaminants (revision of ANSI/NSF 401-2020)

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of drinking water treatment systems that are designed to reduce specific emerging compounds/incidental contaminants in public or private water supplies, such as pharmaceutical, personal care products, and endocrine-disrupting compounds. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners as well as the minimum service-related obligations that the manufacturer shall extend to system owners.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Monica Leslie; [mleslie@nsf.org](mailto:mleslie@nsf.org)

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [rbrooker@nsf.org](mailto:rbrooker@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF 455-3-202x (i23r2), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2019)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of cosmetic products to ISO 22716, Good Manufacturing Practices (GMPs) for cosmetics, as well as incorporating additional retailer requirements. It refers to the requirements for GMPs applicable to all cosmetics. It will assist in the determination of adequate facilities and controls for cosmetic manufacture with sufficient quality to ensure suitability for intended use.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Rachel Brooker; [rbrooker@nsf.org](mailto:rbrooker@nsf.org)

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [rbrooker@nsf.org](mailto:rbrooker@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF 455-4-202x (i28r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

This Standard is intended to define a standardized approach for auditing to determine the level of compliance of over-the-counter (OTC) drug products to 21 CFR Part 210, Current Good Manufacturing Practice in Manufacturing, Processing, Packing, or Holding of Drugs; General; and 21 CFR Part 211, Current Good Manufacturing Practice for Finished Pharmaceuticals, as well as incorporating additional retailer requirements. It refers to the requirements for good manufacturing practices (GMPs) applicable to all OTC drugs. It will assist in the determination of adequate facilities and controls for OTC drug manufacture with sufficient quality to ensure suitability for intended use.

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Rachel Brooker; [rbrooker@nsf.org](mailto:rbrooker@nsf.org)



## Comment Deadline: September 5, 2021

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | griff.edwards@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 668-202x, Standard for Hose Valves for Fire-Protection Service (revision of ANSI/UL 668-2016)

This proposal covers: (1) Update of standard; (2) Friction loss of hose valves.

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

Send comments (copy [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)

333 Pfingsten Road, Northbrook, IL 60062-2096 | Susan.P.Malohn@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 61730-1-202x, Standard for Safety for Photovoltaic (PV) module safety qualification - Part 1:

Requirements for Construction (revision of ANSI/UL 61730-1-2020)

(1) New PV compatibility identifier marking and documentation requirements.

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

Send comments (copy [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)

333 Pfingsten Road, Northbrook, IL 60062-2096 | Susan.P.Malohn@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 61730-2-202x, Standard for Safety for Photovoltaic (PV) module safety qualification Part 2: Requirements for Testing (revision of ANSI/UL 61730-2-2020a)

(1) Addition of frame compression test to assess frame type.

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

Send comments (copy [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: September 20, 2021

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

410 North 21st Street, Colorado Springs, CO 80904 | [tambrosius@aafs.org](mailto:tambrosius@aafs.org), [www.aafs.org](http://www.aafs.org)

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

BSR/ASB STD 096-202x, Standard Method for the Examination and Documentation of Ammunition and Ammunition Components (new standard)

This standard provides procedures for the examination and documentation of ammunition and/or ammunition components by forensic firearm and toolmark examiners or technicians. Following these procedures, an examiner or technician will be able to document and report the examination of ammunition and/or ammunition components. This document does not cover the microscopic comparison of toolmarks on ammunition components.

Single copy price: Free

Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: <http://www.asbstandardsboard.org/notice-of-standard-development-and-coordination/>.

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

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

1001 N Fairfax Street, Alexandria, VA 22314-1587 | [tech@agma.org](mailto:tech@agma.org), [www.agma.org](http://www.agma.org)

#### ***Reaffirmation***

BSR/AGMA 9000-D11-2011 (R202x), Flexible Couplings - Potential Unbalance Classification (reaffirmation of ANSI/AGMA 9000-D11-2011 (R2016))

This standard defines classes of flexible coupling potential unbalance, one of which the user must select to meet the needs of their system.

Single copy price: \$79.00

Obtain an electronic copy from: [tech@agma.org](mailto:tech@agma.org)

Order from: [tech@agma.org](mailto:tech@agma.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [aboutaleb@agma.org](mailto:aboutaleb@agma.org)

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

1001 N Fairfax Street, Alexandria, VA 22314-1587 | [tech@agma.org](mailto:tech@agma.org), [www.agma.org](http://www.agma.org)

#### ***Reaffirmation***

BSR/AGMA 9006-A-2016 (R202x), Flexible Couplings - Basis for Rating (reaffirmation of ANSI/AGMA 9006-A-2016)

This standard presents criteria and guidelines for the basis of flexible coupling ratings. It is not a comprehensive rating method that can be applied to a specific product or manufacturer.

Single copy price: \$68.00

Obtain an electronic copy from: [tech@agma.org](mailto:tech@agma.org)

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## Comment Deadline: September 20, 2021

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

1001 N Fairfax Street, Alexandria, VA 22314-1587 | [tech@agma.org](mailto:tech@agma.org), [www.agma.org](http://www.agma.org)

#### ***Reaffirmation***

BSR/AGMA 9110-A11-2011 (R202x), Flexible Couplings - Potential Unbalance Classification - Metric Edition (reaffirmation of ANSI/AGMA 9110-A11-2011 (R2016))

This metric standard defines classes of flexible coupling potential unbalance, one of which the user must select to meet the needs of their system.

Single copy price: \$73.00

Obtain an electronic copy from: [tech@agma.org](mailto:tech@agma.org)

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [aboutaleb@agma.org](mailto:aboutaleb@agma.org)

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

2311 Wilson Boulevard, Arlington, VA 22201-3001 | [kbest@ahrinet.org](mailto:kbest@ahrinet.org), [www.ahrinet.org](http://www.ahrinet.org)

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

BSR/AHRI Standard 840 (I-P)-202x, Performance Rating of Unit Ventilators (new standard)

The purpose of this standard is to establish, for Unit Ventilators: definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.

Single copy price: Free

Obtain an electronic copy from: <https://ahrinet.org/standards/how-to-participate>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [AHRI\\_Standards@ahrinet.org](mailto:AHRI_Standards@ahrinet.org)

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

2311 Wilson Boulevard, Arlington, VA 22201-3001 | [kbest@ahrinet.org](mailto:kbest@ahrinet.org), [www.ahrinet.org](http://www.ahrinet.org)

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

BSR/AHRI Standard 841 (SI)-202x, Performance Rating of Unit Ventilators (new standard)

The purpose of this standard is to establish, for Unit Ventilators: definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.

Single copy price: Free

Obtain an electronic copy from: <https://ahrinet.org/standards/how-to-participate>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [AHRI\\_Standards@ahrinet.org](mailto:AHRI_Standards@ahrinet.org)

## Comment Deadline: September 20, 2021

### ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Park, IL 60526 | [kmurdoch@ans.org](mailto:kmurdoch@ans.org), [www.ans.org](http://www.ans.org)

#### **Reaffirmation**

BSR/ANS 19.10-2009 (R202x), Methods for Determining Neutron Fluence in BWR and PWR Pressure Vessel and Reactor Internals (reaffirmation of ANSI/ANS 19.10-2009 (R2016))

This standard provides criteria for performing and validating the sequence of calculations required for the prediction of the fast neutron fluence  $\phi$  in the reactor vessel. Applicable to PWR and BWR plants the standard addresses flux attenuation from the core through the vessel to the cavity and provides criteria for generating cross sections, spectra, transport and comparisons with in- and ex-vessel measurements, validation, uncertainties, and flux extrapolation to the inside vessel surface.

Single copy price: \$68.00

Obtain an electronic copy from: [orders@ans.org](mailto:orders@ans.org)

Order from: [orders@ans.org](mailto:orders@ans.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Patricia Schroeder; [pschroeder@ans.org](mailto:pschroeder@ans.org)

### ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Park, IL 60526 | [kmurdoch@ans.org](mailto:kmurdoch@ans.org), [www.ans.org](http://www.ans.org)

#### **Reaffirmation**

BSR/ANS 53.1-2011 (R202x), Nuclear Safety Design Process for Modular Helium-Cooled Reactor Plants (reaffirmation of ANSI/ANS 53.1-2011 (R2016))

This standard establishes the nuclear safety criteria, functional performance and design requirements of structures, systems, and components (SSC) for modular helium reactor (MHR) plants applicable to performance-based, risk-informed regulation.

Single copy price: \$233.00

Obtain an electronic copy from: [orders@ans.org](mailto:orders@ans.org)

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Patricia Schroeder; [pschroeder@ans.org](mailto:pschroeder@ans.org)

### ASA (ASC S3) (Acoustical Society of America)

1305 Walt Whitman Road, Melville, NY 11747 | [standards@acousticalsociety.org](mailto:standards@acousticalsociety.org), [www.acousticalsociety.org](http://www.acousticalsociety.org)

#### **Revision**

BSR/ASA S3.35-202x, Standard Method of Measurement of Performance Characteristics of Hearing Aids Under Simulated Real-Ear Working Conditions (revision of ANSI/ASA S3.35-2010 (R2020))

This standard describes techniques used to measure hearing aids under simulated conditions of real ear use. For the purpose of these measurements, a standard manikin and ear simulator are used to represent a typical hearing aid wearer. Acoustical requirements of the test space as well as how the manikin is positioned with respect to the sound source are given. Two methods are presented to control the level of the incident sound field during the testing. Procedures are provided to obtain both the aided gain and the insertion gain, in order to determine the increase in sound pressure relative to the unaided condition, with and without the acoustical effect of the manikin. Procedures are also provided to obtain the directional response of the hearing aid on the manikin as a function of azimuth and elevation of the sound source, and to calculate the directivity index from the directional response.

Single copy price: \$165.00

Obtain an electronic copy from: [standards@acousticalsociety.org](mailto:standards@acousticalsociety.org)

Order from: Nancy Blair-DeLeon; [standards@acousticalsociety.org](mailto:standards@acousticalsociety.org)

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### ASC X9 (Accredited Standards Committee X9, Incorporated)

275 West Street, Annapolis, MD 21401 | [Ambria.frazier@x9.org](mailto:Ambria.frazier@x9.org), [www.x9.org](http://www.x9.org)

#### Revision

BSR X9.58-202x, Financial transaction messages - Electronic Benefits Transfer (EBT) - Supplemental Nutrition Assistance Program (SNAP) and cash benefit programs (revision of ANSI X9.58-2010)

The standard provides all parties involved in Electronic Benefits Transfer (EBT) transactions for SNAP and cash benefit programs with technical specifications for exchanging financial transaction messages between an acquirer and an EBT card issuer processor. It specifies message structure, format and content, data elements and values for data elements used in the Food Stamp program. The method by which settlement takes place is not within the scope of this standard.

Single copy price: \$60.00

Obtain an electronic copy from: [ambria.frazier@x9.org](mailto:ambria.frazier@x9.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Ambria Frazier; [Ambria.frazier@x9.org](mailto:Ambria.frazier@x9.org)

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [mweber@ashrae.org](mailto:mweber@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### Addenda

BSR/ASHRAE Addendum 55d-202x, Thermal Environmental Conditions for Human Occupancy (addenda to ANSI/ASHRAE Standard 55-2020)

Addendum d to Standard 55-2020 proposes changes to the ERF code. The new code allows the user to calculate ERF and delta mean radiant temperature for an additional body position: horizontal.

Single copy price: \$35.00

Obtain an electronic copy from: Free download at <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [etoto@ashrae.org](mailto:etoto@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### Addenda

BSR/ASHRAE/IES Addendum aq to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019)

This addendum introduces a new Table 7.4 for Service Water Heating (SWH) piping insulation based on typical usage and operating temperatures. Existing Section 6.8.3 requirements have also been reorganized so that two of the footnotes related to insulation thickness are now featured more prominently in the body of the standard.

Single copy price: \$35.00

Obtain an electronic copy from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

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## Comment Deadline: September 20, 2021

### ASME (American Society of Mechanical Engineers)

Two Park Avenue, New York, NY 10016-5990 | [ansibox@asme.org](mailto:ansibox@asme.org), [www.asme.org](http://www.asme.org)

#### Revision

BSR/ASME A17.1/CSA B44-202x, Safety Code for Elevator and Escalators (revision of ANSI/ASME A17.1/CSA B44-2019)

This standard covers safety requirements for elevators, escalators, dumbwaiters, moving walks, and material lifts.

Single copy price: Free

Obtain an electronic copy from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Geraldine Burdeshaw; [burdeshawg@asme.org](mailto:burdeshawg@asme.org)

### ASSP (Safety) (American Society of Safety Professionals)

520 N. Northwest Highway, Park Ridge, IL 60068 | [rblanchette@assp.org](mailto:rblanchette@assp.org), [www.assp.org](http://www.assp.org)

#### Revision

BSR/ASSP Z117.1-202x, Safety Requirements for Entering Confined Spaces (revision and redesignation of ANSI ASSE Z117.1-2016)

This standard provides minimum safety requirements to be followed while entering, exiting, and working in confined spaces at ambient atmospheric pressure.

Single copy price: \$110.00

Obtain an electronic copy from: [rblanchette@assp.org](mailto:rblanchette@assp.org)

Order from: Rick Blanchette; [rblanchette@assp.org](mailto:rblanchette@assp.org)

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

### ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | [accreditation@astm.org](mailto:accreditation@astm.org), [www.astm.org](http://www.astm.org)

#### Revision

BSR/ASTM D3679-202x, Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding (revision of ANSI/ASTM D3679-2017)

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

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#### Revision

BSR/ASTM F683-202x, Practice for Selection and Application of Thermal Insulation for Piping and Machinery (revision of ANSI/ASTM F683-2014)

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

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#### Revision

BSR/ASTM F859-202x, Specification for Heat-Sanitizing Commercial Dishwashing Machines, Multiple Tank, Conveyor Rack Type (revision of ANSI/ASTM F859-2015)

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

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#### Revision

BSR/ASTM F993-202x, Specification for Valve Locking Devices (revision of ANSI/ASTM F993-2017)

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

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#### Revision

BSR/ASTM F1138-202x, Specification for Spray Shields for Mechanical Joints (revision of ANSI/ASTM F1138-1998 (R2014))

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

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | [accreditation@astm.org](mailto:accreditation@astm.org), [www.astm.org](http://www.astm.org)

#### Revision

BSR/ASTM F1199-202x, Specification for Cast (All Temperatures and Pressures) and Welded Pipe Line Strainers (150 psig and 150F Maximum) (revision of ANSI/ASTM F1199-2010 (R2020))

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

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## Comment Deadline: September 20, 2021

### ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | [accreditation@astm.org](mailto:accreditation@astm.org), [www.astm.org](http://www.astm.org)

#### Revision

BSR/ASTM F1200-202x, Specification for Fabricated (Welded) Pipe Line Strainers (Above 150 psig and 150F (1 MPa and 65C)) (revision of ANSI/ASTM F1200-1988 (R2016))

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

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### ATIS (Alliance for Telecommunications Industry Solutions)

1200 G Street NW, Washington, DC 20005 | [dgreco@atis.org](mailto:dgreco@atis.org), [www.atis.org](http://www.atis.org)

#### Revision

BSR/ATIS 0600030-202x, Line-Powering of Telecommunications Equipment on Outside Plant (OSP) Copper Twisted Pair Loops (revision of ANSI/ATIS 0600030-2016)

There are various standards that define telecommunications line-powering voltage limits, power limits, and safety-related precautions. This standard attempts to bring all those requirements into one document. This standard also addresses performance of line-, express-, and span-powering systems (also known as Remote Feeding Telecommunications Circuits [RFT]) in fault conditions and provides manufacturers, installers, and users of line power systems with a consistent fault condition testing and recording method. The fault current levels determined through this analysis can be compared to standards IEC 60479-1, Effects of Current on Human Beings and Livestock, Part 1-General Aspects and IEC 60479-2, Effects of Current on Human Beings and Livestock, Part 2-Special Aspects.

Single copy price: Free

Obtain an electronic copy from: [dgreco@atis.org](mailto:dgreco@atis.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Drew Greco; [dgreco@atis.org](mailto:dgreco@atis.org)

### BHMA (Builders Hardware Manufacturers Association)

17 Faulkner Drive, Niantic, CT 06357 | [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com), [www.buildershardware.com](http://www.buildershardware.com)

#### Revision

BSR/BHMA A156.7-202x, Standard for Template Hinge Dimensions (revision of ANSI/BHMA A156.7-2016)

This Standard covers the requirements for the length, width, thickness, offset, and screw hole spacing for builders template hinges. Included in the standard are hinge identification symbols and screw sizes. Methods for identifying template hinges that conform to the Standard are provided.

Single copy price: \$36.00

Obtain an electronic copy from: [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

Order from: Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

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



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### CSA (CSA America Standards Inc.)

8501 E. Pleasant Valley Road, Cleveland, OH 44131 | [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org), [www.csagroup.org](http://www.csagroup.org)

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

BSR/CSA T200-202x, Evaluation of software development and cybersecurity programs (new standard)  
This standard provides a methodology to determine the maturity of a software development organization. It also provides a broad view to both domains and practice areas that are measurable and a baseline for product/solution cyber risk. This will include both security and privacy elements of the organization that directly impact the product(s)/solution(s) being developed. As a result of the process, an external organization will be able to determine the overall maturity of both the organization and products being developed.

Single copy price: Free

Obtain an electronic copy from: [ansi@csagroup.org](mailto:ansi@csagroup.org)

Order from: David Zimmerman; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [ansi@csagroup.org](mailto:ansi@csagroup.org)

### NECA (National Electrical Contractors Association)

1201 Pennsylvania Avenue, Washington, DC 20004 | [Aga.golriz@necanet.org](mailto:Aga.golriz@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

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

BSR/NECA 5-202X, Recommended Practice for Prefabrication of Electrical Installations for Construction (new standard)

This standard describes recommended on-site and off-site practices for prefabrication of electrical installations for construction projects. The term "prefabrication" collectively refers to any kind of completion of electrical components, (sub-) assemblies, or modules of a construction project that is taken from the final point of installation to a difference, off-site location and performed in a controlled environment.

Single copy price: \$30.00 (NECA members); \$60.00 (non-members)

Obtain an electronic copy from: [neis@necanet.org](mailto:neis@necanet.org)

Order from: Aga Golriz; [Aga.golriz@necanet.org](mailto:Aga.golriz@necanet.org)

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

### NEMA (ASC C8) (National Electrical Manufacturers Association)

1300 North 17th Street, Arlington, VA 22209 | [Khaled.Masri@nema.org](mailto:Khaled.Masri@nema.org), [www.nema.org](http://www.nema.org)

#### ***Revision***

BSR NEMA WC 57/ICEA S-73-532-202x, Standard for Control, Thermocouple, Extension and Instrumentation Cables (revision of ANSI/NEMA WC 57/ICEA S-73-532-2014)

This standard applies to materials, construction, and testing of multiconductor control, thermocouple extension, and instrumentation cables rated up to and including 125 degree C. Control cables are multiconductor cables that convey electrical signals used for monitoring or controlling electrical power systems and their associated processes.

Single copy price: \$198.00

Obtain an electronic copy from: [Khaled.Masri@nema.org](mailto:Khaled.Masri@nema.org)

Order from: Khaled Masri; [Khaled.Masri@nema.org](mailto:Khaled.Masri@nema.org)

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

## Comment Deadline: September 20, 2021

### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **NFPA FIRE PROTECTION STANDARDS DOCUMENTATION**

*The National Fire Protection Association announces the availability of the NFPA Second Draft Report for concurrent review and comment by NFPA and ANSI. These Second Draft Reports contain the disposition of public comment(s) that were received for standards in the 2021 Fall Revision Cycle (available for review on the next edition tab for each standard). All Notices of Intent to Make A Motion on the 2021 Fall Revision Cycle Second Draft Report must be received by the following date: **September 2, 2021**.*

*For more information on the rules and deadlines for NFPA standards in cycle, please check the NFPA website ([www.nfpa.org](http://www.nfpa.org)) or contact Standards Administration at NFPA. Those who submit comments to NFPA's online submission system on the 2021 Fall Revision Cycle Standards are invited to copy ANSI's Board of Standards Review.*

#### **Revision**

BSR/NFPA 385-202x, Standard for Tank Vehicles for Flammable and Combustible Liquids (revision of ANSI/NFPA 385-2017)

This standard shall apply to tank vehicles used for the transportation of asphalt and for the transportation of normally stable flammable and combustible liquids with flash points below 200°F (93°C). Normally stable materials are those having the relative capacity to resist changes in their chemical composition that would produce violent reactions or detonations despite exposure to air, water, or heat, including the normal range of conditions encountered in handling, storage, or transportation. Unstable (reactive) flammable and combustible liquids are liquids that, in the pure state or as commercially produced or transported, will vigorously polymerize, decompose, condense, or become self-reactive under conditions of shock, pressure, or temperature. This standard shall also provide minimum requirements for the design and construction of cargo tanks and their appurtenances and shall set forth certain matters pertaining to tank vehicles. The provisions of this standard shall not preclude the use of additional safeguards for tank vehicles used for the transportation of flammable and combustible liquids having characteristics that introduce additional factors such as high rates of expansion, instability, corrosiveness, and toxicity. The provisions of this standard shall also apply to cutback asphalts that have flash points below 100°F ...

Obtain an electronic copy from: [www.nfpa.org/385Next](http://www.nfpa.org/385Next)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [www.nfpa.org/385Next](http://www.nfpa.org/385Next)

### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### **Revision**

BSR/NFPA 409-202x, Standard on Aircraft Hangars (revision of ANSI/NFPA 409-2016)

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

Obtain an electronic copy from: [www.nfpa.org/409Next](http://www.nfpa.org/409Next)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [www.nfpa.org/409Next](http://www.nfpa.org/409Next)

## Comment Deadline: September 20, 2021

### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### Revision

BSR/NFPA 415-202x, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways (revision of ANSI/NFPA 415-2016)

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

Obtain an electronic copy from: [www.nfpa.org/415Next](http://www.nfpa.org/415Next)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [www.nfpa.org/415Next](http://www.nfpa.org/415Next)

### NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

#### Revision

BSR/NFPA 423-202x, Standard for Construction and Protection of Aircraft Engine Test Facilities (revision of ANSI/NFPA 423-2016)

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

Obtain an electronic copy from: [www.nfpa.org/423Next](http://www.nfpa.org/423Next)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [www.nfpa.org/423Next](http://www.nfpa.org/423Next)

### NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | [mleslie@nsf.org](mailto:mleslie@nsf.org), [www.nsf.org](http://www.nsf.org)

#### Revision

BSR/NSF/CAN 61-202x (i157r2), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 61-2020)

This Standard is intended to cover specific materials or products that come into contact with: drinking water, drinking water treatment chemicals, or both. The focus of the Standard is evaluation of contaminants or impurities imparted indirectly to drinking water. The products and materials covered include, but are not limited to, process media (e.g., carbon, sand), protective materials (e.g., coatings, linings, liners), joining and sealing materials (e.g., solvent cements, welding materials, gaskets), pipes and related products (e.g., pipes, tanks, fittings), mechanical devices used in treatment/transmission/distribution systems (e.g., valves, chlorinators, separation membranes, point-of-entry (POE) drinking water treatment systems), and mechanical plumbing devices (e.g., faucets, endpoint control valves).

Single copy price: Free

Obtain an electronic copy from: [https://standards.nsf.org/apps/group\\_public/download.php/60015/61i157r2%20-%20Table%20N-1.3%20Test%20Waters%20JC%20Memo%20&%20Ballot.pdf](https://standards.nsf.org/apps/group_public/download.php/60015/61i157r2%20-%20Table%20N-1.3%20Test%20Waters%20JC%20Memo%20&%20Ballot.pdf)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Monica Leslie; [mleslie@nsf.org](mailto:mleslie@nsf.org)

## Comment Deadline: September 20, 2021

### TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Arlington, VA 22201-2598 | [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org), [www.tiaonline.org](http://www.tiaonline.org)

#### **Revision**

BSR/TIA 4966-A-202x, Telecommunications Infrastructure Standard for Educational Facilities (revision and redesignation of ANSI/TIA 4966-2014)

This standard is nearing the 5-year mark and should be reviewed for content; updating to incorporate content of the Addendum, current standards, and best practice.

Single copy price: \$112.00

Obtain an electronic copy from: TIA ([standards-process@tiaonline.org](mailto:standards-process@tiaonline.org))

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [Nicolette.A.Weeks@ul.org](mailto:Nicolette.A.Weeks@ul.org), <https://ul.org/>

#### **Reaffirmation**

BSR/UL 14B-2008 (R202x), Standard for Sliding Hardware for Standard, Horizontally Mounted Tin-Clad Fire Doors (reaffirmation of ANSI/UL 14B-2008 (R2017))

This proposal covers: (1) Reaffirmation and continuance of the ninth edition of the Standard for Sliding Hardware for Standard, Horizontally Mounted Tin-Clad Fire Doors, UL 14B, as a standard.

Single copy price: Free

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

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### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [griff.edwards@ul.org](mailto:griff.edwards@ul.org), <https://ul.org/>

#### **Reaffirmation**

BSR/UL 1489-2016 (R202x), Standard for Fire Tests of Fire-Resistant Pipe Protection Systems Carrying Combustible Liquids (reaffirmation of ANSI/UL 1489-2016)

This proposal covers: (1) Reaffirmation and continuance of the first edition of the Standard for Fire Tests of Fire-Resistant Pipe Protection Systems Carrying Combustible Liquids, UL 1489, as a standard.

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### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Nicolette.A.Weeks@ul.org, <https://ul.org/>

#### **Reaffirmation**

BSR/UL 1820-2004 (R202x), Standard for Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics (reaffirmation of ANSI/UL 1820-2004 (R2017))

This proposal covers: (1) Reaffirmation and continuance of the fourth edition of the Standard for Fire Test of Pneumatic Tubing for Flame and Smoke Characteristics, UL 1820, as a standard.

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Send comments (copy [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)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Joshua.Johnson@ul.org, <https://ul.org/>

#### **Revision**

BSR/UL 1653-202X, Electrical Nonmetallic Tubing (revision of ANSI/UL 1653-2019)

(1) Resistance to Deflection Test Acceptance Criteria and Procedure; (2) Requirements for male threaded adapters or for transition couplings with internal threads.

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## Comment Deadline: October 5, 2021

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### **National Adoption**

INCITS/ISO/IEC 10373-6:2020/AM1:2021 [202x], Cards and security devices for personal identification - Test methods - Part 6: Contactless proximity objects - Amendment 1: Dynamic power level management (identical national adoption of ISO/IEC 10373-6:2020/AM1:2021)

Amendment 1 to ISO/IEC 10373-6:2020.

Single copy price: \$20.00

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700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### **National Adoption**

INCITS/ISO/IEC 10373-6:2020/AM2:2020 [202x], Cards and security devices for personal identification - Test methods - Part 6: Contactless proximity objects - Amendment 2: Enhancements for harmonization (identical national adoption of ISO/IEC 10373-6:2020/AM2:2020)

Amendment 2 to ISO/IEC 10373-6:2020.

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#### **National Adoption**

INCITS/ISO/IEC 11693-2:2009 [202x], Identification cards - Optical memory cards - Part 2: Co-existence of optical memory with other machine readable technologies (identical national adoption of ISO/IEC 11693-2:2009)

Defines the conditions under which optical memory can co-exist with other machine-readable card technologies.

Single copy price: \$48.00

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

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#### **National Adoption**

INCITS/ISO/IEC 11693-3:2015 [202x], Identification cards - Optical memory cards - Part 3: Authentication techniques (identical national adoption of ISO/IEC 11693-3:2015)

Defines the authentication techniques.

Single copy price: \$73.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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#### **National Adoption**

INCITS/ISO/IEC 14443-2:2020/AM1:2021 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 2: Radio frequency power and signal interface - Amendment 1: Dynamic power level management (identical national adoption of ISO/IEC 14443-2:2020/AM1:2021)

Amendment 1 to ISO/IEC 14443-2:2020.

Single copy price: \$20.00

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

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#### ***National Adoption***

INCITS/ISO/IEC 14443-3:2018/AM1:2021 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 3: Initialization and anticollision - Amendment 1: Dynamic power level management (identical national adoption of ISO/IEC 14443-3:2018/AM1:2021)

Amendment 1 to ISO/IEC 14443-3:2018.

Single copy price: \$20.00

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#### ***National Adoption***

INCITS/ISO/IEC 14443-3:2018/AM2:2020 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 3: Initialization and anticollision - Amendment 2: Enhancements for harmonization (identical national adoption of ISO/IEC 14443-3:2018/AM2:2020)

Amendment 2 to ISO/IEC 14443-3:2018.

Single copy price: \$20.00

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#### ***National Adoption***

INCITS/ISO/IEC 14443-4:2018/AM2:2020 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 4: Transmission protocol - Amendment 2: Enhancements for harmonization (identical national adoption of ISO/IEC 14443-4:2018/AM2:2020)

Amendment 2 to ISO/IEC 14443-4:2018.

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#### ***National Adoption***

INCITS/ISO/IEC 17839-1:2014 [202x], Information technology - Biometric System-on-Card - Part 1: Core requirements (identical national adoption of ISO/IEC 17839-1:2014)

Establishes functional architecture of a Biometric System-on-Card, definition of type S1 (fully ISO/IEC 7810 compliant) and type S2 implementation of a Biometric System-on-Card, sensor types in a Biometric System-on-Card, minimum requirements to a Biometric System-on-Card with respect to: discriminative power (i.e., biometric accuracy criteria), interfaces, power supply options.

Single copy price: \$48.00

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700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 17839-2:2015 [202x], Information technology - Biometric System-on-Card - Part 2: Physical characteristics (identical national adoption of ISO/IEC 17839-2:2015)

Defines the following: dimensions of a Biometric System-on-Card type S1 and type S2; position and size of the biometric capture device; minimum requirements to a Biometric System-on-Card with respect to: mechanical durability and man-machine interface and ergonomics. The standardization of other on-card devices such as an electronic display or a keypad is outside the scope of this part of ISO/IEC 17839.

Single copy price: \$48.00

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 17839-3:2016 [202x], Information technology - Identification cards - Biometric System-on-Card - Part 3: Logical information interchange mechanism (identical national adoption of ISO/IEC 17839-3:2016)

ISO/IEC 17839-3:2016: logical data structures for a BSoC, enrolment procedures, and usage of commands and data structures defined in other ISO standards for BSoC. ISO/IEC 17839-3:2016 does not define requirements for commands and data structures that apply to devices external to a BSoC, and commands and data structures that apply to logical interfaces inside a BSoC.

Single copy price: \$111.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)



## Comment Deadline: October 5, 2021

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 17839-2:2015/AM1:2021 [202x], Information technology - Biometric System-on-Card - Part 2: Physical characteristics - Amendment 1: Additional specifications for fingerprint biometric capture devices (identical national adoption of ISO/IEC 17839-2:2015/AM1:2021)

Amendment 1 to ISO/IEC 17839-2:2015.

Single copy price: \$20.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 18328-1:2015 [202x], Identification cards - ICC-managed devices - Part 1: General framework (identical national adoption of ISO/IEC 18328-1:2015)

Describes the general architecture of an ICC with ICC-managed devices. ISO/IEC 18328-1:2015 is one of a series of International Standards which outlines the content and the boundaries covered and standardized by the other parts of ISO/IEC 18328. The general principle of this part of ISO/IEC 18328 is that all activities regarding the ICC-managed devices are controlled by the card-IC. This principle also applies when ICC-managed devices are outside the card. ISO/IEC 18328-1:2015 is applicable for all kind of cards independent from interface technology for communication.

Single copy price: \$111.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 18328-3:2016 [202x], Identification cards - ICC-managed devices - Part 3: Organization, security and commands for interchange (identical national adoption of ISO/IEC 18328-3:2016)

Specifies the logical interface of an application supporting the necessary security features in a card-IC which communicates with the external world by a physical interface supporting APDUs. This application supports the usage of electronic devices.

Single copy price: \$200.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

## Comment Deadline: October 5, 2021

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 18328-4:2018 [202x], Identification cards - ICC-managed devices - Part 4: Test methods for logical characteristics (identical national adoption of ISO/IEC 18328-4:2018)

Specifies the test methods used for conformity testing, to determine whether an ICC with at least one ICC-managed device is considered to conform with the specifications of ISO/IEC 18328-3, e.g., device management and device handling.

Single copy price: \$175.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 18745-1:2018 [202x], Test methods for machine readable travel documents (MRTD) and associated devices - Part 1: Physical test methods for passport books (durability) (identical national adoption of ISO/IEC 18745-1:2018)

Provides a set of instructions for evaluation of MRPs which may incorporate contactless integrated circuits. This evaluation is an instrument to establish the ability in principle of a specific type of document to fulfill the requirements of use. It supplies a structured approach to evaluate MRPs by: defining reproducible stress methods to submit the document(s) under evaluation to specific stress or environmental conditions; defining reproducible evaluation methods to measure numerical values for specific document properties; defining test sequences that specify the order in which stress methods and evaluation methods are to be performed; defining test plans to link specific user requirements to test sequences and related parameters.

Single copy price: \$200.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 18584:2015 [202x], Information technology - Identification cards - Conformance test requirements for on-card biometric comparison applications (identical national adoption of ISO/IEC 18584:2015)

Establishes conformance test requirements for using general framework for on-card comparison applications, conformance test requirements for using work-sharing mechanism for on-card comparison applications, and conformance test requirements to check accomplishment of security policies for on-card biometric comparison that are specified in ISO/IEC 24787:2010.

Single copy price: \$111.00

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

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [comments@standards.incits.org](mailto:comments@standards.incits.org)

## Comment Deadline: October 5, 2021

### **TNI (The NELAC Institute)**

PO Box 2439, Weatherford, TX 76086 | robert.wyeth@nelac-institute.org, www.NELAC-Institute.org

#### **Revision**

BSR/TNI EL-V2-M1-Rev. 1.0-202x, Environmental Laboratory Standard; Volume 2. General Requirements for Accreditation Bodies Accrediting Environmental Laboratories; Module 1: General Requirements (revision and redesignation of ANSI/TNI EL-V2-2016)

Volume 2 of the TNI Environmental Lab Sector Standard is entitled General Requirements for Accreditation Bodies Accrediting Environmental Laboratories. This volume of the Standard includes 3 Modules. Module 1 refers to the requirements of Laboratories; Module 2 refers to requirements of ABs with respect to Proficiency Testing; and Module 3 refers to requirements for on-site assessments. The consensus standards development group responsible for this volume has consolidated Module 1 (EL-V2-M1-Rev. 0.1) and Module 3 (EL-V2-M3-Rev.0.1) into a proposed revision of EL-V2-M1-Rev. 1.0. The existence of separate modules has created confusion and difficulties for accrediting bodies with duplicative and overlapping requirements. The revised EL-V2-M1-Rev. 1.0 will also provide for incorporation of ISO/IEC 17011 requirements into a single resource. No action is currently being proposed for EL-V2-M2 at this time. This BSR-8 is related to the proposed efforts to merge EL-V2-M1 and EL-V2-M3 only. EL-V2-M3-Rev. 0.1 will be withdrawn upon conclusion of this project.

Single copy price: Free

Obtain an electronic copy from: Robert.Wyeth@nelac-institute.org

Order from: Robert Wyeth; robert.wyeth@nelac-institute.org

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

### **UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Nicolette.A.Weeks@ul.org, https://ul.org/

#### **Revision**

BSR/UL 1254-202X, Standard for Pre-Engineered and Engineered Dry and Pre-Engineered Wet Chemical Extinguishing System Units (revision of ANSI/UL 1254-2020)

UL proposes the inclusion of Engineered Dry Chemical Extinguishing System Units and an update to the salt-spray applicability requirements.

Single copy price: Free

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

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

Send comments (copy 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 [psa@ansi.org](mailto:psa@ansi.org).

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Reaffirmed Technical Report***

INCITS/ISO/IEC TR 19075-2:2015 [R2021], Information technology - Database languages - SQL Technical Reports - Part 2: SQL Support for Time-Related Information (reaffirm technical report)

This Technical Report describes the support in SQL for time related information. This Technical Report discusses the following features of the SQL language: Time-related datatypes, operations on time-related data, time-related predicates, application-time period tables, system-versioned tables, and bi-temporal tables.

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***Reaffirmed Technical Report***

INCITS/ISO/IEC TR 18015:2006 [R2021], Information technology - Programming languages, their environments and system software interfaces - Technical Report on C++ Performance (reaffirm technical report)

The aim of this technical report is to give the reader a model of time and space overheads implied by use of various C++ language and library features; debunk widespread myths about performance problems in C++; to present techniques for use of C++ in applications where performance matters; and to present techniques for implementing C++ standard language and library facilities to yield efficient code.

## Project Withdrawn

In accordance with clause 4.2.1.3.3 Discontinuance of a standards project of the ANSI Essential Requirements, an accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

### **ASSP (Safety) (American Society of Safety Professionals)**

520 N. Northwest Highway, Park Ridge, IL 60068 | [LBauerschmidt@assp.org](mailto:LBauerschmidt@assp.org), [www.assp.org](http://www.assp.org)

BSR/ASSP Z590.7-202x, Management Systems for the Implementation of Total Worker Health® Programs in the Workplace (new standard)

Inquiries may be directed to Lauren Bauerschmidt; [LBauerschmidt@assp.org](mailto:LBauerschmidt@assp.org)

## Project Withdrawn

### **NEMA (ASC C8) (National Electrical Manufacturers Association)**

1300 North 17th Street, Arlington, VA 22209 | Khaled.Masri@nema.org, www.nema.org

BSR ICEA S-99-689-202x, ICEA Standard for Broadband Twisted-Pair Cable-Filled, Polyolefin-Insulated, Copper Conductor Technical Requirements (revision of ANSI/ICEA S-99-689-2012)

Inquiries may be directed to Khaled Masri; Khaled.Masri@nema.org

## Withdrawal of an ANS by ANSI-Accredited Standards Developer

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

### **NEMA (ASC C8) (National Electrical Manufacturers Association)**

1300 North 17th Street, Arlington, VA 22209 | Khaled.Masri@nema.org, www.nema.org

ANSI/ICEA S-99-689-2012, ICEA Standard for Broadband TP Filled, PE, Cu

Questions may be directed to: Khaled Masri; Khaled.Masri@nema.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.

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

410 North 21st Street, Colorado Springs, CO 80904 | [tambrosius@aafs.org](mailto:tambrosius@aafs.org), [www.aafs.org](http://www.aafs.org)

### *New Standard*

ANSI/ASB Std 120-2021, Standard for the Analytical Scope and Sensitivity of Forensic Toxicological Testing of Blood in Impaired Driving Investigations (new standard) Final Action Date: 7/28/2021

## **ABMA (ASC B3) (American Bearing Manufacturers Association)**

1001 N. Fairfax Street, Alexandria, VA 22314 | [aboutaleb@agma.org](mailto:aboutaleb@agma.org), [www.americanbearings.org](http://www.americanbearings.org)

### *National Adoption*

ANSI ABMA ISO 12240-4-AXX-2021, Spherical plain bearings - Part 4: Spherical plain bearing rod ends (identical national adoption of ISO 12240-4:1998) Final Action Date: 8/2/2021

## **ASC X9 (Accredited Standards Committee X9, Incorporated)**

275 West Street, Annapolis, MD 21401 | [janet.busch@x9.org](mailto:janet.busch@x9.org), [www.x9.org](http://www.x9.org)

### *New Standard*

ANSI X9.145-2021, Framework for Financial Instrument Identification (new standard) Final Action Date: 7/29/2021

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

180 Technology Parkway, Peachtree Corners, GA 30092 | [mweber@ashrae.org](mailto:mweber@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

### *Addenda*

ANSI/ASHRAE Addendum 62.2f-2019, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2019) Final Action Date: 7/30/2021

### *Addenda*

ANSI/ASHRAE Addendum 62.2g-2019, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2019) Final Action Date: 7/30/2021

### *Addenda*

ANSI/ASHRAE/ASHE Addendum 170c-2021, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 7/30/2021

### *Addenda*

ANSI/ASHRAE/IES Addendum o to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019) Final Action Date: 7/24/2021

### *Addenda*

ANSI/ASHRAE/IES Addendum u to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019) Final Action Date: 7/24/2021

### *Addenda*

ANSI/ASHRAE/IES Addendum v to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2019) Final Action Date: 7/24/2021

**AVIXA (Audiovisual and Integrated Experience Association)**

11242 Waples Mill Road, Fairfax, VA 22030 | [lovercash@avixa.org](mailto:lovercash@avixa.org), [www.avixa.org](http://www.avixa.org)

*Revision*

ANSI/AVIXA V201.01-2021, Image System Contrast Ratio (revision and redesignation of ANSI/INFOCOMM 3M-2011)  
Final Action Date: 8/2/2021

**ECIA (Electronic Components Industry Association)**

13873 Park Center Road, Herndon, VA 20171 | [Idonohoe@ecianow.org](mailto:Idonohoe@ecianow.org), [www.ecianow.org](http://www.ecianow.org)

*Revision*

ANSI/EIA 364-G-2021, Electrical Connector/Socket Test Procedures Including Environmental Classifications (revision and redesignation of ANSI/EIA 364-F-2014) Final Action Date: 7/29/2021

**NEMA (ASC C8) (National Electrical Manufacturers Association)**

1300 North 17th Street, Arlington, VA 22209 | [Khaled.Masri@nema.org](mailto:Khaled.Masri@nema.org), [www.nema.org](http://www.nema.org)

*Revision*

ANSI ICEA S-107-704-2021, Broadband Buried Service Wire, Filled, Polyolefin Insulated, Copper Conductor (revision of ANSI/ICEA S-107-704-2012) Final Action Date: 7/27/2021

**NFPA (National Fire Protection Association)**

One Batterymarch Park, Quincy, MA 02269-9101 | [PFoley@nfpa.org](mailto:PFoley@nfpa.org), [www.nfpa.org](http://www.nfpa.org)

*Revision*

ANSI/NFPA 1150-2022, Standard on Foam Chemicals for Fires in Class A Fuels (revision of ANSI/NFPA 1150-2017) Final Action Date: 7/28/2021

**PHTA (Pool and Hot Tub Alliance)**

2111 Eisenhower Avenue, Suite 500, Alexandria, VA 22314 | [standards@phta.org](mailto:standards@phta.org), [www.PHTA.org](http://www.PHTA.org)

*Revision*

ANSI/PHTA/ICC-15-2021, Standard for Residential Swimming Pool and Spa Energy Efficiency (revision, redesignation and consolidation of ANSI/APSP/ICC S-15-2011, ANSI/APSP/ICC S-15 (Addenda)-2013) Final Action Date: 8/2/2021

**SAIA (ASC A92) (Scaffold & Access Industry Association)**

400 Admiral Boulevard, Kansas City, MO 64106 | [deanna@saiaonline.org](mailto:deanna@saiaonline.org), [www.saiaonline.org](http://www.saiaonline.org)

*Revision*

ANSI/SAIA A92.2-2021, Vehicle-Mounted Elevating and Rotating Aerial Devices (revision of ANSI/SAIA A92.2-2015)  
Final Action Date: 7/28/2021

**TIA (Telecommunications Industry Association)**

1320 North Courthouse Road, Arlington, VA 22201-2598 | [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org), [www.tiaonline.org](http://www.tiaonline.org)

*\* New Standard*

ANSI/TIA 604-19-2021, FOCIS 19-Fiber Optic Connector Intermateability Standard- Type: CS Connector (new standard)  
Final Action Date: 7/30/2021

*Revision*

ANSI/TIA 604-10C-2021, FOCIS-10 - Fiber Optic Connector Intermateability Standard, Type LC (revision and redesignation of ANSI/TIA 604-10B-2008 (R2015)) Final Action Date: 7/29/2021

**UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Joshua.Johnson@ul.org, <https://ul.org/>

*Revision*

ANSI/UL 360-2021, Standard for Liquid-Tight Flexible Metal Conduit (revision of ANSI/UL 360-2020) Final Action Date: 8/2/2021

*Revision*

ANSI/UL 817-2021b, Standard for Safety for Cord Sets and Power-Supply Cords (revision of ANSI/UL 817-2018) Final Action Date: 7/28/2021

*Revision*

ANSI/UL 2158-2021, Standard for Safety for Electric Clothes Dryers (revision of ANSI/UL 2158-2019) Final Action Date: 7/30/2021

*Revision*

ANSI/UL 6141-2021, Standard for Safety for Wind Turbines Permitting Entry of Personnel (revision of ANSI/UL 6141-2020) Final Action Date: 7/27/2021



# Call for Members (ANS Consensus Bodies)

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

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

1001 N Fairfax Street, Alexandria, VA 22314-1587 | tech@agma.org, www.agma.org  
Amir Aboutaleb; tech@agma.org

BSR/AGMA 9000-D11-2011 (R202x), Flexible Couplings - Potential Unbalance Classification (reaffirmation of ANSI/AGMA 9000-D11-2011 (R2016))

BSR/AGMA 9006-A-2016 (R202x), Flexible Couplings - Basis for Rating (reaffirmation of ANSI/AGMA 9006-A-2016)

BSR/AGMA 9110-A11-2011 (R202x), Flexible Couplings - Potential Unbalance Classification - Metric Edition (reaffirmation of ANSI/AGMA 9110-A11-2011 (R2016))

## **AHAM (Association of Home Appliance Manufacturers)**

1111 19th Street N.W., Washington, DC 20036 | mwilliams@aham.org, www.aham.org  
Matthew Williams; mwilliams@aham.org

BSR/AHAM 60591-202x, Cooking fume extractors - Methods for measuring performance (national adoption with modifications of IEC 61591)

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

2311 Wilson Boulevard, Arlington, VA 22201-3001 | kbest@ahrinet.org, www.ahrinet.org  
Karl Best; kbest@ahrinet.org

BSR/AHRI Standard 840 (I-P)-202x, Performance Rating of Unit Ventilators (new standard)

BSR/AHRI Standard 841 (SI)-202x, Performance Rating of Unit Ventilators (new standard)

## **ASA (ASC S3) (Acoustical Society of America)**

1305 Walt Whitman Road, Melville, NY 11747 | standards@acousticalsociety.org, www.acousticalsociety.org  
Nancy Blair-DeLeon; standards@acousticalsociety.org

BSR/ASA S3.35-202x, Standard Method of Measurement of Performance Characteristics of Hearing Aids Under Simulated Real-Ear Working Conditions (revision of ANSI/ASA S3.35-2010 (R2020))

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

2950 Niles Road, Saint Joseph, MI 49085 | vangilder@asabe.org, https://www.asabe.org/  
Carla VanGilder; vangilder@asabe.org

ANSI/ASAE S478.1-2012 (R2016), Roll-Over Protective Structures (ROPS) for Compact Utility Tractors (withdrawal of ANSI/ASAE S478.1-2012 (R2016))

BSR/ASABE/ISO 12003-1-MONEYEAR-202x, Tractors for agriculture and forestry - Roll-over protective structures on narrow tractors - Part 1: Front-mounted ROPS (identical national adoption of ISO 12003-1:2021 and revision of ANSI/ASABE/ISO 12003-1-SEP17)

BSR/ASABE/ISO 12003-2-2008 MONEYEAR-202x, Tractors for agriculture and forestry - Roll-over protective structures on narrow tractors - Part 2: Rear-mounted ROPS (identical national adoption of ISO 12003-2:2021 and revision of ANSI/ASABE/ISO 12003-2-2008 SEP2107)

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

2950 Niles Road, Saint Joseph, MI 49085 | [vangilder@asabe.org](mailto:vangilder@asabe.org), <https://www.asabe.org/>

BSR/ASAE S390.7 (ISO 12934-202x) MONYEAR, Tractors and machinery for agriculture and forestry - Basic types - Vocabulary (identical national adoption of ISO 12934:2021 and revision of ANSI/ASAE S390.6 (ISO 12934:2013)-DEC16)

**ASSP (Safety) (American Society of Safety Professionals)**

520 N. Northwest Highway, Park Ridge, IL 60068 | [rblanchette@assp.org](mailto:rblanchette@assp.org), [www.assp.org](http://www.assp.org)  
Rick Blanchette; [rblanchette@assp.org](mailto:rblanchette@assp.org)

BSR/ASSP Z117.1-202x, Safety Requirements for Entering Confined Spaces (revision and redesignation of ANSI ASSE Z117.1-2016)

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

1200 G Street NW, Washington, DC 20005 | [dgreco@atis.org](mailto:dgreco@atis.org), [www.atis.org](http://www.atis.org)  
Drew Greco; [dgreco@atis.org](mailto:dgreco@atis.org)

BSR/ATIS 0600030-202x, Line-Powering of Telecommunications Equipment on Outside Plant (OSP) Copper Twisted Pair Loops (revision of ANSI/ATIS 0600030-2016)

**BHMA (Builders Hardware Manufacturers Association)**

17 Faulkner Drive, Niantic, CT 06357 | [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com), [www.buildershardware.com](http://www.buildershardware.com)  
Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

BSR/BHMA A156.10-202x, Standard for Power-Operated Pedestrian Doors (revision of ANSI/BHMA A156.10-2017)

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

8501 E. Pleasant Valley Road, Cleveland, OH 44131 | [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org), [www.csagroup.org](http://www.csagroup.org)  
David Zimmerman; [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org)

BSR/CSA T200-202x, Evaluation of software development and cybersecurity programs (new standard)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)  
Deborah Spittle; [comments@standards.incits.org](mailto:comments@standards.incits.org)

INCITS/ISO/IEC 10373-6:2020/AM1:2021 [202x], Cards and security devices for personal identification - Test methods - Part 6: Contactless proximity objects - Amendment 1: Dynamic power level management (identical national adoption of ISO/IEC 10373-6:2020/AM1:2021)

INCITS/ISO/IEC 10373-6:2020/AM2:2020 [202x], Cards and security devices for personal identification - Test methods - Part 6: Contactless proximity objects - Amendment 2: Enhancements for harmonization (identical national adoption of ISO/IEC 10373-6:2020/AM2:2020)

INCITS/ISO/IEC 11693-2:2009 [202x], Identification cards - Optical memory cards - Part 2: Co-existence of optical memory with other machine-readable technologies (identical national adoption of ISO/IEC 11693-2:2009)

INCITS/ISO/IEC 11693-3:2015 [202x], Identification cards - Optical memory cards - Part 3: Authentication techniques (identical national adoption of ISO/IEC 11693-3:2015)

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

700 K Street NW, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 14443-2:2020/AM1:2021 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 2: Radio frequency power and signal interface - Amendment 1: Dynamic power level management (identical national adoption of ISO/IEC 14443-2:2020/AM1:2021)

INCITS/ISO/IEC 14443-3:2018/AM1:2021 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 3: Initialization and anticollision - Amendment 1: Dynamic power level management (identical national adoption of ISO/IEC 14443-3:2018/AM1:2021)

INCITS/ISO/IEC 14443-3:2018/AM2:2020 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 3: Initialization and anticollision - Amendment 2: Enhancements for harmonization (identical national adoption of ISO/IEC 14443-3:2018/AM2:2020)

INCITS/ISO/IEC 14443-4:2018/AM2:2020 [202x], Cards and security devices for personal identification - Contactless proximity objects - Part 4: Transmission protocol - Amendment 2: Enhancements for harmonization (identical national adoption of ISO/IEC 14443-4:2018/AM2:2020)

INCITS/ISO/IEC 17839-1:2014 [202x], Information technology - Biometric System-on-Card - Part 1: Core requirements (identical national adoption of ISO/IEC 17839-1:2014)

INCITS/ISO/IEC 17839-2:2015 [202x], Information technology - Biometric System-on-Card - Part 2: Physical characteristics (identical national adoption of ISO/IEC 17839-2:2015)

INCITS/ISO/IEC 17839-3:2016 [202x], Information technology - Identification cards - Biometric System-on-Card - Part 3: Logical information interchange mechanism (identical national adoption of ISO/IEC 17839-3:2016)

INCITS/ISO/IEC 17839-2:2015/AM1:2021 [202x], Information technology - Biometric System-on-Card - Part 2: Physical characteristics - Amendment 1: Additional specifications for fingerprint biometric capture devices (identical national adoption of ISO/IEC 17839-2:2015/AM1:2021)

INCITS/ISO/IEC 18328-1:2015 [202x], Identification cards - ICC-managed devices - Part 1: General framework (identical national adoption of ISO/IEC 18328-1:2015)

INCITS/ISO/IEC 18328-3:2016 [202x], Identification cards - ICC-managed devices - Part 3: Organization, security and commands for interchange (identical national adoption of ISO/IEC 18328-3:2016)

INCITS/ISO/IEC 18328-4:2018 [202x], Identification cards - ICC-managed devices - Part 4: Test methods for logical characteristics (identical national adoption of ISO/IEC 18328-4:2018)

INCITS/ISO/IEC 18745-1:2018 [202x], Test methods for machine readable travel documents (MRTD) and associated devices - Part 1: Physical test methods for passport books (durability) (identical national adoption of ISO/IEC 18745-1:2018)

INCITS/ISO/IEC 18584:2015 [202x], Information technology - Identification cards - Conformance test requirements for on-card biometric comparison applications (identical national adoption of ISO/IEC 18584:2015)

**NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Washington, DC 20004 | Aga.golriz@necanet.org, www.neca-neis.org  
 Aga Golriz; Aga.golriz@necanet.org

BSR/NECA 5-202X, Recommended Practice for Prefabrication of Electrical Installations for Construction (new standard)

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

1300 North 17th Street, Rosslyn, VA 22209 | David.Richmond@nema.org, www.nema.org  
 David Richmond; David.Richmond@nema.org

BSR C136.19-202x, Roadway and Area Lighting Equipment High-Pressure Sodium (HPS) and Retrofit HPS Lamps for Mercury Ballasts - Guide for Selection (revision of ANSI C136.19-2017)

**NSF (NSF International)**

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org  
 Jason Snider; jsnider@nsf.org

BSR/NSF 14-202x (i120r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2020)

BSR/NSF 330-202x (i12r1), Glossary of Drinking Water Treatment Unit Terminology (revision of ANSI/NSF 330-2020)

BSR/NSF 401-202x (i25r1), Drinking Water Treatment Units - Emerging Compounds/Incidental Contaminants (revision of ANSI/NSF 401-2020)

BSR/NSF 455-3-202x (i23r2), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2019)

BSR/NSF 455-4-202x (i28r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2020)

BSR/NSF/CAN 61-202x (i157r2), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 61-2020)

**RVIA (Recreational Vehicle Industry Association)**

1899 Preston White Drive, Reston, VA 20191-4326 | kperkins@rvia.org, www.rvia.org  
 Kent Perkins; kperkins@rvia.org

BSR/RVIA EGS-1-202x, Standard for Engine Generator Sets for RV Safety Requirements (revision of ANSI/RVIA EGS-1-2018)

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

15 Technology Parkway South, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org  
 William Millians; standards@tappi.org

BSR/TAPPI T 409 sp-202x, Machine direction of paper and paperboard (revision of ANSI/TAPPI T 409 sp-2015)

BSR/TAPPI T 449 om-202x, Bacteriological examination of paper and paperboard (revision of ANSI/TAPPI T 449 om-2014)

**TIA (Telecommunications Industry Association)**

1320 North Courthouse Road, Arlington, VA 22201-2598 | [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org), [www.tiaonline.org](http://www.tiaonline.org)  
Teesha Jenkins; [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org)

BSR/TIA 4966-A-202x, Telecommunications Infrastructure Standard for Educational Facilities  
(revision and redesignation of ANSI/TIA 4966-2014)

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

929 W. Portobello Avenue, Mesa, AZ 85210 | [jing.kwok@vita.com](mailto:jing.kwok@vita.com), [www.vita.com](http://www.vita.com)  
Jing Kwok; [jing.kwok@vita.com](mailto:jing.kwok@vita.com)

BSR/VITA 46.0-202x, VPX Baseline Standard (revision of ANSI/VITA 46.0-2019)

# Call for Members (ANS Consensus Bodies)

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## ANSI Accredited Standards Developer

### 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

## ANSI Accredited Standards Developer

### SCTE (Society of Cable Telecommunications Engineers)

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

SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities. Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures. More information is available at [www.scte.org](http://www.scte.org) or by e-mail from [standards@scte.org](mailto:standards@scte.org).

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

# American National Standards (ANS) Announcements

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## Corrections

### AWS - American Welding Society

#### AWS B5.20 should be AWS B5.21

In the PINS section of July 2, 2021 Standards Action, there was an error in the Designation for **AWS B5.20**. The designation should have been listed as **BSR/AWS B5.21-202x**. Please direct inquiries to: Sandra Richiez; [srichiez@aws.org](mailto:srichiez@aws.org)

# Accreditation Announcements (Standards Developers)

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## Public Review of Revised ASD Operating Procedures

### AMCA - Air Movement and Control Association

**Comment Deadline: August 29, 2021**

The **AMCA - Air Movement and Control Association**, an ANSI Member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on AMCA-sponsored American National Standards, under which it was last reaccredited in 2018. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Joseph Brooks, Air Movement and Control Association (AMCA); 30 West University Drive, Arlington Heights, IL 60004-1893; (847) 394-0150; [jbrooks@amca.org](mailto:jbrooks@amca.org)

[Click here to view/download a copy of the revisions during the public review period.](#)

Please submit any public comments on the revised procedures to AMCA by **August 30, 2021**, with a copy to the ExSC Recording Secretary in ANSI's New York Office ([jthompso@ANSI.org](mailto:jthompso@ANSI.org)).



## American National Standards (ANS) Process

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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:

### Where to find Procedures, Guidance, Interpretations and More...

**Please visit ANSI's website ([www.ansi.org](http://www.ansi.org))**

- 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: <https://www.ansi.org/portal/psawebforms/>
- Information about standards Incorporated by Reference (IBR): <https://ibr.ansi.org/>
- 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, please email us at: [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>

# American National Standards 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 (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)

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 “American National Standards Maintained Under Continuous Maintenance.” Questions? [psa@ansi.org](mailto:psa@ansi.org).

# ANSI-Accredited Standards Developers (ASD) Contacts

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment, Call for Members 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 the PSA Department at [psa@ansi.org](mailto:psa@ansi.org).

## AAFS

American Academy of Forensic Sciences  
410 North 21st Street  
Colorado Springs, CO 80904  
[www.aafs.org](http://www.aafs.org)

Teresa Ambrosius  
[tambrosius@aafs.org](mailto:tambrosius@aafs.org)

## ABMA (ASC B3)

American Bearing Manufacturers Association  
1001 N. Fairfax Street  
Alexandria, VA 22314  
[www.americanbearings.org](http://www.americanbearings.org)

Amir Aboutaleb  
[aboutaleb@agma.org](mailto:aboutaleb@agma.org)

## AGMA

American Gear Manufacturers Association  
1001 N Fairfax Street  
Alexandria, VA 22314  
[www.agma.org](http://www.agma.org)

Amir Aboutaleb  
[tech@agma.org](mailto:tech@agma.org)

## AHAM

Association of Home Appliance Manufacturers  
1111 19th Street N.W.  
Washington, DC 20036  
[www.aham.org](http://www.aham.org)

Matthew Williams  
[mwilliams@aham.org](mailto:mwilliams@aham.org)

## AHRI

Air-Conditioning, Heating, and Refrigeration Institute  
2311 Wilson Boulevard  
Arlington, VA 22201  
[www.ahrinet.org](http://www.ahrinet.org)  
Karl Best  
[kbest@ahrinet.org](mailto:kbest@ahrinet.org)

## ANS

American Nuclear Society  
555 North Kensington Avenue  
La Grange Park, IL 60526  
[www.ans.org](http://www.ans.org)

Kathryn Murdoch  
[kmurdoch@ans.org](mailto:kmurdoch@ans.org)

## ASA (ASC S3)

Acoustical Society of America  
1305 Walt Whitman Road  
Melville, NY 11747  
[www.acousticalsociety.org](http://www.acousticalsociety.org)

Nancy Blair-DeLeon  
[standards@acousticalsociety.org](mailto:standards@acousticalsociety.org)

## ASABE

American Society of Agricultural and Biological Engineers  
2950 Niles Road  
Saint Joseph, MI 49085  
<https://www.asabe.org/>

Carla VanGilder  
[vangilder@asabe.org](mailto:vangilder@asabe.org)

## ASC X9

Accredited Standards Committee X9, Incorporated  
275 West Street  
Annapolis, MD 21401  
[www.x9.org](http://www.x9.org)

Ambria Frazier  
[Ambria.frazier@x9.org](mailto:Ambria.frazier@x9.org)

Janet Busch  
[janet.busch@x9.org](mailto:janet.busch@x9.org)

## ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.  
180 Technology Parkway  
Peachtree Corners, GA 30092  
[www.ashrae.org](http://www.ashrae.org)

Connor Barbaree  
[CBarbaree@ashrae.org](mailto:CBarbaree@ashrae.org)

Emily Toto  
[etoto@ashrae.org](mailto:etoto@ashrae.org)

Mark Weber  
[mweber@ashrae.org](mailto:mweber@ashrae.org)

Ryan Shanley  
[rshanley@ashrae.org](mailto:rshanley@ashrae.org)

## ASME

American Society of Mechanical Engineers  
Two Park Avenue  
New York, NY 10016  
[www.asme.org](http://www.asme.org)

Terrell Henry  
[ansibox@asme.org](mailto:ansibox@asme.org)

## ASPE

American Society of Plumbing Engineers  
6400 Shafer Court  
Rosemont, IL 60018  
[www.aspe.org](http://www.aspe.org)

Gretchen Pienta  
[gpienta@aspe.org](mailto:gpienta@aspe.org)

## ASSP (Safety)

American Society of Safety Professionals  
520 N. Northwest Highway  
Park Ridge, IL 60068  
[www.assp.org](http://www.assp.org)

Rick Blanchette  
[rblanchette@assp.org](mailto:rblanchette@assp.org)

## ASTM

ASTM International  
100 Barr Harbor Drive  
West Conshohocken, PA 19428  
[www.astm.org](http://www.astm.org)

Laura Klineburger  
[accreditation@astm.org](mailto:accreditation@astm.org)

## ATIS

Alliance for Telecommunications Industry Solutions  
1200 G Street NW  
Washington, DC 20005  
[www.atis.org](http://www.atis.org)

Drew Greco  
[dgreco@atis.org](mailto:dgreco@atis.org)

## ANSI-Accredited Standards Developers Contact Information

**AVIXA**

Audiovisual and Integrated Experience  
Association  
11242 Waples Mill Road  
Fairfax, VA 22030  
www.avixa.org

Loanna Overcash  
lovercash@avixa.org

**AWS**

American Welding Society  
8669 NW 36th Street  
Miami, FL 33166  
www.aws.org

Rakesh Gupta  
gupta@aws.org

Stephen Borrero  
sborrero@aws.org

**BHMA**

Builders Hardware Manufacturers  
Association  
17 Faulkner Drive  
Niantic, CT 06357  
www.buildershardware.com

Michael Tierney  
mtierney@kellencompany.com

**CSA**

CSA America Standards Inc.  
8501 E. Pleasant Valley Road  
Cleveland, OH 44131  
www.csagroup.org

David Zimmerman  
ansi.contact@csagroup.org

**ECIA**

Electronic Components Industry  
Association  
13873 Park Center Road  
Herndon, VA 20171  
www.ecianow.org

Laura Donohoe  
ldonohoe@ecianow.org

**FM**

FM Approvals  
1151 Boston-Providence Turnpike  
Norwood, MA 02062  
www.fmglobal.com

Josephine Mahnken  
josephine.mahnken@fmapprovals.com

**ITI (INCITS)**

InterNational Committee for Information  
Technology Standards  
700 K Street NW  
Washington, DC 20001  
www.incits.org

Deborah Spittle  
comments@standards.incits.org

**NECA**

National Electrical Contractors Association  
1201 Pennsylvania Avenue  
Washington, DC 20004  
www.neca-neis.org

Aga Golriz  
Aga.golriz@necanet.org

**NEMA (ASC C136)**

National Electrical Manufacturers  
Association  
1300 North 17th Street  
Rosslyn, VA 22209  
www.nema.org

David Richmond  
David.Richmond@nema.org

**NEMA (ASC C8)**

National Electrical Manufacturers  
Association  
1300 North 17th Street  
Arlington, VA 22209  
www.nema.org

Khaled Masri  
Khaled.Masri@nema.org

**NFPA**

National Fire Protection Association  
One Batterymarch Park  
Quincy, MA 02269  
www.nfpa.org

Patrick Foley  
PFoley@nfpa.org

**NSF**

NSF International  
789 N. Dixboro Road  
Ann Arbor, MI 48105  
www.nsf.org

Jason Snider  
jsnider@nsf.org

Monica Leslie  
mleslie@nsf.org

Rachel Brooker  
rbrooker@nsf.org

**PHTA**

Pool and Hot Tub Alliance  
2111 Eisenhower Avenue, Suite 500  
Alexandria, VA 22314  
www.PHTA.org

Genevieve Lynn  
standards@phta.org

**RVIA**

Recreational Vehicle Industry Association  
1899 Preston White Drive  
Reston, VA 20191  
www.rvia.org

Kent Perkins  
kperkins@rvia.org

**SAIA (ASC A92)**

Scaffold & Access Industry Association  
400 Admiral Boulevard  
Kansas City, MO 64106  
www.saiaonline.org

DeAnna Martin  
deanna@saiaonline.org

**SPRI**

Single Ply Roofing Industry  
465 Waverley Oaks Road  
Waltham, MA 02452  
www.spri.org

Linda King  
info@spri.org

**TAPPI**

Technical Association of the Pulp and  
Paper Industry  
15 Technology Parkway South  
Peachtree Corners, GA 30092  
www.tappi.org

William Millians  
standards@tappi.org

**TIA**

Telecommunications Industry Association  
1320 North Courthouse Road  
Arlington, VA 22201  
www.tiaonline.org

Teesha Jenkins  
standards-process@tiaonline.org

## ANSI-Accredited Standards Developers Contact Information

**TNI**

The NELAC Institute  
PO Box 2439  
Weatherford, TX 76086  
[www.NELAC-Institute.org](http://www.NELAC-Institute.org)

Robert Wyeth  
[robert.wyeth@nelac-institute.org](mailto:robert.wyeth@nelac-institute.org)

**UL**

Underwriters Laboratories  
12 Laboratory Drive  
Research Triangle Park, NC 27709  
<https://ul.org/>

Griff Edwards  
[griff.edwards@ul.org](mailto:griff.edwards@ul.org)

Joshua Johnson  
[Joshua.Johnson@ul.org](mailto:Joshua.Johnson@ul.org)

Nicolette Weeks  
[Nicolette.A.Weeks@ul.org](mailto:Nicolette.A.Weeks@ul.org)

**UL**

Underwriters Laboratories  
333 Pfingsten Road  
Northbrook, IL 60062  
<https://ul.org/>

Amy Walker  
[Amy.K.Walker@ul.org](mailto:Amy.K.Walker@ul.org)

Susan Malohn  
[Susan.P.Malohn@ul.org](mailto:Susan.P.Malohn@ul.org)

**UL**

Underwriters Laboratories  
47173 Benicia Street  
Fremont, CA 94538  
<https://ul.org/>

Linda Phinney  
[Linda.L.Phinney@ul.org](mailto:Linda.L.Phinney@ul.org)

**VITA**

VMEbus International Trade Association  
(VITA)  
929 W. Portobello Avenue  
Mesa, AZ 85210  
[www.vita.com](http://www.vita.com)

Jing Kwok  
[jing.kwok@vita.com](mailto:jing.kwok@vita.com)



# ISO Draft International Standards

This section lists proposed standards that the International Organization for Standardization (ISO) is 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 members for comment and vote. Standards Action readers interested in reviewing and commenting on these documents should order copies from ANSI.

## COMMENTS

Comments regarding ISO documents should be sent to ANSI's ISO Team (isot@ansi.org); comments on ISO documents must be submitted electronically in the approved ISO template and as a Word document as other formats will not be accepted. The final date for offering comments is listed after each draft.

## ORDERING INSTRUCTIONS

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

### Acoustics (TC 43)

ISO/DIS 5128, Acoustics - Measurement of interior vehicle noise - 10/14/2021, \$102.00

### Aircraft and space vehicles (TC 20)

ISO/DIS 14302, Space systems - Electromagnetic compatibility requirements - 11/8/2026, \$112.00

ISO/DIS 24330, Space systems - Rendezvous and Proximity Operations (RPO) and On Orbit Servicing (OOS) - Programmatic principles and practices - 11/8/2026, \$71.00

ISO/DIS 23629-12, UAS traffic management (UTM) - Part 12: Requirements for UTM service providers - 10/14/2021, \$98.00

### Anaesthetic and respiratory equipment (TC 121)

IEC 80601-2-26/DAMd1, Medical electrical equipment - Part 2 -26: Particular requirements for the basic safety and essential performance of electroencephalograph - Amendment 1, \$102.00

IEC 80601-2-59/DAMd1, Medical electrical equipment - Part 2 -59: Particular requirements for the basic safety and essential performance of screening thermographs for human febrile temperature screening - Amendment 1, \$29.00

### Banking and related financial services (TC 68)

ISO/DIS 16609, Financial services - Requirements for message authentication using symmetric techniques - 11/8/2028, \$62.00

### Biotechnology (TC 276)

ISO/DIS 20691, Biotechnology - Requirements for data formatting and description in the life sciences - 10/15/2021, \$119.00

### Building construction (TC 59)

ISO/DIS 6707-3, Buildings and civil engineering works - Vocabulary - Part 3: Sustainability terms - 10/14/2021, \$119.00

### Fluid power systems (TC 131)

ISO/FDIS 12151-3, Connections for hydraulic fluid power and general use - Hose fittings - Part 3: Hose fittings with ISO 6162-1 or ISO 6162-2 flange ends - 11/13/2013, \$58.00

### Gas cylinders (TC 58)

ISO/FDIS 23826, Gas cylinders - Ball valves - Specification and testing - 11/2/2013, \$88.00

ISO/FDIS 11114-2, Gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 2: Non-metallic materials - 11/13/2008, \$77.00

### Glass in building (TC 160)

ISO/FDIS 12543-1, Glass in building - Laminated glass and laminated safety glass - Part 1: Definitions and description of component parts - 11/3/2019, \$46.00

ISO/FDIS 12543-2, Glass in building - Laminated glass and laminated safety glass - Part 2: Laminated safety glass - 11/3/2022, FREE

ISO/FDIS 12543-3, Glass in building - Laminated glass and laminated safety glass - Part 3: Laminated glass - 11/3/2019, \$40.00

ISO/FDIS 12543-4, Glass in building - Laminated glass and laminated safety glass - Part 4: Test methods for durability - 11/3/2019, \$58.00

ISO/FDIS 12543-5, Glass in building - Laminated glass and laminated safety glass - Part 5: Dimensions and edge finishing - 11/3/2019, \$46.00

ISO/FDIS 12543-6, Glass in building - Laminated glass and laminated safety glass - Part 6: Appearance - 11/3/2019, \$40.00

#### **Healthcare organization management (TC 304)**

ISO/DIS 5472, Pandemic response (Respiratory) - Walk-through screening station - 11/8/2026, \$67.00

#### **Hydrometric determinations (TC 113)**

ISO/FDIS 748, Hydrometry - Measurement of liquid flow in open channels - Velocity area methods using point velocity measurements - 11/7/2017, \$112.00

ISO/FDIS 3716, Hydrometry - Functional requirements and characteristics of suspended-sediment samplers - 11/12/2027, \$62.00

#### **Industrial automation systems and integration (TC 184)**

ISO/FDIS 8000-110, Data quality - Part 110: Master data - Exchange of characteristic data: Syntax, semantic encoding, and conformance to data specification - 11/5/2028, \$77.00

ISO/DIS 8000-150, Data quality - Part 150: Data quality management: Roles and responsibilities - 10/17/2021, \$93.00

#### **Internal combustion engines (TC 70)**

ISO/DIS 7967-10, Reciprocating internal combustion engines - Vocabulary of components and systems - Part 10: Ignition systems - 11/9/2027, \$58.00

ISO/DIS 7967-12, Reciprocating internal combustion engines - Vocabulary of components and systems - Part 12: Exhaust emission control systems - 11/8/2028, \$46.00

#### **Light metals and their alloys (TC 79)**

ISO/DIS 4155, Magnesium and magnesium alloys - Determination of nickel - Inductively coupled plasma optical emission spectrometric method - 10/24/2021, FREE

ISO/DIS 4177, Magnesium and magnesium alloys - Determination of chromium - Inductively coupled plasma optical emission spectrometric method - 10/24/2021, FREE

ISO/DIS 4181, Magnesium and magnesium alloys - Determination of strontium - Inductively coupled plasma optical emission spectrometric method - 10/24/2021, FREE

ISO/DIS 4188, Magnesium and magnesium alloys - Determination of arsenic - Inductively coupled plasma optical emission spectrometric method - 10/24/2021, FREE

ISO/DIS 4189, Magnesium and magnesium alloys - Determination of sodium - Inductively coupled plasma optical emission spectrometric method - 10/24/2021, FREE

#### **Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)**

ISO/DIS 24139-1, Petroleum and natural gas industries - Corrosion resistant alloy clad bends and fittings for pipeline transportation system - Part 1: Clad bends - 10/14/2021, \$112.00

#### **Nuclear energy (TC 85)**

ISO/DIS 21243, Radiation protection - Performance criteria for laboratories performing initial cytogenetic dose assessment of mass casualties in radiological or nuclear emergencies - General principles and application to dicentric assay - 11/8/2028, \$71.00

#### **Optics and optical instruments (TC 172)**

ISO/DIS 17123-6, Optics and optical instruments - Field procedures for testing geodetic and surveying instruments - Part 6: Rotating lasers - 11/9/2027, \$93.00

#### **Other**

ISO/DIS 14087, Leather - Physical and mechanical tests - Determination of bending force - 11/9/2027, \$46.00

ISO/DIS 18218-1, Leather - Determination of ethoxylated alkylphenols - Part 1: Direct method - 10/15/2021, \$46.00

ISO/DIS 23702-1, Leather - Per- and polyfluoroalkyl substances - Part 1: Determination of non-volatile compounds by extraction method using liquid chromatography - 10/15/2021, \$82.00

#### **Paints and varnishes (TC 35)**

ISO/DIS 8130-4, Coating powders - Part 4: Calculation of lower explosion limit - 11/8/2026, \$33.00

ISO/DIS 11997-3, Paints and varnishes - Determination of resistance to cyclic corrosion conditions - Part 3: Testing of coating systems on materials and components in automotive construction - 11/8/2026, \$82.00

ISO/DIS 19403-1, Paints and varnishes - Wettability - Part 1: Terminology and general principles - 11/8/2026, \$53.00

### **Plastics (TC 61)**

ISO/DIS 11403-2, Plastics - Acquisition and presentation of comparable multipoint data - Part 2: Thermal and processing properties - 10/21/2021, \$46.00

### **Quality management and quality assurance (TC 176)**

ISO/DIS 10010, Quality management - Guidance to understand, evaluate and improve organizational quality culture to drive sustained success - 10/17/2021, \$71.00

### **Railway applications (TC 269)**

ISO/DIS 23054-1, Railway applications - Track geometry quality - Part 1: Characterisation of track geometry and track geometry quality - 11/8/2029, \$102.00

### **Road vehicles (TC 22)**

ISO/DIS 13215-2, Road vehicles - Reduction of misuse risk of child restraint systems - Part 2: Requirements and test procedures for correct installation (panel method) - 10/21/2021, \$58.00

ISO/DIS 13215-3, Road vehicles - Reduction of misuse risk of child restraint systems - Part 3: Prediction and assessment of misuse by Misuse Mode and Effect Analysis (MMEA) - 10/21/2021, \$58.00

### **Ships and marine technology (TC 8)**

ISO/DIS 24225, Ships and marine technology - Pneumatic quick-closing control devices - 10/17/2021, \$53.00

### **Starch (including derivatives and by-products) (TC 93)**

ISO/DIS 24683, High fructose syrup- Specifications and test methods - 11/8/2026, \$46.00

### **Textiles (TC 38)**

ISO/FDIS 2076, Textiles - Chemically manufactured fibres - Generic names - 11/3/2019, \$88.00

ISO/DIS 4333, Textiles - Determination of reduction activity of specific proteins derived from pollen and mite and other sources on textile products - 10/16/2021, \$71.00

### **Thermal insulation (TC 163)**

ISO/FDIS 12571, Hygrothermal performance of building materials and products - Determination of hygroscopic sorption properties - 11/13/2022, \$77.00

### **Tobacco and tobacco products (TC 126)**

ISO/DIS 24211, Vapour products - Determination of selected carbonyls in vapour product emissions - 10/15/2021, \$67.00

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

ISO/IEC DIS 5733, Information technology - Cloud Data Management Interface (CDMITM) Version 2.0 - 10/18/2021, \$245.00

ISO/IEC DIS 22954, Information technology - Office equipment - Automated colour profile distribution - 10/15/2021, \$46.00

ISO/IEC DIS 27099, Information Technology - Public key infrastructure - Practices and policy framework - 11/8/2029, \$155.00

ISO/IEC FDIS 13818-1, Information technology - Generic coding of moving pictures and associated audio information - Part 1: Systems -, \$230.00

ISO/IEC FDIS 22237-4, Information technology - Data centre facilities and infrastructures - Part 4: Environmental control - 11/9/2024, \$88.00

ISO/IEC FDIS 18000-63, Information technology - Radio frequency identification for item management - Part 63: Parameters for air interface communications at 860 MHz to 960 MHz Type C - 11/7/2011, \$245.00





# Newly Published ISO & IEC Standards

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

## ISO Standards

### Agricultural food products (TC 34)

**ISO 23776:2021**, Meat and meat products - Determination of total phosphorous content, \$111.00

### Banking and related financial services (TC 68)

**ISO 5116-1:2021**, Improving transparency in financial and business reporting - Harmonization topics - Part 1: European data point methodology for supervisory reporting, \$111.00

**ISO 5116-2:2021**, Improving transparency in financial and business reporting - Harmonization topics - Part 2: Guidelines for data point modelling, \$200.00

**ISO 5116-3:2021**, Improving transparency in financial and business reporting - Harmonization topics - Part 3: Mapping between DPM and MDM, \$225.00

### Copper, lead and zinc ores and concentrates (TC 183)

**ISO 13546:2021**, Copper concentrates - Determination of mercury content - Cold vapour atomic absorption spectrometric method, \$73.00

### Fine Bubble Technology (TC 281)

**ISO 21256-3:2021**, Fine bubble technology - Cleaning applications - Part 3: Test method for cleaning hard flooring surfaces, \$73.00

### Furniture (TC 136)

**ISO 23767:2021**, Children's furniture - Mattresses for cots and cribs - Safety requirements and test methods, \$149.00

### Governance of organizations (TC 309)

**ISO 37002:2021**, Whistleblowing management systems - Guidelines, \$175.00

### Graphical symbols (TC 145)

**ISO 7010/Amd3:2021**, Graphical symbols - Safety colours and safety signs - Registered safety signs - Amendment 3, \$20.00

### Health Informatics (TC 215)

**ISO 21393:2021**, Genomics informatics - Omics Markup Language (OML), \$200.00

### Mechanical testing of metals (TC 164)

**ISO 1143:2021**, Metallic materials - Rotating bar bending fatigue testing, \$149.00

**ISO 12135:2021**, Metallic materials - Unified method of test for the determination of quasistatic fracture toughness, \$250.00

### Mechanical vibration and shock (TC 108)

**ISO 13091-1/Amd2:2021**, Mechanical vibration - Vibrotactile perception thresholds for the assessment of nerve dysfunction - Part 1: Methods of measurement at the fingertips - Amendment 2, \$20.00

### Plain bearings (TC 123)

**ISO 14287:2021**, Plain bearings - Pad materials for tilting pad bearings, \$73.00

### Plastics (TC 61)

**ISO 1043-4:2021**, Plastics - Symbols and abbreviated terms - Part 4: Flame retardants, \$48.00

### Pulleys and belts (including veebelts) (TC 41)

**ISO 5287:2021**, Belt drives - V-belts for the automotive industry - Fatigue test, \$73.00

### Road vehicles (TC 22)

**ISO 16505/Amd1:2021**, Road vehicles - Ergonomic and performance aspects of Camera Monitor Systems - Requirements and test procedures - Amendment 1: ORP, FeV, MTF10MIN(1:1)/hor, MTF10MIN(1:1)/ver, \$20.00

**ISO 15765-4:2021**, Road vehicles - Diagnostic communication over Controller Area Network (DoCAN) - Part 4: Requirements for emissions-related systems, \$149.00

### Rubber and rubber products (TC 45)

**ISO 9026:2021**, Raw rubber or unvulcanized compounds - Determination of green strength, \$73.00

### Ships and marine technology (TC 8)

**ISO 23731:2021**, Marine technology - Marine environment impact assessment (MEIA) - Performance specification for in situ image-based surveys in deep seafloor environments, \$73.00

[ISO 23732:2021](#), Marine technology - Marine environment impact assessment (MEIA) - General protocol for observation of meiofaunal community, \$111.00

[ISO 23734:2021](#), Marine technology - Marine environment impact assessment (MEIA) - On-board bioassay to monitor seawater quality using delayed fluorescence of microalga, \$111.00

[ISO 24060:2021](#), Ships and marine technology - Ship software logging system for operational technology, \$73.00

### Steel (TC 17)

[ISO 4954:2021](#), Steels for cold heading and cold extruding, \$225.00

### Sterilization of health care products (TC 198)

[ISO 15883-5:2021](#), Washer-disinfectors - Part 5: Performance requirements and test method criteria for demonstrating cleaning efficacy, \$225.00

### Tobacco and tobacco products (TC 126)

[ISO 16055:2021](#), Tobacco and tobacco products - Monitor test piece for smoking machine - Requirements and use, \$73.00

### Traditional Chinese medicine (TC 249)

[ISO 23962:2021](#), Traditional Chinese medicine - Processed Aconitum carmichaelii lateral root, \$111.00

### Transport information and control systems (TC 204)

[ISO 22085-2:2021](#), Intelligent transport systems (ITS) - Nomadic device service platform for micro mobility - Part 2: Functional requirements and dataset definitions, \$149.00

## ISO Technical Reports

### Sludge recovery, recycling, treatment and disposal (TC 275)

[ISO/TR 20736:2021](#), Sludge recovery, recycling, treatment and disposal - Guidance on thermal treatment of sludge, \$250.00

## ISO Technical Specifications

### Health Informatics (TC 215)

[ISO/TS 82304-2:2021](#), Health software - Part 2: Health and wellness apps-Quality and reliability, \$225.00

### Rubber and rubber products (TC 45)

[ISO/TS 16095:2021](#), Reclaimed rubber derived from products containing mainly natural rubber - Evaluation procedure, \$73.00

[ISO/TS 16096:2021](#), Reclaimed isobutene-isoprene (IIR) rubber - Evaluation procedure, \$73.00

## ISO/IEC JTC 1, Information Technology

[ISO/IEC 20919:2021](#), Information technology - Linear tape file system (LTFS) Format specification, \$250.00

[ISO/IEC 11160-2:2021](#), Office equipment - Minimum information to be included in specification sheets - Part 2: Class 3 and Class 4 printers, \$149.00

## IEC Standards

### Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)

[IEC 62153-4-15 Ed. 2.0 b:2021](#), Metallic cables and other passive components test methods - Part 4-15: Electromagnetic compatibility (EMC) - Test method for measuring transfer impedance and screening attenuation - or coupling attenuation with triaxial cell, \$310.00

[S+ IEC 62153-4-15 Ed. 2.0 en:2021 \(Redline version\)](#), Metallic cables and other passive components test methods - Part 4-15: Electromagnetic compatibility (EMC) - Test method for measuring transfer impedance and screening attenuation - or coupling attenuation with triaxial cell, \$404.00

# International Electrotechnical Commission (IEC)

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## USNC Participants and USNC TAG Administrator Needed

### IEC Subcommittee (SC) 59N: Electrical Air Cleaners for Household and Similar Purposes

Response Deadline: August 6, 2021

**IEC approved one (1) new Committee:** *IEC Subcommittee (SC) 59N: Electrical air cleaners for household and similar purposes*

Individuals who are interested in becoming a USNC Technical Advisory Group (TAG) participant or the USNC TAG Administrator for the USNC TAG to IEC/SC 59N: Electrical air cleaners for household and similar purposes are invited to contact Ade Gladstein at [agladstein@ansi.org](mailto:agladstein@ansi.org) by **COB on Friday, August 6**.

Please see the scope for IEC/SC 59N below:

#### Scope

- *To prepare international standards on performance measurement methods for electrical air cleaners for household and similar purposes.*
- *NOTE 1: Cooking fume extractors are covered by SC 59K.*
- *NOTE 2: Health care equipment is under the scope of IEC TC 62 (Electrical equipment in medical practice).*

# International Organization for Standardization (ISO)

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## Call for U.S. TAG Administrator

### ISO/TC 82 – Mining and ISO/TC 82/SC 7 – Mine Closure and Reclamation Management

ANSI has been informed that CSA Group, the ANSI-accredited U.S. TAG Administrator for ISO/TC 82 – *Mining* and ISO/TC 82/SC 7 – *Mine closure and reclamation management*, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 82 operates under the following scope:

*Standardization of:*

- *specifications relating to specialized mining machinery and equipment used in opencast mines (e.g. conveyors, high wall miners, rock drill rigs and continuous surface miners) and all underground mining machinery and equipment for the extraction of solid mineral substances [e.g. road headers, continuous miners, rock drill rigs, raise boring machines, high wall miners, LHDs, mining auger boring machines, RMDSS (rapid mine development systems)]*
- *recommended practice in the presentation of plans and drawings used in mine surveying*
- *methods of calculation of mineral reserves*
- *mine reclamation management*
- *design of structures for mining industry.*
- *special refuge/rescue chambers*
- *shaft boring machines.*

*Excluded:*

- *foundation machines [e.g. piling, diaphragm walling, earth boring, jetting, grouting, drill rigs for soil and rock mixture (ISO/TC 195)]*
- *aggregate processing machines (e.g. screening, crushing)*
- *equipment and protective systems to be used in explosive atmospheres (IEC/TC 31)*
- *hand-held rock drills (ISO/TC 118)*
- *earth-moving machinery (by ISO/TC 127)*
- *geotechnics (ISO/TC 182)*
- *tunnel boring machines (TBMs) and associated machines and equipment (ISO/TC 195).*

ISO/TC 82/SC 7 operates under the following scope:

Standardization of mine reclamation management to minimize mine impacts that occur during the lifecycle of resource development, such as during exploration, extraction, suspension of operation, mine closure, reclamation, and follow-up management. Mine closure planning shall be re-established at every stage for sustainable resource development and risk management. However, it is expected that safety and health issues related to workplace activity will be excluded from this context. Mine closure planning shall be re-established at every stage for sustainable resource development and risk management.

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)).

# International Organization for Standardization (ISO)

## International (ISO) Secretariat Transfer

### ISO TC 104 - Freight Containers

**Reply Deadline: August 6, 2021**

Currently, the U.S. holds a leadership position as Secretariat of ISO/TC 104—*Freight Containers*. ANSI directly administers the Secretariat for ISO/TC 104 with the support of MHI. MHI has advised ANSI to relinquish its role as Secretariat for this committee beginning in 2022. Outreach was conducted within the current US/TAG membership and Emerson, a US/TAG member, has indicated its commitment to continue to fund ANSI for its role in directly administering the Secretariat. The US/TAG has approved this transfer from MHI to Emerson.

ISO/TC 104 operates under the following scope:

*Standardization of freight containers, having an external volume of one cubic meter (35.3 cubic feet) and greater, as regards terminology, classification, dimensions, specifications, handling, test methods and marking.*

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

## Transfer of TAG Administrator – U.S. TAG to ISO

### ISO/TC 104 - Freight Containers, ISO/TC 104/SC 1 - General Purpose Containers, ISO/TC 104/SC 4 - Identification and Communication

**Reply Deadline: August 6, 2021**

ANSI has been informed that MHI, the ANSI-accredited U.S. TAG Administrator for ISO/TC 104, ISO/TC 104/SC 1, ISO/TC 104/SC 2, and ISO/TC 104/SC4, wishes to relinquish their role as U.S. TAG Administrator effective December 31, 2021. Emerson, current US/TAG member, has committed to taking on the role as US/TAG Administrator beginning on January 1, 2022. The US/TAG has approved this transfer.

ISO/TC 104 and its SCs operate under the following scope:

*Standardization of freight containers, having an external volume of one cubic meter (35.3 cubic feet) and greater, as regards terminology, classification, dimensions, specifications, handling, test methods and marking.*

Organizations wishing to comment on the transfer of US/TAG Administrators from MHI to Emerson should contact ANSI's ISO Team ([isot@ansi.org](mailto:isot@ansi.org)).

# Registration of Organization Names in the United States

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

When organization names are submitted to ANSI for registration, they will be listed here alphanumerically.

Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

## Public Review

### FiRa

**Public Review: June 25 through September 27, 2021**

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

A challenge is initiated when a letter from an interested entity is received by the Registration Coordinator. The letter shall identify the alphanumeric organization name being challenged and state the rationale supporting the challenge. A challenge fee shall accompany the letter. After receipt of the challenge, the alphanumeric organization name shall be marked as challenged in the Public Review list. The Registration Coordinator shall take no further action to register the challenged name until the challenge is resolved among the disputing parties.

# Proposed Foreign Government Regulations

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## 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; F: (301) 926-1559; E: [usatbtep@nist.gov](mailto:usatbtep@nist.gov) or [notifyus@nist.gov](mailto:notifyus@nist.gov).



**BSR/ASHRAE Addendum g  
to ANSI/ASHRAE Standard 62.1-2019**

**Public Review Draft**

# **Proposed Addendum g to Standard 62.1-2019, Ventilation for Acceptable Indoor Air Quality**

**First Public Review (July 2021)  
(Draft shows Proposed  
Changes to Current Standard)**

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

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, [www.ashrae.org](http://www.ashrae.org).

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

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**ASHRAE, 180 Technology Parkway, Peachtree Corners, Georgia 30092**



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

## FOREWORD

*Residential occupancies that are 4 stories or more were removed from Standard 62.1 with the 2016 version. Some spaces within these buildings may still be under the scope of Standard 62.1 such as common corridors, lobbies, etc. This proposed addendum removes some items related to nontransient occupancies that are now under the scope of Standard 62.2, Ventilation and Acceptable Indoor Air Quality in Residential Buildings.*

*[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

## Addendum g to 62.1-2019

**Revise Table 6-1 as shown below. The remainder of Table 6-1 is unchanged.**

**Table 6-1 Minimum Ventilation Rates in Breathing Zone**

Occupancy Category	People Outdoor Air Rate $R_p$		Area Outdoor Air Rate $R_a$		Default Values	Air Class	OS (6.2.6.1.4)
[...]							
<del>Transient</del> Residential							
Common corridors	—	—	0.06	0.3		1	✓
<del>Dwelling unit</del>	<del>5</del>	<del>2.5</del>	<del>0.06</del>	<del>0.3</del>	<del>5</del>	<del>1</del>	<del>✓</del>

a. Outpatient facilities to which the rates apply are freestanding birth centers, urgent care centers, neighborhood clinics and physicians offices, Class 1 imaging facilities, outpatient psychiatric facilities, outpatient rehabilitation facilities, and outpatient dental facilities.

b. The requirements of this table provide for acceptable IAQ. The requirements of this table do not address the airborne transmission of airborne viruses, bacteria, and other infectious contagions.

**Informative Note:** These rates are intended only for outpatient dental clinics where the amount of nitrous oxide is limited. They are not intended for dental operatories in institutional buildings where nitrous oxide is piped.

**Revise Table 6-3 as shown below.**

**Table 6-3 Airstreams or Sources**

Description	Air Class
<del>Commercial</del> kitchen grease hoods	4
<del>Commercial</del> kitchen hoods other than grease <u>hoods</u>	3
Diazo printing equipment discharge	4
Hydraulic elevator machine room	2

BSR/ASHRAE Addendum g to ANSI/ASHRAE Standard 62.1-2019, *Ventilation and Acceptable Indoor Air Quality*  
First Public Review Draft

Laboratory hoods	4
Paint spray booths	4
Refrigerating machinery rooms	3
<del>Residential kitchen hoods in transient occupancy</del>	<del>3</del>

***Revise Section 6.2.1.1.4 as shown below.***

**6.2.1.1.4 Dwelling and Sleeping Units with Transient Occupancies.** Air from one ~~residential~~ dwelling unit with transient occupancy or air from one sleeping unit shall not be recirculated or transferred to any other space unit outside of that dwelling.

***Delete Section 6.2.1.1.7.1 as shown below.***

**~~6.2.1.1.7.1 Design Zone Population for Dwelling Units with Transient Occupancy.~~** Default occupancy for dwelling units shall be two persons for studio and one bedroom units, with one additional person for each additional bedroom.

***Revise Table I-1 as shown below. The remainder of Table I-1 is unchanged.***

**Table I-1 Rate Rationale (see Table 6-1)**

Occupancy Category	Description/Rationale	People Outdoor Air Rate, cfm/person	People Outdoor Air Rate, L/s/person	Area Outdoor Air Rate, cfm/ft <sup>2</sup>	Area Outdoor Air Rate, L/s·m <sup>2</sup>	Air Class
[...]						
<del>Transient Residential</del>						
Common corridors	Persons passing through the corridor are considered to be transitory and thus not occupants. There are no significant space-related contaminants.	—	—	0.06	0.3	—
<del>Dwelling unit</del>	<del>Occupant activity is variable. There may be moderate levels of space-related contaminants that are under the control of the occupants.</del>	<del>5</del>	<del>2.5</del>	<del>0.06</del>	<del>0.3</del>	<del>—</del>

*Revise Table L-1 as shown below. The remainder of Table L-1 is unchanged.*

**Table L-1 Check Table for the Ventilation Rate Procedure**

Occupancy Category	Combined Outdoor Air Rate ( $R_e$ )	
	cfm/ft <sup>2</sup>	L/s·m <sup>2</sup>
[...]		
<del>Transient Residential</del>		
<del>Dwelling unit</del>	<del>0.10</del>	<del>0.50</del>



**BSR/ASHRAE Addendum i  
to ANSI/ASHRAE Standard 62.2-2019**

**Public Review Draft**

**Proposed Addendum i to  
Standard 62.2-2019, Ventilation and  
Acceptable Indoor Air Quality in  
Residential Buildings**

**First Public Review (July 2021)  
(Draft shows Proposed Changes to Current Standard)**

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

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**ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092**

BSR/ASHRAE Addendum i to ANSI/ASHRAE Standard 62.2-2019, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*  
First Public Review Draft

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## FOREWORD

*Ozone and similar reactive oxygen species are hazardous both directly and through the indoor chemistry they promote. Some products such as electronic air cleaners may produce ozone incidentally. This proposed addendum prohibits intentional production of ozone and similar species and sets limits on the incidental ozone production allowed.*

*[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

## Addendum i to 62.2-2019

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*Add a new definition in Section 3 as shown below.*

***Electronic Air Cleaner (EAC):** A device intended to clean air that incorporates ultraviolet light or the creation of charged particles, ions or free radicals.*

*Add a new Section 7.5 as shown below.*

**7.5 Ozone:** Devices designed to produce ozone or other reactive oxygen species are prohibited. Electronic air cleaners (EAC) shall be listed and labelled in accordance with UL Standard 2998.

*Add the following reference in Section 9 as shown below. The remainder of Section 9 is unchanged.*

## 9. References

**Underwriters Laboratories Inc. (UL)**  
**333 Pfingsten Road**  
**Northbrook, IL 60062, United States**  
**847-272-8800; [www.ul.com](http://www.ul.com); [cec.us@us.ul.com](mailto:cec.us@us.ul.com)**

UL 2998 (2020) Environmental Claim Validation Procedure (ECVP) for Zero Ozone Emissions from Air Cleaners  
Section 7.5



**BSR/ASHRAE Addendum aa  
to ANSI/ASHRAE Standard 34-2019**

**Public Review Draft**

# **Proposed Addendum aa to Standard 34-2019, Designation and Safety Classification of Refrigerants**

**First Public Review (August 2021)  
(Draft shows Proposed Changes to Current Standard)**

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## FOREWORD

*This addendum adds the zeotropic refrigerant blend R-468C to Tables 4-2 and D-2.*

**Note:** This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.

### Addendum aa to Standard 34-2019

***Modify Tables 4-2 and D-2 as shown.***

#### Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = 468C

Composition (Mass %) = R-1132a/32/1234yf (6.0/42.0/52.0)

Composition tolerances = +0.5,-1.0/+0.5,-1.5/-1.0,+2.0

OEL = 710 ppm v/v

Safety Group = A2L

RCL = 23,000 ppm v/v; 4.3 lb/Mcf; 69 g/m<sup>3</sup>

Highly Toxic or Toxic Under Code Classification = Neither

#### Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 468C

Composition (Mass %) = R-1132a/32/1234yf (6.0/42.0/52.0)

Average Relative Molar Mass = 73.7 g/mol

Bubble Point (°F) = -69.9

Dew Point (°F) = -51.2

Bubble Point (°C) = -56.6

Dew Point (°C) = -46.2



**BSR/ASHRAE Addendum z  
to ANSI/ASHRAE Standard 34-2019**

**Public Review Draft**

# **Proposed Addendum z to Standard 34-2019, Designation and Safety Classification of Refrigerants**

**First Public Review (August 2021)  
(Draft shows Proposed Changes to Current Standard)**

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BSR/ASHRAE Addendum z to ANSI/ASHRAE Standard 34-2019, *Designation and Safety Classification of Refrigerants*  
First Public Review Draft

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## FOREWORD

*This addendum adds the zeotropic refrigerant blend R-468B to Tables 4-2 and D-2.*

**Note:** This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.

### Addendum z to Standard 34-2019

***Modify Tables 4-2 and D-2 as shown.***

#### Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = 468B

Composition (Mass %) = R-1132a/32/1234yf (6.0/13.0/81.0)

Composition tolerances = +0.5,-1.0/+0.5,-1.0/-1.0,+2.0

OEL = 570 ppm v/v

Safety Group = A2L

RCL = 18,000 ppm v/v; 4.4 lb/Mcf; 70 g/m<sup>3</sup>

Highly Toxic or Toxic Under Code Classification = Neither

#### Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 468B

Composition (Mass %) = R-1132a/32/1234yf (6.0/13.0/81.0)

Average Relative Molar Mass = 94.9 g/mol

Bubble Point (°F) = -62.3

Dew Point (°F) = -34.2

Bubble Point (°C) = -52.4

Dew Point (°C) = -36.8

# Public Review Draft

## Proposed Addendum i to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July 2021)  
(Draft Shows Proposed Changes to Current Standard)

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BSR/ASHRAE/ICC/USGBC/IES Addendum i to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* First Public Review Draft.

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## Foreword

*Water heaters can provide significant load shifting and energy storage capacity in many building types. ANSI/CTA-2045-B standardizes the socket, and communications protocol, for heat pump water heaters so they can communicate with the electricity grid and other demand response signal providers. In addition, 2045-B adds control and communications requirements for mixing valves in HPWH to enable them to provide greater storage capacity to support increased load shifting. Versions of this standard are included in codes or other requirements in California, Oregon, and Washington.*

*The addendum also adds a definition of demand responsive control to ensure its consistent use throughout the Standard. This addendum requires controls that may increase costs. It has the potential to reduce load on the electric grid at peak periods and save in utility bills by reducing peak load electric costs.*

**[Note to Reviewers: This addendum makes proposed changes to the standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]**

## Addendum i to 189.1-2020

*Add definition to Section 3.2 as follows*

**demand responsive control:** A control capable of receiving and automatically responding to a demand signal.

*Modify Section 7.3.4 as follows:*

**7.3.4 Automated Demand Response.** ~~Where a demand response (DR) program is available to the building project, t~~  
The building controls shall be designed with automated (DR) infrastructure capable of receiving DR requests from the utility, electrical system operator, or third party DR program provider and demand responsive controls capable of automatically implementing load adjustments to the HVAC, and lighting, and water heating systems.

### Exceptions to 7.3.4:

1. Buildings with a gross conditioned floor area less than 5000 ft<sup>2</sup> (500 m<sup>2</sup>).

BSR/ASHRAE/ICC/USGBC/IES Addendum i to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* First Public Review Draft.

2. Buildings that employ a thermal or electrical energy storage system with a total storage capacity that complies with one of the following:
  - a. For thermal energy storage, the system shall be capable of displacing the HVAC design cooling coil capacity for not less than the equivalent of three hours.
  - b. For electrical energy storage, the capacity shall be not less than the requirements of the following formula:

Minimum kWh capacity = *Gross conditioned floor area* (ft<sup>2</sup>) ×

5.0 W/ft<sup>2</sup> × 1.0 h × (1 kW/1000 W)

Minimum kWh capacity = *Gross conditioned floor area* (m<sup>2</sup>) ×

50 W/m<sup>2</sup> × 1.0 h × (1 kW/1000 W)

*Add Section 7.3.4.4 as follows:*

**7.3.4.4 Demand Responsive Electric Water Heating.** Electric storage water heaters with a storage tank capacity greater than 20 gallons (75 L) shall be provided with demand responsive controls that comply with ANSI/CTA-2045-B.

*Add reference in Chapter 11 Normative References as follows:*

Reference	Title	Section
<hr/> American National Standards Institute (ANSI) 25 West 43 <sup>rd</sup> Street New York, NY 20036, United States 1-212-642-4900; www.ansi.org		
<u>ANSI/CTA-2045-B</u>	<u>Modular Communications Interface for Energy Management</u>	<u>7.3.4.4</u>



**BSR/ASHRAE/IES Addendum aj  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

**Proposed Addendum aj to  
Standard 90.1-2019, Energy Standard  
for Buildings Except Low-Rise  
Residential Buildings**

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FOREWORD

*Addendum ae on Dry-Type Transformer changes to Section 8.4.4 and Table 8.4.4 included a new clarifying footnote that the efficiency of transformers not listed in that table should be based on linear interpolation. This update to Appendix G Table G3.1 adds the same clarification to determining the baseline transformer performance. While inspired by Addendum ae, this clarification does not depend on the status of that addendum. This update will better align with federal regulations.*

*This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost effectiveness analysis.*

*[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

Addendum aj to 90.1-2019

Modify the standard as follows (IP and SI Units)

Table G3.1 Modeling Requirements for Calculating Proposed and Baseline Building Performance

No.	Proposed Building Performance	Baseline Building Performance
15.	Distribution Transformers	
	Low-voltage dry-type distribution transformers shall be modeled if the transformers in the proposed design exceed the efficiency required in Table 8.4.4.	Low-voltage dry-type distribution transformers shall be modeled only if the proposed design transformers exceed the efficiency requirements of Table 8.4.4. <u>A transformer with a kVA rating not listed in the table shall have its minimum efficiency level calculated by a linear interpolation of the kVA and efficiency values listed in the table immediately above and below its kVA rating.</u> If modeled, the efficiency requirements from Table 8.4.4 <u>or the interpolated efficiency requirements</u> shall be used. The ratio of the capacity to peak electrical load of the transformer shall be the same as the ratio in the proposed design.



**BSR/ASHRAE/IES Addendum ak  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

# **Proposed Addendum ak to Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings**

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## FOREWORD

*This addendum proposes a change to the requirement in Section G3.1.1(c) to help clarify the process of isolating an HVAC zone attached to a multizone system in the baseline building that may prevent the system from operating in an efficient way. The wording of the current requirement, if followed explicitly, would remove HVAC zones with internal gains lower than 10 Btu/h-ft<sup>2</sup> below the average of other zones on a multizone system. Since these zones would not adversely impact the operation of a multizone system it is not necessary to require their removal. The proposed change would only require an HVAC zone to be modeled with a separate single zone HVAC system if the peak internal gain is 30 Btu/h-ft<sup>2</sup> or higher and differs by 12 Btu/h-ft<sup>2</sup> or more from the average of other zones on the same HVAC system.*

*The 30 Btu/h-ft<sup>2</sup> threshold was selected based on evaluating the HVAC zones from the prototype models and finding the breakpoint below which space types are not intended to be modeled with separate HVAC systems. Space types above 30 Btu/h-ft<sup>2</sup> include commercial kitchens, auditoriums, and other spaces with high internal equipment loads or high occupant densities. Space types like conference rooms and classrooms in the prototypes have a peak internal gain less than 30 Btu/h-ft<sup>2</sup>.*

*The proposal also increases the peak internal gain differential from 10 Btu/h-ft<sup>2</sup> to 12 Btu/h-ft<sup>2</sup>. This change is based on analysis done across the PNNL prototype models and helps establish baseline building HVAC system configuration outcomes that are more consistent with actual HVAC design practices.*

*The proposal also recommends clarifications to the “schedules” portion of the criteria making it clearer that the intent is to evaluate occupancy and kickout zones whose occupied hours are significantly higher than average. This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost effectiveness analysis.*

*This addendum modifies a section of the standard that was updated by published Addendum ab; you can view the changes introduced by Addendum ab online [here](#).*

***[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]***

## Addendum ak to 90.1-2019

Modify Appendix G Section G3.1.1 (c) as follows (I-P and SI Units)

### G3.1.1 Baseline HVAC System Type and Description

...

c. If the baseline HVAC system type is 5, 6, 7, 8, 9, 10, 11, 12, or 13 use separate *single-zone systems* conforming with the requirements of *system 3* or *system 4* for any HVAC zones that have occupancy, or internal gains, ~~or~~



~~schedules that differ significantly from the rest of the HVAC zones served by the system. The total peak internal gains of 30 Btu/h·ft<sup>2</sup> (94.6 W/m<sup>2</sup>) or higher that also differ by 1012 Btu/h·ft<sup>2</sup> (31.237.9 W/m<sup>2</sup>) or more from the average of other HVAC zones served by the system, or occupied hours schedules that differ by~~ are more than 40 equivalent full-load hours per week higher than the average of ~~from other spaces HVAC zones~~ served by the system, are considered to differ significantly. Examples where this exception may be applicable include but are not limited to commercial kitchens, auditoriums, natatoriums, and continually occupied security areas. This exception does not apply to *computer rooms*.



**BSR/ASHRAE/IES Addendum an  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

# **Proposed Addendum an to Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings**

**Public Review Draft (August 2021)  
(Draft Shows Proposed Changes to Current Standard)**

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

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## **FOREWORD**

*This proposed addendum clarifies baseline HVAC fan schedule requirements for projects that rely on ventilation via operable windows that are manually opened by the occupants. Such designs are fairly common in some parts of the country for multifamily apartments, dorm rooms and hotel guest rooms and have HVAC systems in the proposed design running intermittently to meet heating and cooling load during both occupied and unoccupied hours.*

*Table G3.1 #4, Proposed Design column requires HVAC fans to be modeled as cycling with load since they do not provide OA for ventilation; the Baseline Design column requires schedules to be the same as in the proposed design, suggesting that the baseline PTAC/PTHP fans should also cycle. However, Section G3.1.2.4 requires baseline fans to operated continuously whenever HVAC zones are occupied, which conflicts with G3.1 #4. The proposed change eliminates Section G3.1.2.4, removes the language that was included in this section but was redundant or conflicted with Table G3.1 #4, and moves requirement that were unique into Table G3.1#4 to consolidate all relevant requirements in one place.*

*This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost effectiveness analysis.*

***[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]***

## **Addendum an to 90.1-2019**

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*Modify Appendix G Section G3.1.1 (c) as follows (I-P and SI Units)*

Table G3.1 Modeling Requirements for Calculating Proposed and Baseline Building Performance

Proposed Building Performance	Baseline Building Performance
4. Schedule	
<p>Schedules capable of modeling hourly variations in occupancy, lighting power, miscellaneous <i>equipment</i> power, <i>thermostat set points</i>, and <i>HVAC system</i> operation shall be used. The schedules shall be typical of the proposed <i>building</i> type as determined by the designer and approved by the <i>rating authority</i>.</p> <p><b>Temperature and Humidity Schedules.</b> Temperature and humidity <i>control set points</i> and schedules as well as <i>temperature control throttling range</i> shall be the same for <i>proposed design</i> and <i>baseline building design</i>.</p> <p><b>HVAC HVAC System Fan Schedules.</b> Schedules for HVAC HVAC system fans that provide <i>outdoor air</i> for <i>ventilation</i> shall run continuously whenever <i>spaces</i> are occupied and shall be cycled ON and OFF to meet heating and cooling loads during unoccupied hours.</p> <p><b>Exceptions:</b></p> <p>1. Where no heating and/or cooling <i>system</i> is to be installed, and a heating or cooling <i>system</i> is being simulated only to meet the requirements described in this table, heating and/or cooling <i>system</i> fans shall not be simulated as running continuously during occupied hours but shall be cycled ON and OFF to meet heating and cooling loads during all hours.</p> <p>2. HVAC HVAC system fans shall remain on during occupied and unoccupied hours in <i>spaces</i> that have health- and safety mandated minimum <i>ventilation</i> requirements during unoccupied hours.</p> <p>3. HVAC HVAC system fans shall remain on during occupied and unoccupied hours in <i>systems</i> primarily serving <i>computer rooms</i>.</p>	<p>Same as <i>proposed design</i>.</p> <p><b>Exceptions:</b></p> <p>1. <i>Set points</i> and schedules for <i>HVAC systems</i> that <i>automatically</i> provide occupant thermal comfort via means other than directly controlling the air dry-bulb and wet-bulb temperature may be allowed to differ, provided that equivalent levels of occupant thermal comfort are demonstrated via the methodology in ASHRAE Standard 55, Section 5.3.3, “Elevated Air Speed,” or Standard 55, Appendix B, “Computer Program for Calculation of PMV-PPD.”</p> <p>2. Schedules may be allowed to differ between <i>proposed design</i> and <i>baseline building design</i> when necessary to model nonstandard <i>efficiency</i> measures, provided that the revised schedules have been approved by the <i>rating authority</i>. Measures that may warrant use of different schedules include but are not limited to <i>automatic lighting controls</i>, <i>automatic natural ventilation controls</i>, <i>automatic demand control ventilation controls</i>, and <i>automatic controls</i> that reduce <i>service water-heating</i> loads. In no case shall schedules differ where the <i>controls</i> are <i>manual</i> (e.g., <i>manual</i> operation of light switches or <i>manual</i> operation of windows).</p> <p>3. HVAC system Fan schedules may be allowed to differ when Section G3.1.1(c) applies.</p> <p>4. For <i>Systems 6</i> and <i>8</i>, only the <i>terminal-unit fan and reheat coil</i> shall be energized to meet heating <i>set point</i> during unoccupied hours</p>

.....

**G3.1.2.4 Fan System Operation**

~~Supply and return fans shall operate continuously whenever HVAC zones are occupied and shall be cycled to meet heating and cooling loads during unoccupied hours. Supply, return, and/or exhaust fans will remain on during occupied and unoccupied hours in HVAC zones that have health and safety mandated minimum ventilation requirements during unoccupied hours.~~

**Exception to G3.1.2.4**

~~For Systems 6 and 8, only the terminal unit fan and reheat coil shall be energized to meet heating set point during unoccupied hours.~~



**BSR/ASHRAE/IES Addendum ao  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

# **Proposed Addendum ao to Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings**

**First Public Review (August 2021)  
(Draft Shows Proposed Changes to Current Standard)**

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

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## FOREWORD

This addendum is intended to clarify and correct the mandatory provisions sections for air curtain units and associated controls.

Under Section 5.4.3.3.3, the added pointers in Exceptions 9 and 10 to 5.4.3.3 are intended to link the requirements for air curtain units to air curtain units' automatic controls as well.

Changes to Section 6.4.3.9 add clarity to the requirements for air curtain units, but do not change them.

Adding the word “performance” to the first sentence of 10.4.5 adds clarity to the “tested in accordance with ANSI/AMCA 220 or ISO 27327-1” clause. Removal of the next clause in the first sentence of 10.4.5 and moving the same clause to a new sentence, with added details, is intended to clarify the requirement and indicate that manufacturer’s instructions should contain all necessary installation and operation information. The clause “direction not less than 20 degrees towards the opening” could be overly restrictive and therefore possibly incorrect. The angle of direction is dependent on the location of the air curtain unit and the design of the air curtain unit's discharge nozzle. The air curtain unit manufacturer's instructions identify the correct method of directing the air curtain. Having a prescribed direction may not provide the ideal location of the air curtain and could reduce the energy conserving aspects of the air curtain unit. Therefore, this addendum removes that clause.

A reference to Section 10.4.5 is added in Informative Appendix H, Table H-3 *Standard 90.1 Items to Verify*.

Throughout the changes proposed in this addendum, adding the word “unit” where appropriate to “air curtain” helps to clarify the difference between the air curtain (the stream of air) and the air curtain unit (the product creating the air curtain).

## Economic Analysis

There is no increase to cost through this change. Making the directional correction could lower operating costs through increased assurance of alignment with the manufacturer’s instructions, which helps to ensure intended use of the air curtain unit.

*[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

## Addendum ao to 90.1-2019

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*Make the following changes to the exceptions to Section 5.4.3.3, both I-P and SI:*

### 5.4.3.3.3 Vestibule Envelope

The exterior surfaces of both conditioned vestibules and unconditioned vestibules shall comply with the *continuous air barrier* requirements.

#### Exceptions to 5.4.3.3

1. Doors not intended to be used as a *building entrance*.
2. Doors opening directly from a *dwelling unit*.
3. Building entrances in buildings located in Climate Zone 1 or 2.
4. Doors opening into *semiheated spaces*.
5. Enclosed elevator lobbies for *building entrances* directly from parking garages.
6. Building entrances in buildings that are located in Climate Zone 3, where the *building* is less than four stories above *grade* and less than 10,000 ft<sup>2</sup> (100 m<sup>2</sup>) in *gross conditioned floor area*.
7. Building entrances in buildings that are located in Climate ~~Zone~~ Zones 0, 4, 5, 6, 7, or 8, where the *building* is less than 1000 ft<sup>2</sup> in *gross conditioned floor area*.
8. Doors that open directly from a *space* that is less than 3000 ft<sup>2</sup> in area and is separate from the *building entrance*.
9. Self-closing doors in buildings in Climate Zones 0, 3, and 4 that have an air curtain unit complying with Sections 6.4.3.9 and 10.4.5.
10. Self-closing doors in buildings 15 stories or less in Climate Zones 5 through 8 that have an air curtain unit complying with Sections 6.4.3.9 and 10.4.5.

*Make the following changes to Section 6.4.3.9, both I-P and SI:*

### 6.4.3.9 Heated or Cooled Vestibules or Air Curtains with Integral Heating

Heating systems for vestibules and ~~for~~ air curtains units with integral heating shall include *automatic controls* capable of and configured to shut off the heating *system* when *outdoor air* temperatures are above 45°F (7.0°C). Vestibule heating and cooling *systems* shall be controlled by a *thermostat* in the vestibule capable of and configured to limit heating to a maximum of 60°F (16°C) and cooling to a minimum of 85°F (29°C).

*Make the following changes to Section 10.4.5, both I-P and SI:*

### 10.4.5 Air Curtains

Air curtain units performance shall be tested in accordance with ANSI/AMCA 220 or ISO 27327-1 and ~~installed and commissioned in accordance with the manufacturer's instructions to ensure proper operation and~~ shall have a jet velocity speed of not less than 6.6 ft/s (2.0 m/s) at 6.0 in. (15 cm) above the floor and ~~direction not less than 20 degrees towards the opening~~. Automatic controls shall be provided that will operate the air curtain unit with the opening and closing of the door and comply with Section 6.4.3.9. To ensure proper operation, each air curtain unit shall be commissioned in accordance with the manufacturer's instructions, including air stream split location and direction.

*Make the following addition to Appendix H, Table H3, both I-P and SI:*

Table H-3 Standard 90.1 Items to Verify

Subsection	Subsection Title	Standard 90.1 Items to Verify for Proper Operation or Inclusion	Status
<u>10.4.5</u>	<u>Air Curtains</u>	<u>Functional testing and adjustment per the manufacturer's installation requirements</u>	





**BSR/ASHRAE/IES Addendum b  
to ANSI/ASHRAE/IES Standard 100-2018**

**Second Public Review Draft  
(Independent Substantive Change)**

**Proposed Addendum b to  
Standard 100-2018, Energy  
Efficiency in Existing Buildings**

**Second Public Review (August 2021)  
(Draft shows Proposed Independent Substantive Changes  
to Previous Public Review Draft)**

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

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## FOREWORD

*This addendum adds energy efficiency measures to Informative Annex E, “Energy Efficiency Measures.”*

**Note:** This public review makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions), except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous public review draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment, except as related to the proposed substantive changes.

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### Addendum b to Standard 100-2018

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***Modify Informative Annex E as shown. The remainder of Informative Annex E is unchanged.***

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## INFORMATIVE ANNEX E—ENERGY EFFICIENCY MEASURES

### E2 HVAC SYSTEMS

[ ... ]

- E2.3.16** Install a Fault Detection and Diagnostic (FDD) system and address identified faults. A FDD system should utilize that utilizes ~~that utilizes~~ building analytic algorithms to convert data provided by sensors and devices to automatically identify faults in *building* systems and provide a prioritized list of actionable resolutions to those faults based on cost or energy avoidance, comfort, and maintenance impact.

## Public Review Draft, July 2021

## Proposed changes to current standard, ANSI/FM 4477-2016, Vegetative Roof Systems

## SECTION 1 – INTRODUCTION

## 1.5 Applicable Documents

The following standards, test methods, and practices are referenced in this standard:

ANSI (American National Standards Institute)

- Procedure for Investigating Resistance to Root or Rhizome Penetration on Vegetative Roofs, ~~Investigating Resistance to Root Penetration on Vegetative Roofs, ANSI/SPRI VR-1 2018~~  
ANSI/GRHC/SPRI VR-1 2011

## SECTION 4 – PERFORMANCE REQUIREMENTS

## 4.1 Combustibility From Above the Roof Deck

- 4.1.1.6 There shall be no portion of the vegetative or roof covering material blown, or falling, off of the test deck in the form of flaming or glowing brands that continue to glow after reaching the floor.

## 4.4 Root Barrier Resistance Tests

- 4.4.2 Testing for root barrier resistance of materials without continuous heat welded seams (example overlapping un-bonded seams) or testing for root barrier resistance of polymer-modified bitumen materials with continuous heat welded seams shall be in accordance with Procedure for Investigating Resistance to Root or Rhizome Penetration on Vegetative Roofs, ~~Penetration on Vegetative Roofs, ANSI/GRHC/SPRI VR-1 2018~~11.

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by **gray highlighting**. Rationale statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard  
for Plastics —

## Plastics piping system components and related materials

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### 9 Quality Assurance

Table 9.7  
ABS fitting test frequency

Test	DWV	Well casing
burst pressure	—	—
crush <sup>1</sup>	24 h	—
deflection load and crush resistance	—	annually
dimensions		
body wall thickness	weekly	weekly
socket bottom avg. diameter and out-of-roundness <sup>2</sup>	24 h	24 h
socket entrance avg. diameter and out-of-roundness <sup>2</sup>	24 h	24 h
socket depth <sup>2,5</sup>	(see footnotes 2, 5)	(see footnotes 2, 5)
socket wall thickness	weekly	weekly
spigot ends of fittings, min. wall thickness	weekly	weekly
spigot ends of fittings, avg. diameter and out-of-roundness <sup>3</sup>	24 h	24 h
thread length <sup>5</sup>	(see footnote 5)	(see footnote 5)
thread gauge	24 h	24 h
flattening	annually	—
impact @ 22.8 °C (73 °F) <sup>4</sup>	weekly	—
joint tightness	—	—
pipe stiffness	annually	—
socket concentricity	—	annually
tup puncture resistance	—	annually
product standard(s)	ASTM D2661 CSA B181.1	ASTM F480

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<sup>1</sup> This requirement applies only to products produced under CSA B181.1. All other DWV QC requirements apply only to products produced under ASTM D2661.

<sup>2</sup> Plug gauges are permitted, provided that the mold has been qualified by complete dimensioning and performance of appropriate testing on all products from all mold cavities to verify.

<sup>3</sup> Ring gauges are permitted, provided that the mold has been qualified by complete dimensioning and performance of appropriate testing on all products from all mold cavities to verify.

<sup>4</sup> Toilet flanges listed to D2661 and CSA B181.1 are exempt from the QC requirements of crush and impact.

<sup>5</sup> Socket depth and thread length are only required to be verified at the time a new tool is "qualified" or when new or repaired cores are made.

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**Table 9.12**  
**Fittings for PE and PEX tubing test frequency**

Test	Insert fittings PE pipe	Electro- fusion PE fittings	Butt heat fusion PE fittings	Fittings for PEX tubing	Socket-type PE fittings
burst pressure	weekly	weekly	—	weekly <sup>1</sup>	—
Dimensions					
barb length	weekly	—	—	—	—
insert OD	weekly	—	—	weekly	—
body wall thickness	—	—	—	weekly	—
insert length	weekly	—	—	weekly	—
inside diameter	—	24 h	24 h	24 h	24 h
outside diameter	—	—	24 h	—	—
socket bottom <sup>2</sup>	—	—	—	—	24 h
socket depth <sup>2,7</sup>	—	—	—	—	24 h
socket entrance <sup>2</sup>	—	—	—	—	24 h
socket wall thickness	—	—	—	—	—
thread gauge	24 h	—	—	24 h	—
thread length <sup>6,7</sup>	(see footnotes 6, 7)	—	—	(see footnotes 6, 7)	—
wall thickness (insert)	24 h	24 h	24 h	24 h	—
all other required insert dimensions	—	—	—	weekly	—
excessive temperature and pressure capability	—	—	—	annually	—
impact <sup>3</sup>	—	weekly <sup>3</sup>	—	—	—
joint crush	—	weekly	—	—	—
pull-out strength	—	—	—	annually <sup>8</sup>	—

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**Table 9.12**  
**Fittings for PE and PEX tubing test frequency**

Test	Insert fittings PE pipe	Electro- fusion PE fittings	Butt heat fusion PE fittings	Fittings for PEX tubing	Socket-type PE fittings
short term rupture strength <sup>4</sup>	—	—	weekly	—	weekly
short term strength <sup>5</sup>	—	—	weekly	—	—
sustained pressure	—	—	annually	annually	annually
tensile	—	weekly	—	—	—
thermocycling	—	—	—	annually	—
product standard(s)	ASTM D2609	ASTM F1055	ASTM D3261	ASTM F877, ASTM F1807, ASTM F1960, CSA B137.5, ASTM F2080, ASTM F2098, ASTM 2159, ASTM F3253, ASTM F3347, ASTM F3348	ASTM D2683
<sup>1</sup> Metal fittings, polysulfone, polyphenylsulfone or polysulfone / polyphenylsulfone blends need only be tested annually for burst pressure. <sup>2</sup> Plug gauges are permitted, provided that the mold has been qualified by complete dimensioning and performance of appropriate testing on all products from all mold cavities to verify compliance with the referenced Standard. <sup>3</sup> Applies only to tapping saddles. <sup>4</sup> Applies to fittings 2 to 12 in and 90 mm to 315 mm nominal diameter. <sup>5</sup> Applies to form fittings 14 to 48 in and 355 mm to 1,600 mm nominal diameter. <sup>6</sup> Applies only to molded fittings. <sup>7</sup> Socket depth and thread length are only required to be verified at the time a new tool is “qualified” or when new or repaired cores are made. <sup>8</sup> This requirement applies only to products produced under ASTM F3253.					

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**Table 9.37**  
**Corrugated polyethylene pipe and fittings for nonpressure storm sewer, land drainage and sanitary sewer applications**

Test	Corrugated PP double and triple wall	PP dual wall
inside diameter	2 h	2 h
minimum wall thickness	2 h	2 h
stiffness	annually	annually
impact	weekly	annually

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flattening	annually	annually
long term strength	qualification	qualification
joint tightness	qualification	—
OT	—	—
product standard(s)	F2764, CSA B182.13	F2881

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 Multiple Revisions to 401i25r1 and 330i12r1

Revision to NSF/ANSI 401-2020  
 Issue 401 Revision 1 (July 2021)

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NSF/ANSI Standard  
 for Drinking Water Treatment Units –

## Drinking Water Treatment Units - Emerging Compounds / Incidental Contaminants

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### 2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this Standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

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EPA-90/020, *Methods for the Determination of Organic Compounds in Drinking Water*, Supplement 1, July 1990<sup>Error! Bookmark not defined.</sup>

NSF/ANSI 42, *Drinking Water Treatment Units – Aesthetic Effects*

NSF/ANSI 51, *Food Equipment Materials*

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### 7 Elective performance claims – Test methods

#### 7.1 General requirements

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#### 7.2 Chemical reduction claims

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#### 7.3 Mechanical reduction claims

##### 7.3.1 Microplastics reduction claim

Testing shall be performed in accordance with the test procedure under NSF/ANSI 42 for nominal particulate reduction (85%) claims for the reduction of nominal particulate class I.



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## 8 Instruction and information

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### 8.4 Performance data sheet

**8.4.1** A performance data sheet shall be available to potential buyers for each system and shall include the following information:

- complete name, address, and telephone number of manufacturer;
- model number and trade designation;
- statement for **chemical reduction** claims:

*“This system has been tested according to NSF/ANSI 401 for reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 401.”*

NOTE 1 — Minimum substance reductions per NSF/ANSI 401 shall be listed using the values in Table 8.1.

NOTE 2 — In addition to this statement, advertising materials may show the average percent reduction determined during verification.

NOTE 3 — Average concentrations shall be the arithmetic mean of all reported influent challenge or product water concentrations (the detection limit value shall be used for any nondetectable concentrations). The specified percent reduction shall not be greater than the reduction calculated using the arithmetic means of the influent challenge and the product water concentrations, respectively.

**Table 8.1**  
**Performance data sheet reduction claims**

Substance	CAS Number	Influent challenge concentration (ng/L)	Maximum permissible product water concentration (ng/L)
atenolol	29122-68-7	200 ± 20%	30
bisphenol A	80-05-7	2,000 ± 20%	300
carbamazepine	298-46-4	1,400 ± 20%	200
DEET (diethyltoluamide)	134-62-3	1,400 ± 20%	200
estrone	53-16-7	140 ± 20%	20
ibuprofen	15687-27-1	400 ± 20%	60
linuron	330-55-2	140 ± 20%	20
meprobamate	57-53-4	400 ± 20%	60
metolachlor	51218-45-2	1,400 ± 20%	200

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naproxen	22204-53-1	140 ± 20%	20
nonylphenol	84852-15-3	1,400 ± 20%	200
phenytoin	57-41-0	200 ± 20%	30
TCEP (tris(2-chloroethyl)phosphate)	115-96-8	5,000 ± 20%	700
TCPP (tris(1-chloro-2-propyl)phosphate)	13674-84-5	5,000 ± 20%	700
trimethoprim	738-70-5	140 ± 20%	20

**Table 8.2**  
**Performance data sheet reduction claims**

<b>Substance</b>	<b>Influent challenge concentration</b>	<b>Reduction requirement</b>
Microplastics, particles 0.5 to <1 µm	at least 10,000 particles/mL	≥ 85%

- rated service flow rate in L/min or L/d (gpm or gpd);
- rated capacity / rated service life in liters (gallons);
- Microplastics reduction systems shall not claim a rated capacity due to the broad variation in the quantity of particulate matter found in drinking water.

**NOTE**— Each unique model designation shall not claim a capacity or service life greater than the least reduction capacity or service life that has been verified through testing to NSF/ANSI 401.

- maximum working pressure in kPa (psig);
- maximum operating temperature in °C (°F);
- general installation conditions and needs;
- general operation and maintenance requirements including, but not limited to:
  - suggested frequency of component change or service to the system;
  - user responsibility; and
  - parts and service availability.

NSF/ANSI Standard  
 for Drinking Water Treatment Units –

## Glossary of Drinking Water Treatment Unit Terminology

### 3 Definitions

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**3.111 microcystins:** A class of cyanotoxins produced by certain freshwater cyanobacteria that consist of over 100 different variants, or congeners, that share a common structure, but have chemical variations that affect their toxicity and may affect their ability to be removed by filtration technologies. Microcystin LR is the most studied and highly toxic form of microcystin to date and is used as the benchmark microcystin in establishing the recommended drinking water limits as well as reduction performance under NSF/ANSI 53.

**3.112 microplastics:** Solid polymeric materials that are greater than 1 and less than 5,000 micrometers ( $\mu\text{m}$ ).

**3.112 3.113 minimum working pressure:** See *pressure*.

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***Rationale:** Added microplastics reductions to NSF/ANSI 401 claim per recommendation of the DWTU Task Group on Microplastics and the 2021 DWTU Joint Committee meeting discussion (June 9, 2021). The task group determined that the NSF/ANSI 42 Particulate Class I reduction claim could serve as a conservative surrogate, as it specifies a test particle size range from 0-80  $\mu\text{m}$  and allows for a 0.5-1  $\mu\text{m}$  particulate size claim. Definition of microplastics based on existing global regulatory definitions (e.g., WHO, NOAA, the state of California, and the European Food Safety Authority).*

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## NSF/ANSI Standard for Good Manufacturing Practices –

### Good Manufacturing Practices for Cosmetics

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#### 4 Audit requirements

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#### 4.4 Support

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**4.4.18** ~~Cleaning Procedures are~~ shall be established and implemented for cleaning of the plant areas, facilities, and equipment. [ISO 22716:2007 4.10.4 & 5.3.1]

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**4.6.10** Procedures have been established for cleaning and, as applicable, sanitization, including verification and documentation thereof, of all utensils and equipment. [ISO 22716:2007 5.3.1]

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## NSF/ANSI Standard for Good Manufacturing Practices –

### Good Manufacturing Practices for Over-the-Counter Drugs

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## 2 Normative References

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21 CFR § 211.82, *Current Good Manufacturing Practice for Finished Pharmaceuticals: Receipt and Storage of Untested Components, Drug Product Containers, and Closures*

21 CFR § 211.186, *Current Good Manufacturing Practice for Finished Pharmaceuticals: Master Production and Control Records*

21 CFR § 211.46, *Current Good Manufacturing Practice for Finished Pharmaceuticals: Ventilation, Air Filtration, air heating and Cooling*

21 CFR § 211.87, *Current Good Manufacturing Practice for Finished Pharmaceuticals: Retesting of Approved Components, Drug product Containers and Closures* (**New issue paper**)

21 CFR § 211.194, *Current Good Manufacturing Practice for Finished Pharmaceuticals: Laboratory Records* (**New issue paper**)

ICH, Harmonised Tripartite Guideline, Q1A (R2) *Stability Testing of New Drug Substances and Products*, 2003

ICH, Harmonised Tripartite Guideline, Q1B - *Stability Testing: Photostability testing of New Drug Substance and Product*, 1996

ICH, Harmonised Tripartite Guideline, Q1C *Stability testing for New Dosage Forms*, 1996

ICH, Harmonised Tripartite Guideline, Q1D *Bracketing and Matrixing Design for Stability Testing of New Drug Substances and Products*, 2002

ICH, Harmonised Tripartite Guideline, Q1E *Evaluation of Stability Data*, 2003

ICH, Harmonised Tripartite Guideline, Q1F *Stability Package for Registration Application in Climate Zones III and IV*, 2018

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## BSR/UL 668-202x, Standard for Hose Valves for Fire-Protection Service

### 1. Update of Standard

#### PROPOSAL

7.1 A hose valve intended for use on standpipes and fire pumps shall be made entirely of brass, bronze, 300 series stainless steel or other material having equivalent corrosion resistant properties, except for the handwheel (see 7.3) and for the valve seal (see 17.6) of an angle pattern valve.

7.2 A straightway pattern hose valve intended for use on hydrants, and for assembly thereto by bolting or threading the valve to the outside of the hydrant barrel at the hose outlets, shall be permitted to have a cast iron body and a bonnet intended to be bolted together. The remaining valve parts shall be made of brass, bronze, or other material having equivalent corrosion resistant properties, except for the handwheel.

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## BSR/UL 61730-1, Standard for Safety for Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction

### 1. New PV Compatibility Identifier Marking and Documentation Requirements

#### 3.3.8DV D2 Addition of the following definition:

##### frame type

A family of frames that meet the requirements of 5.4.1DV.

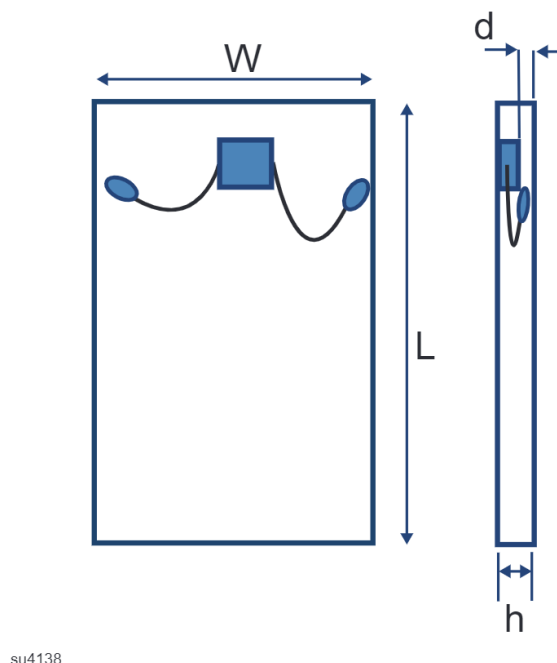
#### 5.2.2.1DV.3 Add the following below item (b):

Type or model number designation for modules with reduced mechanical load shall be identified by a unique model number on nameplate and documentation.

When a PV model designation has two or more constructions (e.g. variations in bill of materials) that do not have identical characteristics for each item listed in 5.2.2.1DV.3(a) – (h), the modules are not considered to be a compatible replacement for all versions having the same model designation. In these cases, a unique compatibility identifier shall be included in the markings.

Modules marked with the same compatibility identifier shall have identical characteristics for each of the following:

- a) Dimensions of outer module width (W), length (L), frame height (h), and distance from bottom of module frame to the bottom of the junction box or other back surface feature (d), as shown in Figure 5.2.2.1DV.3.1.
- b) Voltage, current and power ratings.
- c) Bifaciality coefficients, if applicable.
- d) Temperature coefficients.
- e) Mechanical load ratings.
- f) Mating connectors, unless the connectors of different models have been evaluated for compatibility in accordance with Section 1.3 of UL 6703.
- g) Fire type classification or fire rating, if fire rated in accordance with UL 61730-2, Annex DVB.
- h) Frame type as defined in 5.4.1DV.



**Figure 5.2.2.1DV.3.1**  
**Module dimensions required to be identical for a single compatibility identifier designation**

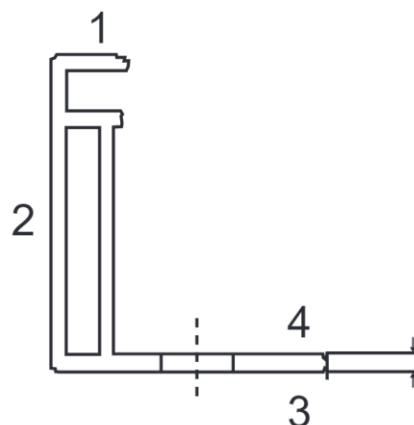
**5.2.3DV D2 Modification of 5.2.3 in accordance with the following:**

– Add the following new paragraph at the end of the first paragraph: "The module is considered to be in compliance with this standard only when the module is either mounted in the manner specified by the mounting instructions, or when the mounting means has been evaluated with this PV module to UL 2703. A module with exposed conductive parts is considered to be in compliance with this standard only when it is either electrically grounded in accordance with the manufacturer's instructions and the requirements of the National Electrical Code, ANSI/NFPA 70 (2014-2017), or when the bonding means has been evaluated with this PV module to UL 2703."

– Add the following compatibility information corresponding to each Frame Type to the end of the first set of bullet items:

- the model number, or model number and compatibility identifier combination, that is applicable to the Frame Type;
- a reference drawing showing the detailed frame cross sectional dimensions;
- length of frame sections;
- mounting hole diameter and locations;
- material of the frame, alloy and heat strengthening;
- coating type and color;
- maximum coating thickness at the 4 locations shown in Figure 5.2.3DV.1; and
- when tested in accordance with the Frame Compressive Force Test, MST 58, in UL 61730-2, the crush resistance (in N and in lbf) shall be included in the documentation.





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**Figure 5.2.3DV.1**

**Frame locations for which a coating thickness must be identical for a module with the same compatibility identifier designation**

– Add the following note after the phrase “The electrical documentation shall include a detailed description of the electrical insulation wiring method to be used. This description shall include:” NOTE – The first, third and fourth items in this list refer to modules with a wiring compartment intended for use with field-installed wiring.

– Replace the sixth bullet about bonding with the following: “the bonding and grounding method(s) to be used (if applicable) shall be specified. All provided or specified hardware shall be identified in the documentation;”

– Replace the seventh bullet about the documentation for by-pass diodes with the following: “the type and rating of bypass-diodes to be used as well as the installation instructions for those diodes (if applicable).”

– Add the following bullets after the seventeenth bullet:

- a statement indicating the minimum mechanical means for securing the PV module (as evaluated during the mechanical load test (MST 34));
- the documentation of modules with reduced mechanical load shall contain:

“When PV modules are intended to be installed in an engineered scenario by qualified personnel such as in a ground-mounted PV power generation plant, they may be designed to meet a lower minimum test load of 1 200 Pa with a safety factor of 1,5: i. e. an 800 Pa minimum design load for the down pressures (positive) and uplift pressures (negative). These modules are marked by “Reduced mechanical design load” on the nameplate followed by the range of positive and negative design loads they are designed for.

As an example, these modules may be used in interior or exterior rows where the module mounting and structure in combination are designed to meet a specific design load lower than 1 600 Pa and a licensed professional engineer has taken into consideration all factors below for the combined site specific wind and snow loads.

1. Pressure coefficients should be derived based on an effective wind area equal to one PV module, from boundary

layer wind tunnel tests on the specific mounting system used to support the PV module.

2. Boundary layer wind tunnel tests should be conducted in accordance with ASCE 7 and ASCE 49, or other recognized industry guidance;
3. Mounting system vibrations with natural frequencies less than 10 Hz may result in loads higher than predicted from static load calculations, depending on wind speed and damping ratio of the vibration mode, and should be considered to assess dynamic amplification factors;
4. Some mounting systems may be susceptible to instabilities due to vortex shedding which may not be addressed in building codes; guidance from qualified experts in boundary layer wind tunnel testing of ground-mounted PV systems may be required to address this risk;
5. Modules when mounted on trackers that rely on being operational or stowing at a specified angle in extreme wind or snow conditions should be verified to limit loads below the design load threshold considering the design controls implemented in such trackers.

Alternatively, modules having a higher minimum design load compatible to the required site-specific loads may be used. Reduced mechanical load modules cannot be used on a rooftop system."

- Reduced mechanical load modules shall not be used on a rooftop system.

NOTE Per the prevailing local codes many large photovoltaic installations of today are designed, engineered and installed by qualified experts in their structural, mechanical and electrical field. To target specific zones in the array to handle higher loading than in interior areas structure designers utilize boundary layer wind tunnel studies of that specific structure per allowances in building codes to utilize such studies. In the overall system design approach the boundary later studies, manufacturer's mounting configurations, stated design loads and test safety factors are utilized.

– Add the following before the second to last paragraph, under the text "The following or equivalent statement shall be included:"

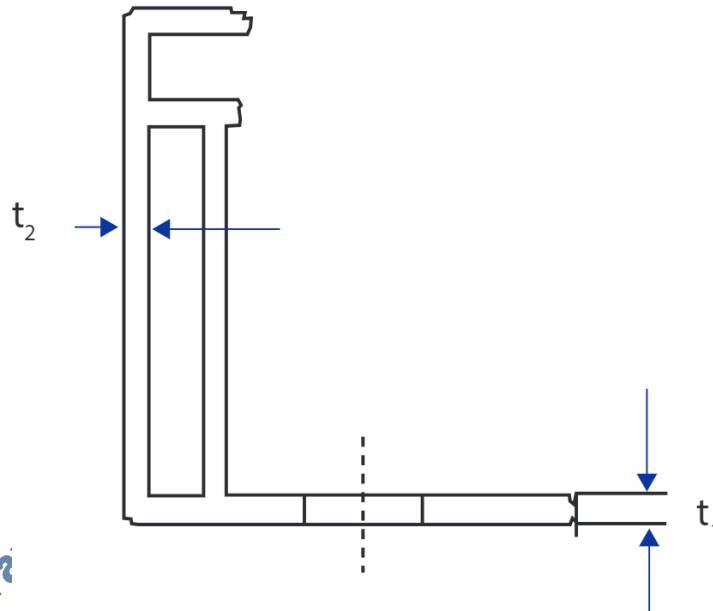
"Mounting systems, mounting devices, clamping/retention devices and ground lugs may be evaluated to UL 2703 with specific PV models and frame types. Where UL 2703 compliance is required for PV modules used with specific mounting systems and devices, consult the manufacturer's manual for the UL 2703 product to determine compatibility with a specific PV model and compatibility identifier, including frame type", and

5.4.1DV DE Modification by adding the following to the end of the Clause:

Modules provided with multiple frame types shall comply with marking and documentation requirements in 5.2.2.1 and 5.2.3. Frames may be considered to be the same frame type if all of the following requirements are met:

- The same material, alloy, and heat strengthening,
- The same surface features on top, exterior side, and the top and bottom of the lower flange surfaces of PV frame (locations 1 through 4 in Figure 5.2.3DV.1),
- Glass capture area on the upper or lower section of the frame channel deviating from frames of the same Frame Type by no more than 20%,

- The same frame height,
- The same thickness “ $t_1$ ” of the lower frame flange (see Figure 5.4.1DV.1),
- The same mounting hole locations and diameter,
- The same thickness “ $t_2$ ” of the outer vertical wall, or for frames with more complex geometry, frames with a measured compressive force causing yield varying by no more than 10% relative to other frames of the same Frame Type per the Frame Compressive Force Test, MST 58, in UL 61730-2,
- The same frame coating or surface treatment, with the thickness of the coating in the four locations shown in Figure 5.2.2.1DV.3.1 deviating by no more than 25% relative to other frames with the same frame type designation, and
- A calculated section modulus deviating from frames of the same frame type by no more than 20%. The section modulus is a measure of the flexural strength of a frame section. It is derived from the cross-sectional dimensions, and is equal to the moment of inertia of the area of the cross section divided by the distance from the neutral axis to the farthest point of the section.



**Figure 5.4.1DV.1**

Thickness “ $t_1$ ” of lower frame flange; thickness “ $t_2$ ” of vertical exterior wall of simple frame

## BSR/UL 61730-2, Standard for Safety for Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing

### 1. Addition of Frame Compression Test to Assess Frame Type

*2DV DR Addition of the following:*

UL 790,  
Standard Test Methods for Fire Tests of Roof Coverings

UL 2703,  
Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels

ANSI/NFPA 70,  
National Electrical Code

ASTM E9,  
Standard Test Methods of Compression Testing of Metallic Materials at Room Temperature

10.34DV D2 Addition of the following Frame Compressive Force Test MST 58:

#### 10.34DV.1 Purpose

The purpose of the frame compression test is to verify that modules that allow the use of top-down clamps, and that are constructed with various frame dimensions or materials and with the same model number and compatibility identifier will perform as expected (without yielding) when installed with top down clamps. This section is only applicable to PV module designs which:

- a) Are constructed using frames of different dimensions or materials under a single model number and compatibility identifier, and
- b) Manufacturer's documentation indicates that top-down type clamps can be used with the module frame, and
- c) Have a frame geometry more complex than shown in Figure 5.4.1DV.1 of UL 61730-1, such that the relative axial rigidity (i.e., for the purpose of comparison to other frame designs) of the frame cross section cannot be approximated by the exterior vertical wall thickness "t<sub>2</sub>".

#### 10.34DV.2 Apparatus

A compressive testing machine that complies with ASTM E9 is to be used.

#### 10.34DV.3 Procedure

This test is to be conducted in accordance with ASTM E9, with the following exceptions:

- a) The specimen is to consist of a specially prepared 25.4 mm (1 in) long section of frame,
- b) The frame section is to be compressed at a speed of 2.5 mm/minute (0.1 in/minute) until yielding is observed, and
- c) The force causing yield shall be recorded (in N and in lbf).

**10.34DV.4 Pass Criteria**

**Where the force causing yield is within 10% of all Frame Types used with the same PV model number, the frame shall be considered to be of the same Frame Type.**

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