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# Project Initiation Notification System (PINS)

Section 2.5.1 of the *ANSI Essential Requirements* ([www.ansi.org/essentialrequirements](http://www.ansi.org/essentialrequirements)) describes the Project Initiation Notification System (PINS) and includes requirements associated with a PINS Deliberation. Following is a list of PINS notices submitted for publication in this issue of ANSI Standards Action by ANSI-Accredited Standards Developers (ASDs). Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for information about American National Standards (ANS) maintained under the continuous maintenance option, as a PINS to initiate a revision of such standards is not required. 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 interested parties wishing to receive more information or to submit comments are to contact the sponsoring ANSI-Accredited Standards Developer directly **within 30 calendar days** of the publication of this PINS announcement.

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## **ASTM (ASTM International)**

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

### ***New Standard***

BSR/ASTM WK82223-202x, New Specification for Standard Specification for IBC Special Inspection services (new standard)

Stakeholders: Agencies Performing Construction Inspection, Testing and Special Inspection Industry

Project Need: Since the mass adoption of the International Building Code, by all 50 States, the need for Standards written to the Special Inspection Agency and the Special Inspectors, on how to effectively complete their inspections has become increasingly relevant. ASTM does not have a Standard on the Specification for Special Inspection.

Interest Categories: Producer, User, General Interest

Scope: The purpose of this specification is to establish requirements for the Special Inspection Agency and their Special Inspectors, in the daily exercise of their service. These requirements will be in conformance with the Test Methods and Standard Practices of ASTM and the currently adopted International Building Code (2018 IBC), including methods for field verification and laboratory testing, as reflected in the Construction Documents.

## **BHMA (Builders Hardware Manufacturers Association)**

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

### ***Revision***

BSR/BHMA A156.16-202x, Standard for Auxiliary Hardware (revision of ANSI/BHMA A156.16-2013 (R2018))

Stakeholders: Manufacturers, building owners, builders, architects, specifiers and consumers.

Project Need: Five-year maintenance and update.

Interest Categories: Producers, Laboratories, General Interest, Users, Government.

Scope: This Standard establishes requirements for auxiliary hardware and includes performance tests covering operational, cyclical, strength, or finish criteria.

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

Richard Nix; standards@esta.org | 271 Cadman Plaza, P.O. Box 23200 | Brooklyn, NY 11202-3200 www.esta.org

**Revision**

BSR/E1.50-1-202x, Requirements for the Structural Support of Temporary LED, Video & Display Systems (revision of ANSI E1.50-1-2017)

Stakeholders: Video wall owners and manufacturers, equipment rental houses, structural engineers, concert touring riggers, production management, and performers.

Project Need: The existing standard is being opened for revision, to update its requirements and references to externally referenced standards.

Interest Categories: Custom market producers, mass market producers, dealer or rental companies, designers, users, and general interest.

Scope: The scope of this standard covers LED and other self-illuminated video display structures used as part of the scenery in concerts, theatre shows, and special events. The standard includes advice on planning and site preparedness, assembly and erection, suspension and safety of components, special access requirements, and the use and dismantling of these systems.

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

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**New Standard**

BSR/IEEE 260.3-202x, Standard Mathematical Signs and Symbols for Use in Physical Sciences and Technology (new standard)

Stakeholders: Producers of technical documents with mathematical signs and symbols, and users of those technical documents.

Project Need: Std 260.3 was last revised in 1993 and last reaffirmed in 2012, so it will be going inactive at the end of 2022. Std 260.3 is referenced by many standards, including those of the AESS/IEEE Gyro and Accelerometer Panel, so it is important to keep this standard current and active.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: Only signs and symbols used in writing mathematical text are contained in this Standard. Special symbols peculiar to certain branches of mathematics, such as non-Euclidean Geometries, Abstract Algebras, Topology, and Mathematics of Finance, which are not ordinarily applied to the physical sciences and engineering, are not included. Symbols used in tensor analysis are also not included.

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

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***New Standard***

BSR/IEEE 1276a-202x, Guide for the Application of High-Temperature Insulation Materials in Liquid-Immersed Distribution, Power, and Regulating Transformers Amendment: Updates to Annex B and corresponding references in Annex D (new standard)

Stakeholders: Distribution, Power and Regulating Transformer Users, Designers and Manufacturers.

Project Need: The current guide needs to be updated to include new industry use cases and knowledge so that it remains an active tool for the application of high temperature insulation materials in distribution, power, and regulating transformers.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This guide applies to liquid-immersed distribution, power, and regulating transformers that are designed to operate at temperatures that exceed the normal thermal limits of IEEE Std C57.12.00 under continuous load, in the designed average ambient, and at rated conditions.

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

Lisa Weisser; l.weisser@ieee.org | 445 Hoes Lane | Piscataway, NJ 08854-4141 www.ieee.org

***New Standard***

BSR/IEEE 1310-202x, Recommended Practice for Thermal Cycle Testing of Form-Wound Stator Bars and Coils for Large Rotating Machines (new standard)

Stakeholders: Large generator manufacturers, electric power utilities, and thermal cycle test providers.

Project Need: This recommended practice is needed to define a test method that enables independent parties to conduct thermal cycle testing in the same way so that the ability to resist thermal cycling of stator bars and coils from different vendors can be compared.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This recommended practice describes a test procedure used for individual form-wound bars/coils for rotating machines typically rated 10 kV or more at 50 Hz or 60 Hz that are subjected to many transitions from no-load to full-load current during normal operations, and where rapid load variations are typical. Only the thermal cyclic degradation due to delamination of the groundwall insulation and debonding of the groundwall insulation from the conductor stack are addressed by this test. Examples of indirectly (conventionally) cooled machine types that typically experience rapid load transitions include: Combustion turbine generators, Pumped storage or peaking duty hydrogenerators, Synchronous condensers, and Cyclic duty water pump motors.

Various pass/fail criteria are defined, to facilitate agreement between the user and the manufacturer on the criteria that apply in a specific circumstance, prior to the commencement of testing.

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

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**Revision**

BSR/IEEE 3004.8-202x, Recommended Practice for Motor Protection in Industrial and Commercial Power Systems (revision of ANSI/IEEE 3004.8-2016)

Stakeholders: Those interested in, or responsible for, protection of electric motors typically used in industrial and commercial power systems.

Project Need: This recommended practice is an aid to all engineers responsible for the electrical design and application of industrial and commercial power systems. Using these techniques for industrial and commercial motor protection helps to reduce protection errors and false tripping, assists in improving reliability, and aids in increasing productivity. The existing Recommended Practice is updated to reflect up-to-date motor protection practices, revise reference standards, include new motor technologies and motor protection methods. The revision updates condition monitoring techniques. General updates for new technologies are included for low-voltage and medium-voltage motor protection. This information is mainly used in the industrial and commercial power systems applications by users, manufacturers, and designers for electric motor protection.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This recommended practice describes the protection of electric motors used in industrial and commercial power systems. The contents cover ac and dc motor protection including factors to consider in the protection of motors, types of protection, and low-voltage and medium-voltage motor protection, including the motor branch circuit, for fixed-speed and adjustable-speed drive applications. Motor protection during various operations is included, such as motor starting and motor bus transfer. Recommended protection functions are included for multifunction motor protection relays for contactor-controlled starters and breaker-controlled starters. Supportive diagrams are also included. Technologies for condition monitoring of motors are included. Motor protection in various environments is also included, such as hazardous (classified) locations.

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

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***New Standard***

BSR/IEEE 3148-202x, Guide for Field Detection of Metallic Sheath Current of Single-conductor Shielded and Cross-linked Polyethylene (XLPE) Insulated Alternating Current (AC) Cable (new standard)

Stakeholders: Electrical equipment manufacturers, utilities, energy service companies and other interested entities.

Project Need: Standards for field detection of metallic sheath current are needed to standardize and guide testing and diagnostic methods for metallic sheath bonding systems. Technical requirements for detection instruments and the diagnosis criteria for defects in metallic sheath bonding system are needed. Based on a diagnosis result, comprehensive correlation analysis can be carried out to further perform cable maintenance. The Cigre TB815 report released in 2020 identified 406 cases of cross-linked polyethylene cable failure from 2006 to 2015. Internal failures accounted for 71%, and 40% of all internal faults were caused by defects in the oversheath. Metallic-sheath-induced current detection technology can find defects such as damaged oversheath of a cable, poor connection of a metallic sheath bonding system, and a damaged sheath voltage limiter. The Cigre TB825 report released in 2021 included a questionnaire survey on new methods of power cable condition maintenance, conducted for 65 units. Among them, 11% of the respondents are applying metallic sheath current monitoring for condition-based maintenance and are willing to expand their application experience of metallic sheath ground current online monitoring equipment.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This guide describes a field detection method of metallic sheath induced current of single-conductor shield XLPE insulated AC cable rated 110 kV to 500 kV, including the current detection method, the technical requirements of detection instrument, and the diagnosis criteria for defects in a metallic sheath bonding system.

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

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***New Standard***

BSR/IEEE 3149-202x, Trial Use Guide for Dissection Techniques of Form Wound Stator Coils and Bars (new standard)

Stakeholders: Rotating equipment users and manufacturers, laboratories and material suppliers.

Project Need: A baseline of common techniques used for stator bar/coil dissections is needed to enable the industry to draw conclusions based on common methodology.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: The guide describes dissection techniques and methodologies for form wound stator coils and bars from rotating machines. The techniques are for use at any point in the life cycle of a coil or bar, as dissection can be done as part of a manufacturing process, after qualification test, after machine faults, and on coils and bars with no faults. The guide applies to any given construction, including Vacuum Pressure Impregnation (VPI), Resin Rich (RR), and Global Vacuum Pressure Impregnation (GVPI) and other systems. Due to the variety of construction, materials, and manufacturing processes, the guide does not provide acceptance criteria for measurable parameters.

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

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***New Standard***

BSR/IEEE 3150-202x, Guide for Testing the Semi-Conductive Water Blocking Tape in Cross-Linked Polyethylene Insulated Alternating-Current Power Cables (new standard)

Stakeholders: Power grid industry equipment designers, engineers and manufacturers, utility companies and energy service companies.

Project Need: The properties and technical performance of semi-conductive water blocking tape is very important for the operational stability of XLPE insulation AC power cable systems, which are widely used worldwide.

However, there is no unified standard for the technical parameters testing method for semi-conductive water blocking tapes in power cables at present. Therefore, it is urgent to specify test methods for semi-conductive water blocking tape, providing technical guidance and reference data for use in the design, manufacturing, measurement, acceptance and operation of semi-conductive water blocking tape, to support efficient and effective quality and performance improvements.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This guide defines and describes test methods and associated setups for semi-conductive water blocking tape for Cross-Linked Polyethylene (XLPE) insulated Alternating-Current (AC) power cable of 110 kV to 500 kV.

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

Lisa Weisser; l.weisser@ieee.org | 445 Hoes Lane | Piscataway, NJ 08854-4141 www.ieee.org

***New Standard***

BSR/IEEE 3151-202x, Standard for Spray-On Surface Antimicrobial Coatings Test Methodology (new standard)

Stakeholders: Industry, medical, producers, consumers/users, healthcare workers, government agencies.

Project Need: There is currently no defined, independent standard for Healthcare Environmental Surface Antimicrobial Coatings. There has been a growing interest in Antimicrobial Coatings in recent years which has been propelled even further forward as a result of the SARS-CoV-2 pandemic.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This standard specifies an objective performance test methodology to assess the efficacy of non-porous surface antimicrobial coatings against different organism groups (e.g., bacteria, viruses, yeasts, and moulds) present within hospital and healthcare environments. The standard is applicable to all types of environmental surface antimicrobial coatings that are designed to be sprayed onto and coat the surface to provide continual antimicrobial activity for a specified period of time. This standard excludes antimicrobial coatings (such as, antimicrobial plastics, polymers, silicone, paints, etc.) incorporated during the manufacturing process and non-environmental antimicrobial coatings specifically intended for medical devices.

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

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**Revision**

BSR/IEEE C37.14-202x, Standard for DC (3200 V and below) Power Circuit Breakers Used in Enclosures (revision of ANSI/IEEE C37.14-2015)

Stakeholders: Manufacturers, designers, consulting engineers and users of DC (3200 V and below) power circuit breakers.

Project Need: This standard was substantially revised during the last revision. This project is expected to include a 1200A Frame Rating for general-purpose circuit breakers, updates to references, and other changes to bring it up to date with the other standards in the C37 series.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This standard covers the following types, preferred ratings, and testing requirements of enclosed dc power circuit breakers: (a) Stationary or drawout type of one- or two-pole functional construction, (b) Having rated maximum voltages of up to 3200 V, (c) Manually operated or power operated, and (d) With or without overcurrent trip devices. NOTE--In this standard, the use of the term "circuit breaker" is considered to mean "enclosed dc power circuit breaker."

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

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**Revision**

BSR/IEEE C57.12.01-202x, Standard for General Requirements for Dry-Type Distribution and Power Transformers (revision of ANSI/IEEE C57.12.01-2015)

Stakeholders: Dry Type transformer manufacturers and owners.

Project Need: Over 15 items were identified by the Task Force to be addressed since the last revision.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This standard defines the electrical and mechanical requirements of single- and polyphase-ventilated, nonventilated, and sealed dry-type distribution and power transformers or autotransformers, with a voltage of 601V or higher in the highest voltage winding. This standard applies to all dry-type transformers, including those with solid-cast and/or resin encapsulated windings except as follows: (a) Instrument transformers, (b) Step and induction-voltage regulators, (c) Arc-furnace transformers, (d) Rectifier transformers, (e) Specialty and general-purpose transformers, (f) Mine transformers, (g) Testing transformers, (h) Welding transformers, (i) Drive transformers, and (j) Inverter transformers.



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

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***New Standard***

BSR/IEEE C57.12.53-202x, Guide for Mitigating Corrosion on Subsurface Transformers and Network Protectors (new standard)

Stakeholders: Electric utilities, other equipment users, consulting engineers, contractors, and manufacturers.

Project Need: Corrosion of transformers and network protectors installed in subsurface structures has been a persistent problem over time due to routine submersion of such equipment. A guide is needed to measure and quantify the contributing factors to classify corrosion risk. There is uncertainty by many users on when to use stainless steel submersible equipment enclosures, what specific stainless steel alloy to use, as well as when and how to use sacrificial anodes. A guide is needed to summarize what strategies are available to mitigate corrosion, so they may be incorporated into tailored specifications for equipment enclosures and cathodic protection. Furthermore, a guide is needed to define what testing and measurements are needed to help ensure the effectiveness of the corrosion mitigation strategies that are established.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This guide provides technical references for users of transformers and network protectors in subsurface structures. This includes testing, measurements, and classifications to define corrosive environments, as well as strategies to mitigate corrosion in subsurface environments, guidance on equipment enclosure specifications, and cathodic protection.

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

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***New Standard***

BSR/IEEE C57.12.91-202x, Standard Test Code for Dry-Type Distribution and Power Transformers (new standard)

Stakeholders: Users (electric utilities, industrial and commercial facilities) and manufacturers of dry type distribution and power transformers.

Project Need: Since publication of the last revision of this standard, it has been recognized that some test procedures described in the standard have had modifications proposed by stakeholders, are no longer used, or are performed in a different way or with different test equipment to that described.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This standard describes methods for performing tests specified in IEEE Std C.57.12.01 and other referenced standards applicable to dry-type distribution and power transformers, with a voltage of 601 V or higher in the highest voltage winding. It is intended for use as a basis for performance and for the proper testing of dry-type distribution and power transformers. This standard applies to all dry-type transformers including those with solid cast and/or resin encapsulated windings, except as follows: (a) Instrument transformers, (b) Step-voltage and induction voltage regulators, (c) Arc furnace transformers, (d) Rectifier transformers, (e) Specialty and General Purpose transformers, (f) Mine transformers, (g) Testing transformers, (h) Welding transformers. (i) Drive Transformers, and (j) Inverter Transformer.

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

Lisa Weisser; l.weisser@ieee.org | 445 Hoes Lane | Piscataway, NJ 08854-4141 www.ieee.org

**Revision**

BSR/IEEE C57.94-202x, Recommended Practice for Installation, Application, Operation, and Maintenance of Dry-Type Distribution and Power Transformers (revision of ANSI/IEEE C57.94-2015)

Stakeholders: Users and manufacturers of dry type distribution and power transformers.

Project Need: This project is needed to update C57.94. This project corrects errors that have been identified, updates the document to reflect current advancements in technologies, and updates the document format to align with current IEEE standard guidelines.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This recommended practice describes general recommendations for the installation, application, operation, and maintenance of all single- and polyphase-ventilated, non-ventilated, and sealed dry-type distribution and power transformers or autotransformers, including those with solid-cast and/or resin encapsulated windings except transformers described as exceptions in IEEE Std C57.12.01. NOTE—Where IEEE standards do not exist for the transformers mentioned above or for other special transformers, this standard may be applicable as a whole or in parts subject to agreement between the parties responsible for the application and for the design of the transformer.

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

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**New Standard**

BSR/IEEE C62.11-202x, Standard for Metal-Oxide Surge Arresters for AC Power Circuits (1 kV) (new standard)

Stakeholders: Users, specifiers and manufacturers of metal oxide surge arresters.

Project Need: Improved knowledge of performance and application of metal oxide varistor (MOV) surge arresters highlight deficiencies in existing design test procedures intended to verify suitability of an arrester for service.

Certain tests need to be modified, new tests need to be added and others need to be eliminated to better reflect the needs. Clearer definition of the need for each test is required to serve as information for current users and to provide a historical record for future revisions of the standard.

Interest Categories: A subset of the interest categories on this list is expected to comprise the consensus body: <https://ieee.box.com/v/Interest-Categories>.

Scope: This standard applies to metal-oxide surge arresters (MOSAs) designed to repeatedly limit the voltage surges on 48-Hz to 62-Hz power circuits (>1000 V) by passing surge discharge current and automatically limiting the flow of system power current. This standard applies to devices for separate mounting and to devices supplied integrally with other equipment.

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

David Richmond; David.Richmond@nema.org | 1300 North 17th Street, Suite 900 | Rosslyn, VA 22209 www.nema.org

**Revision**

BSR C136.41-201X-202x, Standard For Roadway and Area Lighting Equipment Dimming Control Between an External Locking Type Photocontrol and Ballast or Driver (revision of ANSI C136.41-2021)

Stakeholders: Lighting Controls Manufacturers, Utilities, End Users.

Project Need: Revise this document to limit to the scope to 0-10V and Dali for dimming control, update references, contact designations, electrical requirements, and revise mechanical drawings.

Interest Categories: Producer Luminaire, Producer Other, Producer Poles, User, and General Interest.

Scope: This standard describes methods of light-level control between an external locking-type photocontrol (or similar device) and a dimmable ballast or driver for street and area lighting equipment. Mechanical, electrical, and marking requirements are established for dimming, locking-type photocontrols, and mating receptacles. All requirements of ANSI C136.10-2010 for photocontrols and receptacles shall apply, except where specifically superseded by this standard.

**SDI (ASC A250) (Steel Door Institute)**

Linda Hamill; leh@wherryassoc.com | 30200 Detroit Road | Westlake, OH 44145 www.wherryassocsteeldoor.org

**Revision**

BSR A250.4-202x, Physical Endurance for Steel Doors, Frames and Frame Anchors (revision of ANSI A250.4-2018)

Stakeholders: Steel door and frame manufacturers and steel door and frame end-users.

Project Need: To maintain the five-year review cycle and revise the standard as needed.

Interest Categories: Consumers, producers, and individuals of general interest.

Scope: The primary purpose of this procedure is to establish a standard method of testing the performance of a steel door mounted in a hollow metal or channel iron frame installed with appropriate anchors, under conditions that might reasonably be considered an accelerated field operating condition.

**TCNA (ASC A108) (Tile Council of North America)**

Katelyn Simpson; KSimpson@tileusa.com | 100 Clemson Research Blvd. | Anderson, SC 29625 www.tcnatile.com

**Revision**

BSR A108.10-202x, Installation of Grout in Tilework (revision of ANSI A108.10-2017 (R2022))

Stakeholders: Ceramic tile installers, contractors, and builders (labor interest category), related material manufacturers (manufacturing interest category), distributors, retailers and consumers (user interest category), and affiliated industries and other general interest users of this standard (general interest category).

Project Need: Various stakeholders have suggested revisions be made to various sections of this standard.

Interest Categories: Manufacturer, Labor, General Interest, User.

Scope: This specification describes the minimum requirements for grouting ceramic tile with sand-portland cement grout, standard sanded cement grout, standard unsanded cement grout, polymer modified sanded tile grout, and polymer modified unsanded tile grout.

# 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

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## Comment Deadline: August 7, 2022

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

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

#### Addenda

BSR/ASHRAE Addendum a to BSR/ASHRAE Standard 145.1-202x, Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media (addenda to ANSI/ASHRAE Standard 145.1-2015)

This addendum makes changes to several definitions to harmonize them as much as possible with definitions in Standard 145.2 (as amended by RP-1838) and Chapter 47 in the Applications Handbook.

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

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

## Comment Deadline: August 7, 2022

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

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

#### **Addenda**

BSR/ASHRAE/ICC/IES/USGBC Addendum t 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)

This addendum addresses the energy use of indoor agriculture grow spaces in the three ways. First, the proposal adds additional lighting efficacy and renewable energy requirements to these facilities. Second, this proposal increases the efficacy requirement to 2.1 PPE. Third, this proposal will also require lighting from these be provided by renewable energy to account for increased carbon emissions from indoor grow spaces and greenhouse facilities compared with growing crops outdoors. This proposal also addresses the energy use of HVAC systems in indoor grow facilities and adds a compliance option so the cost of construction will not increase.

[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 | [tloxley@ashrae.org](mailto:tloxley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/ICC/IES/USGBC Addendum x 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)

This addendum adds a normative reference in Section 11 to Chapter 3, the occupancy classification and use chapter of the International Building Code© (IBC). Standard 189.1 already references IBC occupancy groups in Section 5.3.7.3 and has other sections that are applicable to specific building uses. Some of these existing sections, and potentially future provisions, may benefit from the ability to make a reference to the defined occupancy classifications of the IBC. This change will also enhance the correlation between the International Green Construction Code and the other International Codes, most of which reference the IBC for occupancy classification.

[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 | [tloxley@ashrae.org](mailto:tloxley@ashrae.org), [www.ashrae.org](http://www.ashrae.org)

#### **Addenda**

BSR/ASHRAE/ICC/IES/USGBC Addendum y 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)

This addendum adds language to section 8.3.1.7 to add a prohibition on vaping and required signage for any designated smoking areas.

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## Comment Deadline: August 7, 2022

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#### **Addenda**

BSR/ASHRAE/IES Addendum bp 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 would remove a previous exception in the control requirements for captive key cards used in hotel guestrooms since this technology is not commonly used and is often bypassed.

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#### **Addenda**

BSR/ASHRAE/IES Addendum cv 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 is in response to a revision to AHRI 920 (2020 edition + Addendum I) in which new metrics (ISMRE2 and IS COP2) are being used to evaluate the efficiency of dehumidification and heating. The minimum efficiency requirements for 90.1 and DOE-covered DX-DOAS equipment have been modified for consistency with the new test procedure.

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#### **Addenda**

BSR/ASHRAE/IES Addendum cw 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 proposes an additional lighting power allowance that can be used to achieve exit access stairway illuminance levels in accordance with the 2021 IBC.

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## Comment Deadline: August 7, 2022

### 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 41-202x (i11r2), Non-liquid Saturated Treatment Systems (revision of ANSI/NSF 41-2018)

This wastewater standard contains minimum requirements for treatment systems that do not utilize a liquid saturated media as a primary means of storing or treating human excreta or human excreta mixed with other organic household materials. It addresses treatment systems that treat both solid and liquid waste, as well as those that only treat solid waste. Management methods for the end products of these systems are not addressed by this Standard.

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#### Revision

BSR/NSF 350-202x (i72r1), Onsite Residential and Commercial, Water Reuse Treatment Systems (revision of ANSI/NSF 350-2020)

This Standard contains minimum requirements for onsite residential and commercial greywater treatment systems. Systems may include greywater reuse treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d); or Commercial greywater reuse treatment systems: This applies to onsite commercial reuse treatment systems that treat combined commercial facility greywater with capacities exceeding 5,678 L/d (1,500 gal/d) and commercial facility laundry water only of any capacity. Management methods and end uses appropriate for the treated effluent discharged from greywater residential and commercial treatment systems meeting this Standard are limited to subsurface discharge to the environment only.

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

### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | [alan.t.mcgrath@ul.org](mailto:alan.t.mcgrath@ul.org), <https://ul.org/>

#### Revision

BSR/UL 428B-202X, Standard for Electrically Operated Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations Up To 20 Percent (B20), Kerosene, and Fuel Oil (revision of ANSI/UL 428B-2021)

(1) ANSI approval of the revisions covering the (a) deletion of redundant requirements in UL 428B, and (b) Operations Test.

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: [alan.t.mcgrath@ul.org](mailto:alan.t.mcgrath@ul.org)

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### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | Amy.K.Walker@ul.org, <https://ul.org/>

#### Revision

BSR/UL 705-202x, Standard for Safety for Power Ventilators (revision of ANSI/UL 705-2021)

This proposal for UL 705 covers: (2) Update internal wiring for hazardous voltage; and (3) Addition of solid state speed controller test requirements

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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)

47173 Benicia Street, Fremont, CA 94538 | Linda.L.Phinney@ul.org, <https://ul.org/>

#### Revision

BSR/UL 1581-202x, Standard for Reference Standard for Electrical Wires, Cables, and Flexible Cords (July 8, 2022) (revision of ANSI/UL 1581-2020)

This proposal covers: (1) Editorial change to 11.1 and addition of copper-clad Aluminum, New Section 12.

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### UL (Underwriters Laboratories)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada | kevin.hf.wu@ul.org, <https://ul.org/>

#### Revision

BSR/UL 2034-202x, Standard for Safety for Single and Multiple Station Carbon Monoxide Alarms (revision of ANSI/UL 2034-2022)

This proposal covers:(1) New Commercial Vehicles Definition; (6) New Velocity Sensitivity Test.

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### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

#### Revision

BSR/UL 2594-202X, Standard for Safety for Electric Vehicle Supply Equipment (revision of ANSI/UL 2594-2016)  
(1) The Proposed Third Edition of the Standard for Electric Vehicle Supply Equipment, ANCE J- 677/CSA 280/UL 2594, including the following revisions: (a) Removal of requirement to fasten in place devices rated over 125 V; (b) Increase voltage to 1000 V input, (c) Revisions due to withdrawal of UL 2744; and (d) Location of interrupting device for personnel protection systems in EVSE in accordance with the NEC.

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### WMA (World Millwork Alliance)

10047 Robert Trent Jones Parkway, New Port Richey, FL 34655 | [jferris@worldmillworkalliance.com](mailto:jferris@worldmillworkalliance.com), <http://worldmillworkalliance.com>

#### Revision

BSR/WMA 100-202x, Standard Method of Determining Structural Performance Ratings of Side-Hinged Exterior Door Systems and Procedures for Component Substitution (revision of ANSI/WMA 100-2018)

Additional revisions regarding updated reference standards have been incorporated into the ANSI/WMA 100-2018 by WMA's Industry Standards and Certification Committee (ISCC) from comments received during the WMA 100 Consensus Body balloting and the public comment period in May/June. The WMA 100 provides a method to obtain a structural design pressure rating for a side-hinged exterior door system (SHEDS) using the ASTM E330 test method. Once a rating is obtained, the standard defines methods for qualifying door system components for substitution in the rated system. Slab stiffness testing is used and outlined in this standard as a means to qualify components.

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Jessica Ferris, Director of Codes and Standards  
[jferris@worldmillworkalliance.com](mailto:jferris@worldmillworkalliance.com)

## Comment Deadline: August 22, 2022

### 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 8.5-1996 (R202x), Use of Borosilicate-Glass Raschig Rings as a Neutron Absorber in Solutions of Fissile Material (reaffirmation of ANSI/ANS 8.5-1996 (R2017))

This standard provides guidance for the use of borosilicate-glass Raschig rings as a neutron absorber for criticality control in ring-packed vessels containing solutions of 235U, 239Pu, or 233U. The chemical and physical environment, properties of the rings, and packed vessels, maintenance inspection procedures, and operating guidelines are specified.

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## Comment Deadline: August 22, 2022

### **ANS (American Nuclear Society)**

555 North Kensington Avenue, La Grange Park, IL 60526 | kmurdoch@ans.org, www.ans.org

#### **Reaffirmation**

BSR/ANS 8.6-1983 (R202x), Safety in Conducting Subcritical Neutron-Multiplication Measurements in Situ (reaffirmation of ANSI/ANS 8.6-1983 (R2017))

This standard provides safety guidance for conducting subcritical neutron-multiplication measurements where physical protection of personnel against the consequences of a criticality accident is not provided. The objectives of in situ measurements are either to confirm an adequate safety margin or to improve an estimate of such a margin. The first objective may constitute a test of the criticality safety of a design that is based on calculations. The second may effect improved operating conditions by reducing the uncertainty of safety margins and providing guidance to new designs.

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555 North Kensington Avenue, La Grange Park, IL 60526 | kmurdoch@ans.org, www.ans.org

#### **Revision**

BSR/ANS 8.3-202x, Criticality Accident Alarm System (revision of ANSI/ANS 8.3-1997 (R2017))

This standard is applicable to operations with fissionable materials in which inadvertent criticality could occur leading to an excessive radiation dose to personnel. This standard is not applicable to nuclear reactors or critical experiments.

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256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

#### **National Adoption**

BSR/ARESCA 61400-12-4-202x, Wind energy generation systems - Part 12-4: Numerical site calibration for power performance testing of wind turbines (identical national adoption of IEC TR 61400-12-4:2020)  
IEC TR 61400-12-4:2020 summarizes the current state of the art in numerical flow modelling, existing guidelines and past benchmarking experience in numerical model validation and verification. Based on the work undertaken, the document identifies the important technical aspects for using flow simulation over terrain for wind application as well as the existing open issues including recommendations for further validation through benchmarking tests.

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#### ***National Adoption***

BSR/ARESCA 61400-15-1-202x, Wind energy generation systems - Part 15-1: Site suitability input conditions for wind power plants (identical national adoption of IEC 61400-15-1:2022)

The scope of this standard is the assessment and reporting of site-specific wind conditions. This includes the following aspects: (1) all measurement, analysis and evaluation steps including data analysis, modeling, loss assessment and net energy production estimation for wind power stations; (2) all documentation requirements to make the results traceable to national standards; (3) all reporting requirements; (4) a standardised approach to the uncertainty assessment of an assessment of site-specific wind conditions. The expression "site-specific conditions" as used in the context of this document is defined as the set of meteorological site conditions which are relevant for the design, operation and structural integrity of a wind turbine (WT). The meteorological site conditions addressed in this document relate to wind conditions, where parameters like wind speed, wind direction, air density, or air temperature are included to the extent that they affect the wind flow.

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#### ***National Adoption***

BSR/ARESCA 61400-25-1-202x, Wind energy generation systems - Part 25-1: Communications for monitoring and control of wind power plants - Overall description of principles and models (identical national adoption of IEC 61400-25-1:2017)

IEC 61400-25-1:2017 gives an overall description of the principles and models used in the IEC 61400-25 series, which is designed for a communication environment supported by a client-server model. Three areas are defined, that are modelled separately to ensure the scalability of implementations: wind power plant information models, information exchange model, and mapping of these two models to a standard communication profile. This new edition includes the following significant technical changes with respect to the previous edition: general harmonization of text and overview models with the other parts of the IEC 61400-25 series, harmonization of definitions in other related standards.

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#### ***National Adoption***

BSR/ARESCA 61400-25-2-202x, Wind energy generation systems - Part 25-2: Communications for monitoring and control of wind power plants - Information models (identical national adoption of IEC 61400-25-2:2015)  
IEC 61400-25-2:2015 specifies the information model of devices and functions related to wind power plant applications. In particular, it specifies the compatible logical node names, and data names for communication between wind power plant components. This includes the relationship between logical devices, logical nodes, and data. The names defined in the IEC 61400-25 series are used to build the hierarchical object references applied for communicating with components in wind power plants.

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#### ***National Adoption***

BSR/ARESCA 61400-25-3-202x, Wind energy generation systems - Part 25-3: Communications for monitoring and control of wind power plants - Information exchange models (identical national adoption of IEC 61400-25-3:2015)

IEC 61400-25-3:2015 specifies an abstract communication service interface describing the information exchange between a client and a server for:

- data access and retrieval;
- device control;
- event reporting and logging;
- self-description of devices (device data dictionary); and
- data typing and discovery of data types.

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#### ***National Adoption***

BSR/ARESCA 61400-25-4-202x, Wind energy generation systems - Part 25-4: Communications for monitoring and control of wind power plants - Mapping to communication profile (identical national adoption of IEC 61400-25-4:2016)

IEC 61400-25-4:2016 specifies the specific mappings to protocol stacks encoding the messages required for the information exchange between a client and a remote server for: data access and retrieval, device control, event reporting and logging, publisher/subscriber, self-description of devices (device data dictionary), data typing and discovery of data types. The mappings specified in this part of IEC 61400-25 comprise:

- a mapping to SOAP-based web services;
- a mapping to OPC/XML-DA;
- a mapping to IEC 61850-8-1 MMS;
- a mapping to IEC 60870-5-104; and
- a mapping to DNP3.

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#### ***National Adoption***

BSR/ARESCA 61400-25-5-202x, Wind energy generation systems - Part 25-5: Communications for monitoring and control of wind power plants - Compliance testing (identical national adoption of IEC 61400-25-5:2017)

IEC 61400-25-5:2017 specifies standard techniques for testing of compliance of implementations, as well as specific measurement techniques to be applied when declaring performance parameters. The use of these techniques will enhance the ability of users to purchase systems that integrate easily, operate correctly, and support the applications as intended. This part of IEC 61400-25 defines: the methods and abstract test cases for compliance testing of server and client devices used in wind power plants; the metrics to be measured in said devices according to the communication requirements specified in IEC 61400-25 (all parts).

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#### ***National Adoption***

BSR/ARESCA 61400-25-6-202x, Wind energy generation systems - Part 25-6: Communications for monitoring and control of wind power plants - Logical node classes and data classes for condition monitoring (identical national adoption of IEC 61400-25-6:2016)

IEC 61400-25-6:2016 specifies the information models related to condition monitoring for wind power plants and the information exchange of data values related to these models. This standard is to be used with other standards of the IEC 61400-25 series.

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#### ***National Adoption***

BSR/ARESCA 61400-27-1-202x, Wind energy generation systems - Part 27-1: Electrical simulation models - Generic models (identical national adoption of IEC 61400-27-1:2020)

IEC 61400-27-1:2020 defines standard electrical simulation models for wind turbines and wind power plants. The specified models are time domain positive sequence simulation models, intended to be used in power system and grid stability analyses. The models are applicable for dynamic simulations of short term stability in power systems. This document defines the generic terms and parameters for the electrical simulation models. This document specifies electrical simulation models for the generic wind power plant topologies/configurations currently on the market. The wind power plant models include wind turbines, wind power plant control and auxiliary equipment. The wind power plant models are described in a modular way which can be applied for future wind power plant concepts and with different wind turbine concepts.

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#### ***National Adoption***

BSR/ARESCA 61400-27-2-202x, Wind energy generation systems - Part 27-2: Electrical simulation models - Model validation (identical national adoption of IEC 61400-27-2:2020)

IEC 61400-27-2:2020 specifies procedures for validation of electrical simulation models for wind turbines and wind power plants, intended to be used in power system and grid stability analyses. The validation procedures are based on the tests specified in IEC 61400-21 (all parts). The validation procedures are applicable to the generic models specified in IEC 61400-27-1 and to other fundamental frequency wind power plant models and wind turbine models. The validation procedures for wind turbine models focus on fault ride-through capability and control performance. The fault ride-through capability includes response to balanced and unbalanced voltage dips as well as voltage swells. The control performance includes active power control, frequency control, synthetic inertia control and reactive power control. The validation procedures for wind turbine models refer to the tests specified in IEC 61400-21-1. The validation procedures for wind turbine models refer to the wind turbine terminals.

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#### ***National Adoption***

BSR/ARESCA 61400-50-3-202x, Wind energy generation systems - Part 50-3: Use of nacelle-mounted lidars for wind measurements (identical national adoption of IEC 61400-50-3:2022)

IEC 61400-50-3:2022 describes procedures and methods that ensure that wind measurements using nacelle-mounted wind lidars are carried out and reported consistently and according to best practice. This document does not prescribe the purpose or use case of the wind measurements. However, as this document forms part of the IEC 61400 series of standards, it is anticipated that the wind measurements will be used in relation to some form of wind energy test or resource assessment. The scope of this document is limited to forward-looking nacelle-mounted wind lidars (i.e., the measurement volume is located upstream of the turbine rotor). This document aims to describe wind measurements using nacelle-mounted wind lidar with sufficient quality for the use case of power performance testing (according to IEC 61400-12-1:2017).

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### **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | secretary@aresca.us, www.aresca.us

#### ***National Adoption***

BSR/ARESCA 61400-25-71-202x, Wind energy generation systems - Part 25-71: Communications for monitoring and control of wind power plants - Configuration description language (identical national adoption of IEC TS 61400-25-71:2019)

This document describes how to extend the IEC 61400-25 series with the IEC 61850-6 Substation Configuration description Language (SCL) file format for describing communication-related Intelligent Electronic Device (IED) configurations of a wind turbine, wind power plant controller, meteorological mast, etc. The extension of SCL to the wind domain is intended to simplify integration of wind power plant equipment for clients, as well as their integration to the electrical system. The adoption of SCL allows formalised tool-based exchange of IED parameters, communication system configurations, switch yard (function) structures, as well as description of the relations between them.

Single copy price: Free

Obtain an electronic copy from: secretary@aresca.us

Order from: ARESCA

Send comments (copy psa@ansi.org) to: secretary@aresca.us

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

520 N. Northwest Highway, Park Ridge, IL 60068 | LBauerschmidt@assp.org, www.assp.org

#### ***Revision***

BSR/ASSP Z359.4-202x, Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems and Components (revision and redesignation of ANSI/ASSE Z359.4-2013)

This standard establishes requirements for the performance, design, marking, qualification, instruction, training, use, maintenance and removal from service of connectors, harnesses, lanyards, anchorage connectors, winches/hoists, descent control devices, rope tackle blocks and self-retracting lanyards with integral rescue capability comprising rescue systems, utilized in pre-planned self-rescue and assisted-rescue applications for one to two persons.

Single copy price: \$110.00

Obtain an electronic copy from: LBauerschmidt@assp.org

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

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

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 | accreditation@astm.org, www.astm.org

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

BSR/ASTM D8428-202x, Standard Guide for Establishing Analyst Competence to Perform a Test Method (new standard)

<https://www.astm.org/ansi-review>

Single copy price: Free

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## Comment Deadline: August 22, 2022

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

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | [kbulger@aws.org](mailto:kbulger@aws.org), [www.aws.org](http://www.aws.org)

#### **Revision**

BSR/AWS D14.0/D14.0M-202x, Machinery and Equipment Welding Specification (revision, redesignation and consolidation of ANSI/AWS D14.3/D14.3M-2018, ANSI/AWS D14.4/D14.4M-2019, ANSI/AWS D14.5/D14.5M-2009, and AWS D14.1/D14.1M)

This specification establishes design, manufacture, quality, inspection, and repair requirements for carbon and low-alloy steel welded connections in machinery and equipment. It addresses topics including weld joint design, workmanship, quality acceptance criteria, non-destructive inspection methods (visual, radiographic, ultrasonic, magnetic particle, and liquid penetrant), repair of weld defects, and post-weld heat treatment.

Single copy price: \$134.00 (Non-Members)/\$100.00 (AWS Members)

Obtain an electronic copy from: [kbulger@aws.org](mailto:kbulger@aws.org)

Order from: Kevin Bulger; [kbulger@aws.org](mailto:kbulger@aws.org)

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

### **CGA (Compressed Gas Association)**

8484 Westpark Drive, Suite 220, McLean, VA 22102 | [tdeary@cganet.com](mailto:tdeary@cganet.com), [www.cganet.com](http://www.cganet.com)

#### **New Standard**

BSR/CGA G-5-202x, Hydrogen (new standard)

This publication provides information on the physical and chemical properties of hydrogen and proper handling and use. It is intended to provide background information for personnel involved in the manufacture, distribution, and use of hydrogen.

Single copy price: Free

Obtain an electronic copy from: [tdeary@cganet.com](mailto:tdeary@cganet.com)

Order from: [tdeary@cganet.com](mailto:tdeary@cganet.com)

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

8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | [ansi.contact@csagroup.org](mailto:ansi.contact@csagroup.org), [www.csagroup.org](http://www.csagroup.org)

#### **Revision**

BSR/CSA HGV 3.1-202x, Fuel system components for compressed hydrogen gas powered vehicles (revision of ANSI/CSA HGV 3.1-2014 (R2019))

This standard establishes requirements for newly produced compressed hydrogen gas fuel system components, intended for use on hydrogen-gas-powered vehicles including: check valves, manual valves, manual container valves, automatic valves and automatic container valves, hydrogen injectors, pressure and temperature sensors and pressure gauges, pressure regulators, pressure relief valves, pressure relief devices, excess flow valves, gas-tight housing and ventilation passages, stainless steel rigid fuel lines, flexible fuel lines, hoses and assemblies, filter assemblies, fittings, non-metallic low-pressure rigid fuel lines and discharge line closures.

Single copy price: Free

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

## Comment Deadline: August 22, 2022

### CTA (Consumer Technology Association)

1919 S. Eads Street, Arlington, VA 22202 | cakers@cta.tech, www.cta.tech

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

BSR/CTA 2106-202x, Characteristics and Requirements for Mental Health Technology Solutions (new standard)

This document will provide guidelines and implementation for consumer technologies related to the monitoring treatment, and diagnosis of mental health and mental wellness.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: standards@cta.tech

Send comments (copy psa@ansi.org) to: CAkers@cta.tech

### CTA (Consumer Technology Association)

1919 S. Eads Street, Arlington, VA 22202 | cakers@cta.tech, www.cta.tech

#### ***Revision***

BSR/CTA/NSF-2052.1-A-202x, Definitions and Characteristics for Wearable Sleep Monitors (revision and redesignation of ANSI/CTA/NSF-2052.1)

This standard specifies terms and definitions for consumer sleep-wearable devices used to describe sleep and indicates the functionality necessary to measure the characteristics of sleep.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: standards@cta.tech

Send comments (copy psa@ansi.org) to: CAkers@cta.tech

### EOS/ESD (ESD Association, Inc.)

218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, www.esda.org

#### ***Revision***

BSR/EOS ESDA/JEDEC JS-001-202x, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing - Human Body Model (HBM) - Component Level (revision of ANSI/ESDA/JEDEC JS-001-2017)

This standard establishes the procedure for testing, evaluating, and classifying components and microcircuits according to their susceptibility (sensitivity) to damage or degradation by exposure to a defined human body model (HBM) electrostatic discharge (ESD). For the purpose of this standard, the term "component" includes packaged device, unpackaged singulated bare die, and die which are still part of a wafer.

Single copy price: \$145.00 (List)/\$115.00 (EOS Members) [Hard cover]; \$135.00 (List)/\$105.00 (EOS Members) [Soft cover]

Obtain an electronic copy from: cearl@esda.org

Order from: Christina Earl; cearl@esda.org

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

## Comment Deadline: August 22, 2022

### ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

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

BSR/E1.71-202x, Powered Curtain Machines (new standard)

This standard establishes requirements for the design, manufacture, installation, inspection, and maintenance of machines intended for the movement of curtains in entertainment environments. Curtains operated by these machines may be for scenery, performance, presentation, acoustical dampening, museum exhibits, retail displays, and theatrical production. Specifically included are the machine control systems, mechanical construction, and powertrain components.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

Order from: Richard Nix; [standards@esta.org](mailto:standards@esta.org)

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### ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

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

BSR/E1.72-202x, Powered Floor Machinery (new standard)

This standard establishes requirements for the design, manufacture, installation, inspection, operation and maintenance of powered Stage Floor Machinery for performance, presentation, and theatrical production. It covers the machinery, mechanisms, machine safety devices, and control interface requirements for equipment and systems, installed permanently or temporarily. This standard does not apply to the structure to which the machine is attached nor to the finished floor or subflooring construction. Machines that produce substantially vertical movement are also excluded from this standard.

Single copy price: Free

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271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

#### ***Reaffirmation***

BSR E1.9-2007 (R202x), Reporting Photometric Performance Data for Luminaires Used in Entertainment (reaffirmation of ANSI E1.9-2007 (R2017))

ANSI E1.9 defines the minimum photometric data to be presented on documents purporting to accurately describe the photometric performance of stage and studio luminaires used in the live entertainment and performance industries.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

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### ESTA (Entertainment Services and Technology Association)

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#### Reaffirmation

BSR E1.25-2012 (R202x), Recommended Basic Conditions for Measuring the Photometric Output of Stage and Studio Luminaires by Measuring Illumination Levels Produced on a Planar Surface (reaffirmation of ANSI E1.25-2012 (R2017))

ANSI E1.25 describes the basic conditions for measuring the photometric output of a stage or studio luminaire by testing methods that measure the illumination levels produced by the luminaire on a planar surface. These testing methods include, but are not limited to, measurements taken by digital cameras or hand-held meters. This standard is not intended to give guidance on testing conditions for testing methods that use goniophotometers.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

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### ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

#### Reaffirmation

BSR E1.35-2013 (R202x), Standard for Lens Quality Measurements for Pattern Projecting Luminaires Intended for Entertainment Use (reaffirmation of ANSI E1.35-2013 (R2018))

ANSI E1.35 describes a method for measuring stage and studio luminaire lens quality with particular emphasis on contrast and perceived projected image quality (sharpness). It also offers a way for presenting these results on a datasheet in a format that is readily understood by a typical end-user and that allows the end-user to directly compare lenses in a meaningful way. Without this standard, there is no way to describe how clearly a stage lighting instrument projects an image, other than by showing a person with the actual instrument and gobo.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

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### ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | [standards@esta.org](mailto:standards@esta.org), [www.esta.org](http://www.esta.org)

#### Revision

BSR/E1.28-202x, Guidance on planning followspot positions in places of public assembly (revision of ANSI E1.28-2011 (R2021))

ANSI E1.28 offers guidance on the planning of permanent followspot positions. It is being revised to add guidance on glass panes when used as part of a followspot position.

Single copy price: Free

Obtain an electronic copy from: [https://tsp.esta.org/tsp/documents/public\\_review\\_docs.php](https://tsp.esta.org/tsp/documents/public_review_docs.php)

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## Comment Deadline: August 22, 2022

### IEEE (ASC C63) (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854 | J.Santulli@ieee.org, www.ieee.org

#### Revision

BSR C63.10 Corrigendum-202x, Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices (revision of ANSI C63.10-2020)

Corrections for the following: (1) Harmonize requirements between clauses 6.2.2 and 6.2.3.2.2 to remove the requirement to calibrate the LISN with an extension cable as currently required in 6.2.2 and then later removing the requirement in 6.2.3.2.2. (2) Correct formula for UWB Center Frequency.

Single copy price: Free

Obtain an electronic copy from: j.santulli@ieee.org

Send comments (copy psa@ansi.org) to: j.santulli@ieee.org

### NEMA (ASC C119) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 | Pau\_orr@nema.org, www.nema.org

#### Revision

BSR C119.4-202x, Electric Connectors - Connectors for Use between Aluminum-to-Aluminum and Aluminum-to-Copper Conductors Designed for Normal Operation at or Below 93°C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100°C (revision of ANSI C119.4-2016)

This standard covers connectors used for making electrical connections between aluminum-to-aluminum or aluminum-to-copper or copper-to-copper conductors used on distribution and transmission lines for electric utilities.

Single copy price: \$172.00

Obtain an electronic copy from: pau\_orr@nema.org

Order from: www.nema.org

Send comments (copy psa@ansi.org) to: pau\_orr@nema.org

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

1300 North 17th Street, Suite 900, Arlington, VA 22209 | Khaled.Masri@nema.org, www.nema.org

#### Revision

BSR NEMA WC 74/ICEA S-93-639-202x, 5-46 kV Shielded Power Cable for Use in the Transmission and Distribution of Electric Energy (revision of ANSI/NEMA WC 74/ICEA S-93-639-2017)

This standard applies to materials, constructions, and testing of 5,000 volt to 46,000 volt shielded crosslinked polyethylene, and ethylene propylene rubber insulated wires and cables that are used for the transmission and distribution of electrical energy for normal conditions of installation and service, either indoors, outdoors, aerial, underground, or submarine.

Single copy price: \$295.00

Obtain an electronic copy from: communication@nema.org

Order from: khaled.masri@nema.org

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

## Comment Deadline: August 22, 2022

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

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 | Pau\_orr@nema.org, www.nema.org

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

BSR/NEMA GR 1-202x, Ground Rod Electrodes and Ground Rod Electrode Couplings (new standard)  
This standards publication applies to ground rod electrodes and ground rod electrode couplings that function in accordance with the National Electrical Code (NFPA 70) and/or the National Electrical Safety Code (ANSI C2). Included are materials, construction, and performance of copper-bonded ground rod electrodes, zinc-coated ground rod electrodes, and stainless steel ground rod electrodes. This standards publication also includes information for electrode products that have been successfully used for many years but are not defined within the National Electrical Code or the National Electrical Safety Code. The items described in this standards publication are defined in Section 1.

Single copy price: \$102.00

Obtain an electronic copy from: pau\_orr@nema.org

Order from: www.nema.org

Send comments (copy psa@ansi.org) to: pauorr@nema.org

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

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | aburr@nsf.org, www.nsf.org

#### ***Revision***

BSR/NSF 332-202x (i9r3.1), Sustainability Assessment for Resilient Floor Coverings (revision of ANSI/NSF 332-2015)

This sustainability standard establishes a consistent approach to the evaluation and determination of environmentally preferable and sustainable resilient floor coverings. The Standard includes relevant criteria across the product(s) life cycle from raw material extraction through manufacturing, use, and end-of-life management. As used in this Standard, "resilient floor coverings" includes, but is not limited to, vinyl tile, vinyl composition tile, sheet vinyl, rubber, polymeric, and linoleum flooring products in which the wearing surface is non-textile. Also included are flooring accessories such as wall base, moldings, and stair treads.

Single copy price: Free

Obtain an electronic copy from: [https://standards.nsf.org/apps/group\\_public/download.php/64288/332i9r3.1%20-%20Full%20Revision%20-%20JC%20Memo%20-%2026%20ballot.pdf](https://standards.nsf.org/apps/group_public/download.php/64288/332i9r3.1%20-%20Full%20Revision%20-%20JC%20Memo%20-%2026%20ballot.pdf)

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

### **UL (Underwriters Laboratories)**

333 Pfingsten Road, Northbrook, IL 60062-2096 | Lisette.delgado@ul.org, <https://ul.org/>

#### ***Reaffirmation***

BSR/UL 486G-2018 (R202x), Standard for Sealed Twist-On Connecting Devices (reaffirmation of ANSI/UL 486G-2018)

Reaffirmation of UL 486G which covers Sealed Twist-On Connecting Devices.

Single copy price: Free

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

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## Comment Deadline: August 22, 2022

### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062 | [megan.monsen@ul.org](mailto:megan.monsen@ul.org), <https://ul.org/>

#### Revision

BSR/UL 1998-202x, Standard for Safety for Software in Programmable Components (revision of ANSI/UL 1998-2018)

The proposed revisions to UL 1998 include: (1) Removal of limitation to non-networked software, (2) Update of definitions, (3) Clarification of risk analysis scope and requirements, (4) Clarification of software development process requirements, (5) Clarification of tool requirements, (6) Clarification of software design requirements, (7) Clarification of measures to address systematic microelectronic hardware failures, and (8) Clarification of change management and document control requirements.

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### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 | [Susan.P.Malohn@ul.org](mailto: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 61730-2-2020)

(1) Update of IEC TS 62915 References to UL 62915; (2) Correction of Clause DVA.1 to correlate with the intent of Clause DVA.3; (3) Change Fire Type Glass Description in Table 10.17DV.4.6.1 to not Overlap; (4) New Fire Type Additions 35 – 40 in Fire Type Testing, Section 10.17DV.4.

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

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: August 22, 2022

### ULSE (UL Standards & Engagement)

47173 Benicia Street, Fremont, CA 94538 | Marcia.M.Kawate@ul.org, <https://ul.org/>

#### **Reaffirmation**

BSR/UL 1261-2017 (R202x), Standard for Safety for Electric Water Heaters for Pools and Tubs (reaffirmation of ANSI/UL 1261-2017)

These requirements cover permanently installed electric water heaters, rated 600 volts or less, for heating the water supplied through plumbing to separately heated public or private pools or tubs, in which swimming, wading, bathing, or partial or total immersion of persons, may be involved. Equipment covered may or may not be intended for use with external water circulating equipment, and is intended for installation in accordance with the National Electrical Code, NFPA 70.

Single copy price: Free

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

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 6, 2022

### ASME (American Society of Mechanical Engineers)

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | [ansibox@asme.org](mailto:ansibox@asme.org), [www.asme.org](http://www.asme.org)

#### **New Standard**

BSR/ASME PTC 53-202x, Performance Test Code for Mechanical and Thermal Energy Storage Systems (new standard)

This Performance Test Code defines uniform test procedures and quantifiable test methods for assessing, determining, and reporting the performance of mechanical or thermal energy storage systems (ESS) across varying technology platforms. ASME PTC 53 covers mechanical and thermal technologies including compressed air, flywheels, thermal storage ranging from molten salts to cryogenic liquids, and pumped hydromechanical energy.

Single copy price: Free

Order from: <https://cstools.asme.org/csconnect/PublicReviewPage.cfm>

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Donnie Alonzo; [dalonzo@asme.org](mailto:dalonzo@asme.org)



## Comment Deadline: September 6, 2022

### ISANTA (International Staple, Nail and Tool Association)

8735 W. Higgins Road, Suite 300; c/o Association Management Center, Chicago, IL 60631 | [jhenry@isanta.org](mailto:jhenry@isanta.org)

#### Revision

BSR/ISANTA SNT-101-202x, Safety Requirements for Portable Compressed-Air-Actuated Fastener Driving Tools (revision of ANSI SNT-101-2015)

Standard for Power Tools - Safety Requirements for Portable, Compressed-Air-Actuated, Fastener Driving Tools, ANSI SNT-101-2015, sets forth safety requirements for tool manufacturers, owners, employers (including self-employed contractors), designers, safety professionals, supervisors, operators, purchasers, users and other persons concerned with or responsible for the safe design, construction, use, repair, and maintenance of these tools. The tools are powered by compressed air. The tools drive nails, staples and other fasteners, typically in the industrial size range. The covered tools are used for fastening applications that generally, but by no means exclusively, involve wood-to-wood connections as found in commercial and residential building construction (framing, sheathing, decking, flooring, insulation, finish work, factory-build units and components, and coverings for walls, ceilings and roofs, etc.); carton closure; and the manufacture of furniture, box-spring assemblies, containers (boxes, pallets, crating, etc.), cabinets, etc.

Single copy price: Free

Obtain an electronic copy from: A copy of the proposed standard can be downloaded from the technical resources / tool safety standards page at [www.isanta.org](http://www.isanta.org). Or an electronic copy can be requested by emailing Jeff Henry at [jhenry@isanta.org](mailto:jhenry@isanta.org)

Order from: A paper copy can be obtained by emailing Jeff Henry at [jhenry@isanta.org](mailto:jhenry@isanta.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: All comments should be directed to Jeff Henry at [jhenry@isanta.org](mailto:jhenry@isanta.org)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### National Adoption

INCITS/ISO/IEC 9594-1:2020 [202x], Information technology - Open systems interconnection - Part 1: The Directory: Overview of concepts, models and services (identical national adoption of ISO/IEC 9594-1:2020 and revision of INCITS/ISO/IEC 9594-1:2017 [2018])

Provides the directory capabilities required by many application layer standards and telecommunication services. Among the capabilities which it provides are those of "user-friendly naming", whereby objects can be referred to by names which are suitable for citing by human users (though not all objects need have user-friendly names); and "name-to-address mapping" which allows the binding between objects and their locations to be dynamic.

Single copy price: \$149.00

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

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## Comment Deadline: September 6, 2022

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

#### ***National Adoption***

INCITS/ISO/IEC 9594-2:2020 [202x], Information technology - Open systems interconnection - Part 2: The Directory: Models (identical national adoption of ISO/IEC 9594-2:2020 and revision of INCITS/ISO/IEC 9594-2:2017 [2018])

Provides a conceptual and terminological framework for the other ITU-T X.500-series Recommendations | parts of ISO/IEC 9594 which define various aspects of the Directory. The functional and administrative authority models define ways in which the Directory can be distributed, both functionally and administratively. Generic Directory System Agent (DSA) and DSA information models and an Operational Framework are also provided to support Directory distribution.

Single copy price: \$250.00

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

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

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#### ***National Adoption***

INCITS/ISO/IEC 9594-3:2020 [202x], Information technology - Open systems interconnection - Part 3: The Directory: Abstract service definition (identical national adoption of ISO/IEC 9594-3:2020 and revision of INCITS/ISO/IEC 9594-3:2017 [2018])

Defines in an abstract way the externally visible service provided by the Directory. This document does not specify individual implementations or products.

Single copy price: \$250.00

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#### ***National Adoption***

INCITS/ISO/IEC 9594-4:2020 [202x], Information technology - Open systems interconnection - Part 4: The Directory: Procedures for distributed operation (identical national adoption of ISO/IEC 9594-4:2020 and revision of INCITS/ISO/IEC 9594-4:2017 [2018])

Specifies the behaviour of DSAs taking part in a distributed directory consisting of multiple Directory systems agents (DSAs) and/or LDAP servers with at least one DSA. The allowed behaviour has been designed to ensure a consistent service given a wide distribution of the DIB across a distributed directory. Only the behaviour of DSAs taking part in a distributed directory is specified. The behaviour of LDAP servers are specified in relevant LDAP specifications. There are no special requirements on an LDAP server beyond those given by the LDAP specifications.

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#### ***National Adoption***

INCITS/ISO/IEC 9594-5:2020 [202x], Information technology - Open systems interconnection - Part 5: The Directory: Protocol specifications (identical national adoption of ISO/IEC 9594-5:2020 and revision of INCITS/ISO/IEC 9594-5:2017 [2018])

Specifies the Directory Access Protocol, the Directory System Protocol, the Directory Information Shadowing Protocol, and the Directory Operational Binding Management Protocol which fulfil the abstract services specified in Rec. ITU-T X.511 | ISO/IEC 9594-3, Rec. ITU-T X.518 | ISO/IEC 9594-4, Rec. ITU-T X.525 | ISO/IEC 9594-9, and Rec. ITU-T X.501 | ISO/IEC 9594-2.

Single copy price: \$250.00

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#### ***National Adoption***

INCITS/ISO/IEC 9594-6:2020 [202x], Information technology - Open systems interconnection - Part 6: The Directory: Selected attribute types (identical national adoption of ISO/IEC 9594-6:2020 and revision of INCITS/ISO/IEC 9594-6:2017 [2018])

Defines a number of attribute types and matching rules which may be found useful across a range of applications of the Directory.

Single copy price: \$250.00

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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 9594-7:2020 [202x], Information technology - Open systems interconnection - Part 7: The Directory: Selected object classes (identical national adoption of ISO/IEC 9594-7:2020 and revision of INCITS/ISO/IEC 9594-7:2017 [2018])

Defines a number of object classes and name forms which may be found useful across a range of applications of the Directory. The definition of an object class involves listing a number of attribute types which are relevant to objects of that class. The definition of a name form involves naming the object class to which it applies and listing the attributes to be used in forming names for objects of that class. These definitions are used by the administrative authority which is responsible for the management of the directory information.

Single copy price: \$175.00

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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 9594-8:2020 [202x], Information technology - Open systems interconnection - Part 8: The Directory: Public-key and attribute certificate frameworks (identical national adoption of ISO/IEC 9594-8:2020 and revision of INCITS/ISO/IEC 9594-8:2017 [2018])

Addresses some of the security requirements in the areas of authentication and other security services through the provision of a set of frameworks upon which full services can be based. Specifically, this Recommendation | International Standard defines frameworks for public-key certificates; and attribute certificates.

Single copy price: \$250.00

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#### ***National Adoption***

INCITS/ISO/IEC 9594-9:2020 [202x], Information technology - Open systems interconnection - Part 9: The Directory: Replication (identical national adoption of ISO/IEC 9594-9:2020 and revision of INCITS/ISO/IEC 9594-9:2017 [2018])

Specifies a shadow service which Directory system agents (DSAs) may use to replicate Directory information. The service allows Directory information to be replicated among DSAs to improve service to Directory users. The shadowed information is updated, using the defined protocol, thereby improving the service provided to users of the Directory.

Single copy price: \$200.00

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#### ***National Adoption***

INCITS/ISO/IEC 9594-11:2020 [202x], Information technology - Open systems interconnection directory - Part 11: Protocol specifications for secure operations (identical national adoption of ISO/IEC 9594-11:2020)  
Provides guidance on how to prepare new and old protocols for cryptographic algorithm migration, and defines auxiliary cryptographic algorithms to be used for migration purposes.

Single copy price: Free

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

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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 9594-2:2020/AM1:2021 [202x], Information technology - Open systems interconnection - Part 2: The Directory: Models - Amendment 1 (identical national adoption of ISO/IEC 9594-2:2020/AM1:2021)  
Amendment 1 to ISO/IEC 9594-2:2020.

Single copy price: \$20.00

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#### ***National Adoption***

INCITS/ISO/IEC 9594-8:2020/COR1:2021 [202x], Information technology - Open systems interconnection - Part 8: The Directory: Public-key and attribute certificate frameworks - Technical Corrigendum 1 (identical national adoption of ISO/IEC 9594-8:2020/COR1:2021)  
Technical Corrigendum 1 to ISO/IEC 9594-8:2020.

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

INCITS 550-202x, Information technology - Zoned Block Commands - 2 (ZBC-2) (new standard)

Storage devices are embracing fundamental changes in technology. New devices based on this technology allow random reading of data that is already written, while requiring writing to occur at specific locations on their media. The proposed new standard builds on the work accomplished in ZBC to continue and improve support for the new technology. The following items should be considered for inclusion into the ZBC-2 standard: corrections for difficulties discovered during the development of first-adopter products based on ZBC; enhanced command and error handling definitions to support new customer requirements for the technology; and other capabilities that may fit within the scope of this project.

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

INCITS 554-202x, Information technology - SAS Protocol Layer - 5 (SPL-5) (new standard)

Specifies the next generation of the protocol portion of the current Serial Attached SCSI. It follows SPL-4, SPL-3, SPL-2, SPL, and the protocol portions of SAS-2, and SAS-1.1. The following items should be considered for inclusion in SAS Protocol Layer - 5: enhancements to the protocol; corrections and clarifications; and other capabilities that may fit within the scope of this project.

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## Comment Deadline: September 6, 2022

### UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062 | [isabella.brodzinski@ul.org](mailto:isabella.brodzinski@ul.org), <https://ul.org/>

#### Reaffirmation

BSR/UL 2115-2017 (R202x), Standard for Safety for Processed Solid-Fuel Firelogs and Firestarters (reaffirmation of ANSI/UL 2115-2017)

These requirements cover processed solid-fuel firelogs that are intended for use as an alternative fuel in factory-built fireplaces and masonry fireplaces. These requirements also cover processed solid-fuel fire starters, with a volatile fuel content not exceeding 75% of the total fuel content, intended for use in factory-built fireplaces, solid-fuel burning appliances, fireplace inserts and masonry fireplaces.

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

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Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Isabella Brodzinski, [isabella.brodzinski@ul.org](mailto:isabella.brodzinski@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [Jonette.A.Herman@ul.org](mailto:Jonette.A.Herman@ul.org), <https://ul.org/>

#### Revision

BSR/UL 2743-202x, Standard for Portable Power Packs (revision of ANSI/UL 2743-2020)

The following changes are proposed: (1) Clarification to definition of hazardous voltage level, (2) Addition of definition of "portable or moveable", (3) Alignment of requirements for sub-enclosures with UL 746C, (4) Receptacle output not supplied by AC mains, (5) Increase the vehicle adapter voltage rating, (6) Replacement of UL 60950-1 with UL 62368-1 for external charger standard, (7) Double insulated products with functional earthing, (8) Alternative cell standard for Lithium and Lead Acid batteries, (9) Addition of alternative standard for inverters in the power pack, (10) Addition of mass limitation for stability test, (11) Addition of the induction output and energy hazard measurement test, (12) Addition of LVLE circuit requirements and test, (13) Clarification of Leakage Current Test with hazardous voltage circuits, (14) Option of single fault condition in control circuit besides functional safety evaluation, (15) Clarification of the short circuit resistance for output short circuit test, (16) Charging current for Overcharging Test, (17) Additional requirements for large energy storage systems (ESS), (18) Strain relief test for interconnecting cable, (19) Updates to the Impact Test and Drop Test, (20) Clarification of the compliance criteria for the Rain Test, (21) Power Pack Ampacity Test and booster ampacity rating marking, (22) Addition of UL 969A requirements for flag labels, (23) Revisions to Markings and Instructions, (24) Addition of instruction for booster cable connection and disconnection to battery, (25) Clarification to Annex A as Normative or Informative.

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### UL (Underwriters Laboratories)

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

#### Revision

BSR/UL 2901-202x, Standard for Antifreeze Solutions for Use in Fire Sprinkler Systems (July 8, 2022) (revision of ANSI/UL 2901-2019)

This proposal covers: (1) Revision to pipe size required for compatibility testing.

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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>.

## 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:

### APCO (Association of Public-Safety Communications Officials-International)

351 N. Williamson Boulevard, Daytona Beach, FL 32114-1112 | [apcostandards@apcointl.org](mailto:apcostandards@apcointl.org), [www.apcointl.org](http://www.apcointl.org)

BSR/APCO 2.104.1-202x, Application Integration with Public Safety Communications Centers and Public Safety Responders (new standard)

Inquiries may be directed to Mindy Adams; [apcostandards@apcointl.org](mailto:apcostandards@apcointl.org)

## Withdrawal of an ANS by ANSI-Accredited Standards Developer

### ASQ (American Society for Quality)

600 N Plankinton Avenue, Milwaukee, WI 53203 | [espaulding@asq.org](mailto:espaulding@asq.org), [www.asq.org](http://www.asq.org)

ANSI/ASQ Z1.11-2011 (R2016), Quality management system standards - Requirements for education organizations

Direct inquiries to: Elizabeth Spaulding; [espaulding@asq.org](mailto:espaulding@asq.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [Deborah.Prince@ul.org](mailto:Deborah.Prince@ul.org), <https://ul.org/>

ANSI/ISA 12.10.02 (IEC 61241-0-2006) (R2015), Electrical Apparatus for Use in Zone 20, Zone 21, and Zone 22 Hazardous (Classified) Locations - General Requirements

Direct inquiries to: Deborah Prince; [Deborah.Prince@ul.org](mailto:Deborah.Prince@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [Deborah.Prince@ul.org](mailto:Deborah.Prince@ul.org), <https://ul.org/>

ANSI/ISA 60079-10-1-2014, Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres

Direct inquiries to: Deborah Prince; [Deborah.Prince@ul.org](mailto:Deborah.Prince@ul.org)



## Withdrawal of an ANS by ANSI-Accredited Standards Developer

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-0 (12.00.01)-2013, Explosive Atmospheres - Part 0: Equipment - General Requirements

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-11 (12.02.01)-2014, Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-15 (12.12.02)-2013, Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-18 (12.23.01)-2012, Explosive atmospheres - Part 18: Equipment protection by encapsulation "m"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-28 (12.21.02)-2013, Explosive Atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-10-2 (12.10.05)-2013, Explosive atmospheres - Part 10-2: Classification of areas - Combustible dust atmospheres

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-1 (12.22.01)-2009 (R2013), Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures 'd'

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

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

ANSI/ISA 60079-6 (12.00.05)-2009 (R2013), Explosive atmospheres - Part 6: Equipment protection by oil-immersion "o"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 60079-7 (12.16.01)-2008 (R2013), Explosive Atmospheres - Part 7: Equipment protection by increased safety "e"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 61010-2-030-2012 (82.02.03), Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-030: Particular requirements for testing and measuring circuits

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 61241-1 (12.10.03)-2007 (R2015), Electrical Apparatus for Use in Zone 21 and Zone 22 Hazardous (Classified) Locations - Protection by Enclosures "tD"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 61241-2 (12.10.06)-2007 (R2015), Electrical Apparatus for Use in Zone 21 and Zone 22 Hazardous (Classified) Locations - Protection by Pressurization "pD"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/ISA 61241-11 (12.10.04)-2007 (R2015), Electrical Apparatus for Use in Zone 20, Zone 21 and Zone 22 Hazardous (Classified) Locations - Protection by Intrinsic Safety "iD"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

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ANSI/ISA 61241-18 (12.10.07)-2007 (R2015), Electrical Apparatus for Use in Zone 20, Zone 21 and Zone 22 Hazardous (Classified) Locations - Protection by Intrinsic Safety "mD"

Direct inquiries to: Deborah Prince; Deborah.Prince@ul.org

### UL (Underwriters Laboratories)

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

ANSI/UL 51-2015, Standard for Safety for Power-Operated Pumps and Bypass Valves for Anhydrous Ammonia, LP-Gas, and Propylene (Proposal dated 1-16-15)

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

### UL (Underwriters Laboratories)

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

ANSI/UL 100-2012 (R2016), Standard for Safety for Sustainability for Gypsum Boards and Panels

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

### UL (Underwriters Laboratories)

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

ANSI/UL 294B-2013, Standard for Safety for Power Over Ethernet (PoE) Power Sources for Access Control Systems and Equipment

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

### UL (Underwriters Laboratories)

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

ANSI/UL 427-2017, Standard for Safety for Refrigerating Units (UL proposal 12/30/16)

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

### UL (Underwriters Laboratories)

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

ANSI/UL 474-2015b, Standard for Safety for Dehumidifiers

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

### UL (Underwriters Laboratories)

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

ANSI/UL 484-2019, Standard for Room Air Conditioners

Direct inquiries to: Patricia Sena; patricia.a.sena@ul.org

## Withdrawal of an ANS by ANSI-Accredited Standards Developer

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 563-2018a, Standard for Ice Makers

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 729-2008 (R2016), Standard for Safety for Oil-Fired Floor Furnaces

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 730-2008 (R2016), Standard for Safety for Oil-Fired Wall Furnaces

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 896-2004 (R2016), Standard for Safety for Oil-Burning Stoves

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 900-2012a, Standard for Safety for Air Filter Units 9 (Proposal bulletin dated 12/16/11)

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 1054-2008 (R2013), Special-Use Switches

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 1313-2015, Standard for Nonmetallic Safety Cans for Petroleum Products

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 1314-2005 (R2014), Standard for Safety for Special-Purpose Metal Containers

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

## Withdrawal of an ANS by ANSI-Accredited Standards Developer

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12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 1413-2012 (R2016), Standard for Safety for High-Voltage Components for Television-Type Appliances

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 1876-2011 (R2015), Standard for Safety for Isolating Signal and Feedback Transformers for Use in Electronic Equipment

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 1995-2015, Standard for Safety for Heating and Cooling Equipment

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 2007A-2011 (R2016), Shatter Containment of Lamps for Use in Regulated Food Establishments

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 2575-2012, Lithium Ion Battery Systems for Use in Electric Power Tool and Motor Operated, Heated and Lighting Appliances

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 7003-2016, Standard for Sustainability for Household Clothes Washers

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

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12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 7004-2017, Standard for Sustainability for Household Cooking Appliances

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

## Withdrawal of an ANS by ANSI-Accredited Standards Developer

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 7005-2017, Standard for Sustainability for Household Clothes Drying Appliances

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 60335-2-79-2016, Standard for Safety for Household and Similar Electrical Appliances, Part 2:

Particular Requirements for High Pressure Cleaners (proposal dated 9-4-15)

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 60730-2-2-2014, Standard for Automatic Electrical Controls for Household and Similar Use - Part 2:

Particular Requirements for Thermal Motor Protectors

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 61215-2012 (R2016), Standard for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

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ANSI/UL 61646-2012 (R2016), Standard for Thin-Film Terrestrial Photovoltaic (PV) Modules - Design Qualification and Type Approval

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org)

### UL (Underwriters Laboratories)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.org), <https://ul.org/>

ANSI/UL 120404-2012 (R2015), Standard for Pressurized Enclosures (Proposal dated 09-04-15)

Direct inquiries to: Patricia Sena; [patricia.a.sena@ul.org](mailto:patricia.a.sena@ul.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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## **ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)**

180 Technology Parkway, Peachtree Corners, GA 30092 | rshanley@ashrae.org, www.ashrae.org

### **Addenda**

ANSI/ASHRAE Addendum ab to ANSI/ASHRAE Standard 34-2019, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE Addendum m to ANSI/ASHRAE Standard 15-2019, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE Addendum n to ANSI/ASHRAE Standard 154-2016, Ventilation for Commercial Cooking Operations (addenda to ANSI/ASHRAE Standard 154-2016) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE Addendum o to ANSI/ASHRAE Standard 154-2016, Ventilation for Commercial Cooking Operations (addenda to ANSI/ASHRAE Standard 154-2016) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE Addendum p to ANSI/ASHRAE Standard 154-2016, Ventilation for Commercial Cooking Operations (addenda to ANSI/ASHRAE Standard 154-2016) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE Addendum q to ANSI/ASHRAE Standard 154-2016, Ventilation for Commercial Cooking Operations (addenda to ANSI/ASHRAE Standard 154-2016) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE Addendum r to ANSI/ASHRAE Standard 154-2016, Ventilation for Commercial Cooking Operations (addenda to ANSI/ASHRAE Standard 154-2016) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE/ASHE Addendum 170f-2021, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE/ASHE Addendum b to ANSI/ASHRAE/ASHE Standard 189.3-2021, Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 189.3-2017) Final Action Date: 6/30/2022

### **Addenda**

ANSI/ASHRAE/ASHE Addendum c to ANSI/ASHRAE/ASHE Standard 189.3-2021, Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 189.3-2017) Final Action Date: 6/30/2022

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

180 Technology Parkway, Peachtree Corners, GA 30092 | etoto@ashrae.org, www.ashrae.org

**Addenda**

ANSI/ASHRAE/ICC/IES/USGBC Addendum p to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020, 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) Final Action Date: 6/30/2022

**Addenda**

ANSI/ASHRAE/ICC/IES/USGBC Addendum q to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020, 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) Final Action Date: 6/30/2022

**Addenda**

ANSI/ASHRAE/ICC/IES/USGBC Addendum r to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020, 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) Final Action Date: 6/30/2022

**Addenda**

ANSI/ASHRAE/IES Addendum bt 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: 6/30/2022

**Addenda**

ANSI/ASHRAE/IES Addendum bv 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: 6/30/2022

**Addenda**

ANSI/ASHRAE/IES Addendum cs 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: 6/30/2022

**Addenda**

ANSI/ASHRAE/IES Addendum ct 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: 6/30/2022

**Addenda**

ANSI/ASHRAE/IES Addendum cu 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: 6/30/2022

**Reaffirmation**

ANSI/ASHRAE Standard 32.2-2018 (R2022), Methods of Testing for Rating Pre-Mix and Post-Mix Beverage Dispensing Equipment (reaffirmation of ANSI/ASHRAE Standard 32.2-2018) Final Action Date: 6/30/2022

**Revision**

ANSI/ASHRAE Standard 72-2022, Method of Testing Open and Closed Commercial Refrigerators and Freezers (revision of ANSI/ASHRAE Standard 72-2018) Final Action Date: 6/30/2022



**CTA (Consumer Technology Association)**

1919 S. Eads Street, Arlington, VA 22202 | cakkers@cta.tech, www.cta.tech

**Revision**

ANSI/CTA 2051-A-2022, Wearable Sound Amplifier Performance Criteria (revision and redesignation of ANSI/CTA 2051-2017) Final Action Date: 6/29/2022

**NSF (NSF International)**

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | rbrooker@nsf.org, www.nsf.org

**Revision**

ANSI/NSF 173-2022 (i98r2), Dietary Supplements (revision of ANSI/NSF 173-2021) Final Action Date: 6/26/2022

**Revision**

ANSI/NSF 245-2022 (i26r2), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020) Final Action Date: 6/24/2022

**Revision**

ANSI/NSF 455-3-2022 (i34r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2021) Final Action Date: 7/1/2022

**Revision**

ANSI/NSF/CAN 50-2022 (i188r1), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2020) Final Action Date: 6/27/2022

**UL (Underwriters Laboratories)**

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | jennifer.fields@ul.org, https://ul.org/

**Reaffirmation**

ANSI/UL 2388-2017 (R2022), Standard for Safety for Flexible Lighting Products (May 6, 2022) (reaffirmation of ANSI/UL 2388-2017) Final Action Date: 6/28/2022

**Revision**

ANSI/UL 244B-2022a, Standard for Field Installed and/or Field Connected Appliance Controls (revision of ANSI/UL 244B-2022) Final Action Date: 6/28/2022

**Revision**

ANSI/UL 514A-2022, Standard for Safety for Metallic Outlet Boxes (revision of ANSI/UL 514A-2017) Final Action Date: 6/30/2022

**Revision**

ANSI/UL 746C-2022, Standard for Safety for Polymeric Materials - Use in Electrical Equipment Evaluations (revision of ANSI/UL 746C-2021) Final Action Date: 6/30/2022

**Revision**

ANSI/UL 2580-2022, Standard for Safety for Batteries for Use in Electric Vehicles (revision of ANSI/UL 2580-2021) Final Action Date: 6/28/2022

**UL (Underwriters Laboratories)**

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

***Revision***

ANSI/UL 2775-2022a, Standard for Fixed Condensed Aerosol Extinguishing System Units (March 25, 2022)  
(revision of ANSI/UL 2775-2022) Final Action Date: 6/30/2022

# 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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## 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 interested 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 underrepresented categories:

- Producer-Software
- Producer-Hardware
- Distributor
- Service Provider
- Users
- Consultants
- Government
- SDO and Consortia Groups
- Academia
- General Interest

## 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).

# Call for Members (ANS Consensus Bodies)

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## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-12-4-202x, Wind energy generation systems - Part 12-4: Numerical site calibration for power performance testing of wind turbines (identical national adoption of IEC TR 61400-12-4:2020)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-15-1-202x, Wind energy generation systems - Part 15-1: Site suitability input conditions for wind power plants (identical national adoption of IEC 61400-15-1:2022)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-25-1-202x, Wind energy generation systems - Part 25-1: Communications for monitoring and control of wind power plants - Overall description of principles and models (identical national adoption of IEC 61400-25-1:2017)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-25-2-202x, Wind energy generation systems - Part 25-2: Communications for monitoring and control of wind power plants - Information models (identical national adoption of IEC 61400-25-2:2015)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-25-3-202x, Wind energy generation systems - Part 25-3: Communications for monitoring and control of wind power plants - Information exchange models (identical national adoption of IEC 61400-25-3:2015)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

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BSR/ARESCA 61400-25-4-202x, Wind energy generation systems - Part 25-4: Communications for monitoring and control of wind power plants - Mapping to communication profile (identical national adoption of IEC 61400-25-4:2016)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

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BSR/ARESCA 61400-25-5-202x, Wind energy generation systems - Part 25-5: Communications for monitoring and control of wind power plants - Compliance testing (identical national adoption of IEC 61400-25-5:2017)

# Call for Members (ANS Consensus Bodies)

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## **ARESCA (American Renewable Energy Standards and Certification Association)**

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BSR/ARESCA 61400-25-6-202x, Wind energy generation systems - Part 25-6: Communications for monitoring and control of wind power plants - Logical node classes and data classes for condition monitoring (identical national adoption of IEC 61400-25-6:2016)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-27-1-202x, Wind energy generation systems - Part 27-1: Electrical simulation models - Generic models (identical national adoption of IEC 61400-27-1:2020)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-27-2-202x, Wind energy generation systems - Part 27-2: Electrical simulation models - Model validation (identical national adoption of IEC 61400-27-2:2020)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-50-3-202x, Wind energy generation systems - Part 50-3: Use of nacelle-mounted lidars for wind measurements (identical national adoption of IEC 61400-50-3:2022)

## **ARESCA (American Renewable Energy Standards and Certification Association)**

256 Farrell Farm Road, Norwich, VT 05055 | [secretary@aresca.us](mailto:secretary@aresca.us), [www.aresca.us](http://www.aresca.us)

BSR/ARESCA 61400-25-71-202x, Wind energy generation systems - Part 25-71: Communications for monitoring and control of wind power plants - Configuration description language (identical national adoption of IEC TS 61400-25-71:2019)

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

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | [ansibox@asme.org](mailto:ansibox@asme.org), [www.asme.org](http://www.asme.org)

BSR/ASME PTC 53-202x, Performance Test Code for Mechanical and Thermal Energy Storage Systems (new standard)

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

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | [kbulger@aws.org](mailto:kbulger@aws.org), [www.aws.org](http://www.aws.org)

BSR/AWS D14.0/D14.0M-202x, Machinery and Equipment Welding Specification (revision, redesignation and consolidation of ANSI/AWS D14.3/D14.3M-2018, ANSI/AWS D14.4/D14.4M-2019, ANSI/AWS D14.5/D14.5M-2009, and AWS D14.1/D14.1M)

## **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)

BSR/BHMA A156.16-202x, Standard for Auxiliary Hardware (revision of ANSI/BHMA A156.16-2013 (R2018))

# Call for Members (ANS Consensus Bodies)

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## **CGA (Compressed Gas Association)**

8484 Westpark Drive, Suite 220, McLean, VA 22102 | tdeary@cganet.com, www.cganet.com

BSR/CGA G-5-202x, Hydrogen (new standard)

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

1919 S. Eads Street, Arlington, VA 22202 | cakkers@cta.tech, www.cta.tech

BSR/CTA/NSF-2052.1-A-202x, Definitions and Characteristics for Wearable Sleep Monitors (revision and redesignation of ANSI/CTA/NSF-2052.1)

CTA is seeking new members to join the consensus body. CTA and the R11 Health, Fitness & Wellness Committee are particularly interested in adding new members (called "users") who acquire health, fitness and wellness products. from those who create them, and in adding new members who neither produce nor use health, fitness or wellness products, and others (called members with a "general interest").

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

1919 S. Eads Street, Arlington, VA 22202 | cakkers@cta.tech, www.cta.tech

BSR/CTA 2106-202x, Characteristics and Requirements for Mental Health Technology Solutions (new standard)

CTA is seeking new members to join the consensus body. CTA and the R11 Health, Fitness & Wellness Committee are particularly interested in adding new members (called "users") who acquire health, fitness and wellness products. from those who create them, and in adding new members who neither produce nor use health, fitness or wellness products, and others (called members with a "general interest").

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

218 W. Court Street, Rome, NY 13440 | jkirk@esda.org, www.esda.org

BSR/EOS ESDA/JEDEC JS-001-202x, ESDA/JEDEC Joint Standard for Electrostatic Discharge Sensitivity Testing - Human Body Model (HBM) - Component Level (revision of ANSI/ESDA/JEDEC JS-001-2017)

## **ISANTA (International Staple, Nail and Tool Association)**

8735 W. Higgins Road, Suite 300; c/o Association Management Center, Chicago, IL 60631 | jhenry@isanta.org

BSR/ISANTA SNT-101-202x, Safety Requirements for Portable Compressed-Air-Actuated Fastener Driving Tools (revision of ANSI SNT-101-2015)

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

700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

INCITS 550-202x, Information technology - Zoned Block Commands - 2 (ZBC-2) (new standard)

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

700 K Street NW, Suite 600, Washington, DC 20001 | comments@standards.incits.org, www.incits.org

INCITS 554-202x, Information technology - SAS Protocol Layer - 5 (SPL-5) (new standard)

# Call for Members (ANS Consensus Bodies)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-1:2020 [202x], Information technology - Open systems interconnection - Part 1: The Directory: Overview of concepts, models and services (identical national adoption of ISO/IEC 9594-1:2020 and revision of INCITS/ISO/IEC 9594-1:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-2:2020 [202x], Information technology - Open systems interconnection - Part 2: The Directory: Models (identical national adoption of ISO/IEC 9594-2:2020 and revision of INCITS/ISO/IEC 9594-2:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-3:2020 [202x], Information technology - Open systems interconnection - Part 3: The Directory: Abstract service definition (identical national adoption of ISO/IEC 9594-3:2020 and revision of INCITS/ISO/IEC 9594-3:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-4:2020 [202x], Information technology - Open systems interconnection - Part 4: The Directory: Procedures for distributed operation (identical national adoption of ISO/IEC 9594-4:2020 and revision of INCITS/ISO/IEC 9594-4:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-5:2020 [202x], Information technology - Open systems interconnection - Part 5: The Directory: Protocol specifications (identical national adoption of ISO/IEC 9594-5:2020 and revision of INCITS/ISO/IEC 9594-5:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-6:2020 [202x], Information technology - Open systems interconnection - Part 6: The Directory: Selected attribute types (identical national adoption of ISO/IEC 9594-6:2020 and revision of INCITS/ISO/IEC 9594-6:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-7:2020 [202x], Information technology - Open systems interconnection - Part 7: The Directory: Selected object classes (identical national adoption of ISO/IEC 9594-7:2020 and revision of INCITS/ISO/IEC 9594-7:2017 [2018])

# Call for Members (ANS Consensus Bodies)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-8:2020 [202x], Information technology - Open systems interconnection - Part 8: The Directory: Public-key and attribute certificate frameworks (identical national adoption of ISO/IEC 9594-8:2020 and revision of INCITS/ISO/IEC 9594-8:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-9:2020 [202x], Information technology - Open systems interconnection - Part 9: The Directory: Replication (identical national adoption of ISO/IEC 9594-9:2020 and revision of INCITS/ISO/IEC 9594-9:2017 [2018])

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-11:2020 [202x], Information technology - Open systems interconnection directory - Part 11: Protocol specifications for secure operations (identical national adoption of ISO/IEC 9594-11:2020)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-2:2020/AM1:2021 [202x], Information technology - Open systems interconnection - Part 2: The Directory: Models - Amendment 1 (identical national adoption of ISO/IEC 9594-2:2020/AM1:2021)

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

700 K Street NW, Suite 600, Washington, DC 20001 | [comments@standards.incits.org](mailto:comments@standards.incits.org), [www.incits.org](http://www.incits.org)

INCITS/ISO/IEC 9594-8:2020/COR1:2021 [202x], Information technology - Open systems interconnection - Part 8: The Directory: Public-key and attribute certificate frameworks - Technical Corrigendum 1 (identical national adoption of ISO/IEC 9594-8:2020/COR1:2021)

## **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)

BSR/NSF 41-202x (i11r2), Non-liquid Saturated Treatment Systems (revision of ANSI/NSF 41-2018)

## **NSF (NSF International)**

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

BSR/NSF 332-202x (i9r3.1), Sustainability Assessment for Resilient Floor Coverings (revision of ANSI/NSF 332-2015)

## **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)

BSR/NSF 350-202x (i72r1), Onsite Residential and Commercial, Water Reuse Treatment Systems (revision of ANSI/NSF 350-2020)



# Call for Members (ANS Consensus Bodies)

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## **SDI (ASC A250) (Steel Door Institute)**

30200 Detroit Road, Westlake, OH 44145 | leh@wherryassoc.com, www.wherryassocsteeldoor.org

BSR A250.4-202x, Physical Endurance for Steel Doors, Frames and Frame Anchors (revision of ANSI A250.4-2018)

## 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)

## 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.

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- 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)
  - Home Innovation (Home Innovation Research Labs)
  - IES (Illuminating Engineering Society)
  - ITI (InterNational Committee for Information Technology Standards)
  - MHI (Material Handling Industry)
  - NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
  - NCPDP (National Council for Prescription Drug Programs)
  - NEMA (National Electrical Manufacturers Association)
  - NFRC (National Fenestration Rating Council)
  - 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)
  - ULSE (UL Standards & Engagement)

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).

<p><b>ANS</b> American Nuclear Society 555 North Kensington Avenue La Grange Park, IL 60526 <a href="http://www.ans.org">www.ans.org</a> Kathryn Murdoch <a href="mailto:kmurdoch@ans.org">kmurdoch@ans.org</a></p>	<p>Lauren Bauerschmidt <a href="mailto:LBauerschmidt@assp.org">LBauerschmidt@assp.org</a></p>	<p><b>EOS/ESD</b> ESD Association, Inc. 218 W. Court Street Rome, NY 13440 <a href="http://www.esda.org">www.esda.org</a> Jennifer Kirk <a href="mailto:jkirk@esda.org">jkirk@esda.org</a></p>
<p><b>ARESCA</b> American Renewable Energy Standards and Certification Association 256 Farrell Farm Road Norwich, VT 05055 <a href="http://www.aresca.us">www.aresca.us</a> George Kelly <a href="mailto:secretary@aresca.us">secretary@aresca.us</a></p>	<p><b>ASTM</b> ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428 <a href="http://www.astm.org">www.astm.org</a> Laura Klineburger <a href="mailto:accreditation@astm.org">accreditation@astm.org</a></p>	<p><b>ESTA</b> Entertainment Services and Technology Association 271 Cadman Plaza, P.O. Box 23200 Brooklyn, NY 11202 <a href="http://www.esta.org">www.esta.org</a> Richard Nix <a href="mailto:standards@esta.org">standards@esta.org</a></p>
<p><b>ASHRAE</b> American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 180 Technology Parkway Peachtree Corners, GA 30092 <a href="http://www.ashrae.org">www.ashrae.org</a> Carmen King <a href="mailto:cking@ashrae.org">cking@ashrae.org</a> Emily Toto <a href="mailto:etoto@ashrae.org">etoto@ashrae.org</a> Mark Weber <a href="mailto:mweber@ashrae.org">mweber@ashrae.org</a> Ryan Shanley <a href="mailto:rshanley@ashrae.org">rshanley@ashrae.org</a> Tanisha Meyers-Lisle <a href="mailto:tmlisle@ashrae.org">tmlisle@ashrae.org</a> Thomas Loxley <a href="mailto:tloxley@ashrae.org">tloxley@ashrae.org</a></p>	<p><b>AWS</b> American Welding Society 8669 NW 36th Street, Suite 130 Miami, FL 33166 <a href="http://www.aws.org">www.aws.org</a> Kevin Bulger <a href="mailto:kbulger@aws.org">kbulger@aws.org</a></p>	<p><b>IEEE</b> Institute of Electrical and Electronics Engineers 445 Hoes Lane Piscataway, NJ 08854 <a href="http://www.ieee.org">www.ieee.org</a> Lisa Weisser <a href="mailto:l.weisser@ieee.org">l.weisser@ieee.org</a></p>
<p><b>ASME</b> American Society of Mechanical Engineers Two Park Avenue, M/S 6-2B New York, NY 10016 <a href="http://www.asme.org">www.asme.org</a> Terrell Henry <a href="mailto:ansibox@asme.org">ansibox@asme.org</a></p>	<p><b>BHMA</b> Builders Hardware Manufacturers Association 17 Faulkner Drive Niantic, CT 06357 <a href="http://www.buildershardware.com">www.buildershardware.com</a> Michael Tierney <a href="mailto:mtierney@kellencompany.com">mtierney@kellencompany.com</a></p>	<p><b>IEEE (ASC C63)</b> Institute of Electrical and Electronics Engineers 445 Hoes Lane Piscataway, NJ 08854 <a href="http://www.ieee.org">www.ieee.org</a> Jennifer Santulli <a href="mailto:J.Santulli@ieee.org">J.Santulli@ieee.org</a></p>
<p><b>ASSP (Safety)</b> American Society of Safety Professionals 520 N. Northwest Highway Park Ridge, IL 60068 <a href="http://www.assp.org">www.assp.org</a></p>	<p><b>CGA</b> Compressed Gas Association 8484 Westpark Drive, Suite 220 McLean, VA 22102 <a href="http://www.cganet.com">www.cganet.com</a> Thomas Deary <a href="mailto:tdeary@cganet.com">tdeary@cganet.com</a></p>	<p><b>ISANTA</b> International Staple, Nail and Tool Association 8735 W. Higgins Road, Suite 300; c/o Association Management Center Chicago, IL 60631  Jeff Henry <a href="mailto:jhenry@isanta.org">jhenry@isanta.org</a></p>
	<p><b>CSA</b> CSA America Standards Inc. 8501 East Pleasant Valley Road Cleveland, OH 44131 <a href="http://www.csagroup.org">www.csagroup.org</a> Debbie Chesnik <a href="mailto:ansi.contact@csagroup.org">ansi.contact@csagroup.org</a></p>	<p><b>ITI (INCITS)</b> InterNational Committee for Information Technology Standards 700 K Street NW, Suite 600 Washington, DC 20001 <a href="http://www.incits.org">www.incits.org</a></p>
	<p><b>CTA</b> Consumer Technology Association 1919 S. Eads Street Arlington, VA 22202 <a href="http://www.cta.tech">www.cta.tech</a> Catrina Akers <a href="mailto:cakers@cta.tech">cakers@cta.tech</a></p>	

## ANSI-Accredited Standards Developers Contact Information

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 Deborah Spittle  
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**NEMA (ASC C12)**

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**NEMA (ASC C8)**

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 Jessica Ferris  
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# ISO & IEC Draft International Standards



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

## COMMENTS

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

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

## ORDERING INSTRUCTIONS

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

## ISO Standards

### Air quality (TC 146)

ISO/FDIS 8518, Workplace air - Determination of particulate lead and lead compounds - Flame and electrothermal atomic absorption spectrometric methods - 9/18/2021, \$98.00

### Aircraft and space vehicles (TC 20)

ISO/DIS 5110, Test method for flight stability of multi-copter UAS under wind and rain conditions - 5/6/2022, \$62.00

ISO/DIS 24245, Space systems - Global Navigation Satellite System (GNSS) receiver class codes - 5/5/2022, \$71.00

### Applications of statistical methods (TC 69)

ISO/FDIS 28596, Sampling procedures for inspection by attributes - Two-stage sampling plans for auditing and for inspection under prior information - 2/12/2021, \$112.00

### Cleaning equipment for air and other gases (TC 142)

ISO/FDIS 10121-3, Test methods for assessing the performance of gas-phase air cleaning media and devices for general ventilation - Part 3: Classification system for GPACDs applied to treatment of outdoor air - 3/6/2021, \$82.00

### Ergonomics (TC 159)

ISO/DIS 9241-221, Ergonomics of human-system interaction - Part 221: Human-centred design process assessment model - 9/15/2022, \$165.00

### Facilities management (TC 267)

ISO/DIS 41015, Facility management - Influencing organizational behaviours for improved facility outcomes - 5/6/2022, \$82.00

### Fertilizers and soil conditioners (TC 134)

ISO/DIS 6181, Fertilizers and soil conditioners - Liquid methylene-urea slow release fertilizers - General requirements - 4/29/2022, \$40.00

ISO/FDIS 8157, Fertilizers, soil conditioners and beneficial substances - Vocabulary - 6/24/2021, \$88.00

### Fine ceramics (TC 206)

ISO/DIS 20505, Fine ceramics (advanced ceramics, advanced technical ceramics) - Mechanical properties of ceramic composites at room temperature - Determination of the interlaminar shear strength and shear modulus of continuous-fibre-reinforced composites by the compression of double-notched test pieces and by the Iosipescu test - 4/29/2022, \$82.00

### Fire safety (TC 92)

ISO/DIS 24678-4, Fire Safety Engineering - Requirements governing algebraic formulae - Part 4: Smoke layers - 4/29/2022, \$98.00

### Fluid power systems (TC 131)

ISO/FDIS 12151-2, Connections for hydraulic fluid power and general use - Hose fittings - Part 2: Hose fittings with ISO 8434 -1 24° cone connector ends with O-rings - 8/26/2021, \$62.00

### Furniture (TC 136)

ISO/DIS 9098-1, Bunk beds and high beds - Safety requirements and tests - Part 1: Safety requirements - 4/30/2022, \$71.00

ISO/DIS 9098-2, Bunk beds for domestic use - Safety requirements and tests - Part 2: Test methods - 4/29/2022, \$82.00

**Geotechnics (TC 182)**

ISO/FDIS 22476-1, Geotechnical investigation and testing - Field testing - Part 1: Electrical cone and piezocone penetration test - 4/30/2021, \$134.00

**Health Informatics (TC 215)**

ISO/DIS 41064, Health informatics - Standard communication protocol - Computer-assisted electrocardiography - 5/5/2022, \$203.00

**Internal combustion engines (TC 70)**

ISO/DIS 4548-13, Methods of test for full-flow lubricating oil filters for internal combustion engines - Part 13: Static burst pressure test for composite filter housings - 4/29/2022, \$40.00

ISO/FDIS 8528-10, Reciprocating internal combustion engine driven alternating current generating sets - Part 10: Measurement of airborne noise - 12/18/2020, \$112.00

**Laboratory glassware and related apparatus (TC 48)**

ISO/DIS 8655-10, Piston-operated volumetric apparatus - Part 10: User guidance and requirements for competence, training, and POVA suitability - 5/2/2022, \$88.00

**Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)**

ISO/DIS 24201, Petroleum, petrochemical and natural gas industries - Bulk material for offshore projects - Tertiary outfitting structures - 9/16/2022, \$185.00

ISO/DIS 24202, Petroleum, petrochemical and natural gas industries - Bulk material for offshore projects - Monorail beam and padeye - 9/16/2022, \$107.00

ISO/FDIS 24139-1, Petroleum and natural gas industries - Corrosion resistant alloy clad bends and fittings for pipeline transportation system - Part 1: Clad bends - 7/22/2021, \$112.00

**Measurement of fluid flow in closed conduits (TC 30)**

ISO/FDIS 5167-3, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 3: Nozzles and Venturi nozzles -, \$112.00

ISO/FDIS 5167-5, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 5: Cone meters - 10/14/2021, \$67.00

ISO/FDIS 5167-6, Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 6: Wedge meters - 10/14/2021, \$62.00

**Medical devices for injections (TC 84)**

ISO/DIS 23217, Injection systems for self-administration by paediatric patients - Guidance for design - 5/6/2022, \$107.00

**Non-destructive testing (TC 135)**

ISO/FDIS 24543, Non-destructive testing - Acoustic emission testing - Verification of the receiving sensitivity spectra of piezoelectric acoustic emission sensors - 9/9/2021, \$125.00

**Nuclear energy (TC 85)**

ISO/DIS 4233, Hot helium leak testing method for high temperature pressure-bearing components in nuclear fusion reactors - 5/2/2022, \$58.00

ISO/DIS 7753, Nuclear criticality safety - Use of criticality accident alarm systems for operations - 9/16/2022, \$93.00

ISO/DIS 24389-1, Management of radioactive waste from nuclear facilities - Part 1: General principles, objectives and practical approaches - 5/2/2022, \$67.00

**Other**

ISO/CIE DIS 23603, Standard method of assessing the spectral quality of daylight simulators for visual appraisal and measurement of colour - 4/29/2022, \$71.00

**Paints and varnishes (TC 35)**

ISO/DIS 20567-4, Paints and varnishes - Determination of stone-chip resistance of coatings - Part 4: Mobile multi-impact testing on a small testing area - 4/29/2022, \$58.00

**Personal safety - Protective clothing and equipment (TC 94)**

ISO/DIS 11611, Protective clothing for use in welding and allied processes - 9/16/2022, \$119.00

**Plastics (TC 61)**

ISO/DIS 293, Plastics - Compression moulding of test specimens of thermoplastic materials - 4/30/2022, \$46.00

ISO/DIS 4410, Experimental characterization of in-plane permeability of fibrous reinforcements for liquid composite moulding - 5/1/2022, \$98.00

ISO/DIS 20753, Plastics - Test specimens - 5/1/2022, \$67.00

ISO/DIS 22183, Plastics - Validation of force-time curves obtained from high-speed tensile tests - 5/5/2022, \$88.00

**Railway applications (TC 269)**

ISO/FDIS 19659-3, Railway applications - Heating, ventilation and air conditioning systems for rolling stock - Part 3: Energy efficiency - 10/1/2021, \$88.00

**Road vehicles (TC 22)**

ISO/DIS 8714, Electric road vehicles - Reference energy consumption and range - Test procedures for passenger cars and light commercial vehicles - 9/22/2022, \$71.00

ISO/DIS 34503, Road Vehicles - Test scenarios for automated driving systems - Taxonomy for operational design domain - 5/5/2022, \$93.00

ISO/DIS 15031-3, Road vehicles - Communication between vehicle and external equipment for emissions-related diagnostics - Part 3: Diagnostic connector and related electrical circuits: Specification and use - 4/30/2022, \$33.00

**Rubber and rubber products (TC 45)**

ISO/DIS 5260, Epoxidized natural rubber - Determination of epoxidation and ring opening level by NMR spectrometry - 4/30/2022, \$53.00

ISO/DIS 19043, Natural rubber latex concentrate - Determination of total phosphate content by spectrophotometric method - 5/5/2022, \$46.00

ISO/DIS 24483, Epoxidised natural rubber - Specifications - 4/30/2022, \$40.00

**Security (TC 292)**

ISO/DIS 22342, Security and resilience - Protective security - Guidelines for the development of a security plan for an organization - 4/29/2022, \$58.00

**Ships and marine technology (TC 8)**

ISO/FDIS 11711-2, Ships and marine technology - Aquatic nuisance species - Part 2: Ballast water sample collection and handling - 10/3/2020, \$112.00

**Small craft (TC 188)**

ISO/FDIS 21487, Small craft - Permanently installed petrol and diesel fuel tanks - 4/4/2021, \$71.00

**Sports and recreational equipment (TC 83)**

ISO/DIS 4980, Benefit-risk assessment for sports, for recreational and sports facilities including equipment - 9/17/2022, \$119.00

**Steel (TC 17)**

ISO/FDIS 14284, Steel and iron - Sampling and preparation of samples for the determination of chemical composition - 9/10/2021, \$112.00

**Surface chemical analysis (TC 201)**

ISO/FDIS 17862, Surface chemical analysis - Secondary ion mass spectrometry - Linearity of intensity scale in single ion counting time-of-flight mass analysers - 2/13/2020, \$77.00

**Technical systems and aids for disabled or handicapped persons (TC 173)**

ISO/FDIS 7176-25, Wheelchairs - Part 25: Lead-acid batteries and chargers for powered wheelchairs - Requirements and test methods - 6/5/2021, \$71.00

ISO/DIS 7176-31, Wheelchairs - Part 31: Lithium-ion battery systems and chargers for powered wheelchairs - Requirements and test methods - 5/5/2022, \$62.00

**Textiles (TC 38)**

ISO/DIS 5773, Textiles - Determination of components in flax fibres - 5/2/2022, \$53.00

ISO/DIS 18782, Textiles - Determination of dynamic hygroscopic heat generation - 9/17/2022, \$71.00

ISO/DIS 17751-1, Textiles - Quantitative analysis of cashmere, wool, other specialty animal fibres and their blends - Part 1: Light microscopy method - 9/18/2022, \$112.00

**Tractors and machinery for agriculture and forestry (TC 23)**

ISO 8437-4:2019/DAmD 1, - Amendment 1: Snow throwers - Safety requirements and test procedures - Part 4: Additional national and regional requirements - Amendment 1 - 9/16/2022, \$33.00

**Transport information and control systems (TC 204)**

ISO/DIS 4273, Intelligent transport systems - Automated braking during low speed manoeuvring (ABLS) - Requirements and test procedures - 9/18/2022, \$88.00

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

ISO/IEC 7816-8:2021/DAmD 1, - Amendment 1: Identification cards - Integrated circuit cards - Part 8: Commands and mechanisms for security operations - Amendment 1: Interoperability for the interchange of security operations using quantum safe cryptography - 9/16/2022, \$119.00

ISO/IEC DIS 24392, Cybersecurity - Security reference model for industrial Internet platform (SRM- IIP) - 5/2/2022, \$102.00

ISO/IEC DIS 4396-5, Telecommunications and information exchange between systems - Future network recursive inter-network architecture - Part 5: Incremental enrollment procedures - 5/1/2022, \$33.00

ISO/IEC DIS 4396-6, Telecommunications and information exchange between systems - Future network recursive inter-network architecture - Part 6: RINA data transfer service - 5/1/2022, \$58.00

ISO/IEC DIS 4396-8, Telecommunications and information exchange between systems - Future network recursive inter-network architecture - Part 8: RINA general delimiting procedures - 5/1/2022, \$40.00



ISO/IEC FDIS 23090-3, Information technology - Coded representation of immersive media - Part 3: Versatile video coding - 8/6/2021, \$291.00

ISO/IEC DIS 23837-1, Information technology security techniques - Security requirements, test and evaluation methods for quantum key distribution - Part 1: Requirements - 5/6/2022, \$125.00

ISO/IEC DIS 23837-2, Information technology security techniques - Security requirements, test and evaluation methods for quantum key distribution - Part 2: Evaluation and testing methods - 5/6/2022, \$155.00

ISO/IEC DIS 27006-1, Requirements for bodies providing audit and certification of information security management systems - Part 1: General - 5/2/2022, \$125.00

ISO/IEC FDIS 19823-11, Information technology - Conformance test methods for security service crypto suites - Part 11: Crypto suite PRESENT-80 - 11/1/2021, \$58.00

ISO/IEC FDIS 23008-12, Information technology - MPEG systems technologies - Part 12: Image File Format -, \$165.00

ISO/IEC DIS 23090-15/DAmD 1, - Amendment 1: Information technology - Coded representation of immersive media - Part 15: Conformance testing for versatile video coding - Amendment 1: Operation range extensions - 9/16/2022, \$82.00

## IEC Standards

100/3774/CDV, IEC 60268-23 ED1: Sound system equipment - Part 23: TVs and monitors - Loudspeaker systems, 09/23/2022

### All-or-nothing electrical relays (TC 94)

94/724/CD, IEC 61810-7-0 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-0: General and Guidance, 08/26/2022

94/727/CD, IEC 61810-7-16 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-16: Soldering, 08/26/2022

94/728/CD, IEC 61810-7-19 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-19: Electrical endurance, 08/26/2022

94/730/CD, IEC 61810-7-23 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-23: Overload (contact circuit), 08/26/2022

94/733/CD, IEC 61810-7-43 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-43: Proof tracking index (PTI), 08/26/2022

### Audio, video and multimedia systems and equipment (TC 100)

100/3771/CDV, IEC 62087-2 ED2: Audio, video, and related equipment - Determination of power consumption - Part 2: Signals and media (TA 19), 09/23/2022

100/3772/CDV, IEC 62087-3 ED2: Audio, video, and related equipment - Determination of power consumption - Part 3: Television sets (TA 19), 09/23/2022

### Automatic controls for household use (TC 72)

72/1307(F)/FDIS, IEC 60730-1 ED6: Automatic electrical controls - Part 1: General requirements, 07/22/2022

### Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)

46A/1581/FDIS, IEC 61196-1-125 ED1: Coaxial communication cable - Part 1-125: Electrical test methods - Test for equivalent permittivity and equivalent dissipation factor of dielectric, 08/12/2022

46A/1582/FDIS, IEC 61196-1-126 ED1: Coaxial communication cables - Part 1-126: Electrical test methods - Corona extinction voltage, 08/12/2022

46A/1577/CDV, IEC 61196-1-123 ED1: Coaxial Communication Cables - Part 1-123: Electrical test methods - Test for attenuation constant of radiating cable, 09/23/2022

### Electric cables (TC 20)

20/2029/CDV, IEC 61442 ED3: Test methods for accessories for power cables with rated voltages from 6 kV ( $U_m = 7,2$  kV) up to 30 kV ( $U_m = 36$  kV), 09/23/2022

### Electric traction equipment (TC 9)

9/2847/CD, IEC 62427 ED2: Railway applications - Compatibility between rolling stock and train detection systems, 09/23/2022

### Electrical accessories (TC 23)

23H/512/CD, IEC TS 62196-7 ED1: Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 7: Vehicle adapter, 09/23/2022

### Electrical equipment in medical practice (TC 62)

62C/844/CD, IEC 61674 ED3: Medical electrical equipment - Dosimeters with ionization chambers and/or semiconductor detectors as used in X-ray diagnostic imaging, 09/23/2022

**Electromechanical components and mechanical structures for electronic equipments (TC 48)**

48B/2973(F)/FDIS, IEC 63171-5 ED1: Connectors for electrical and electronic equipment - Part 5: Detail specification for 2-way M8 and M12 circular connectors, shielded or unshielded, free and fixed - Mechanical mating information, pin assignment and additional requirements for Type 5, 07/29/2022

48B/2974/CD, IEC 60512-28-100 ED3: Connectors for electrical and electronic equipment - Tests and measurements - Part 28-100: Signal integrity tests up to 2 000 MHz - Tests 28a to 28g, 09/23/2022

**Fibre optics (TC 86)**

86B/4626(F)/FDIS, IEC 61753-089-02 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 089-02: Non-connectorised single-mode bidirectional OTDR monitoring WWDM for category C - Indoor controlled environment, 07/22/2022

86B/4635/FDIS, IEC 61753-043-02 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 043-02: Simplex patch-cord style single-mode fibre wavelength selective devices with cylindrical ferrule connectors for category C - Controlled environment, 08/12/2022

86B/4629/FDIS, IEC 61755-2-1 ED2: Fibre optic interconnecting devices and passive components - Connector optical interfaces for single-mode fibres - Part 2-1: Connection parameters of dispersion unshifted physically contacting fibres - Non-angled, 08/12/2022

86A/2220/CD, IEC 60794-1-307 ED1: Optical fibre cables - Part 1-307: Generic specification - Basic optical cable test procedures - Cable element test methods - Tube kinking, method G7, 09/23/2022

86C/1801/CDV, IEC 61291-2 ED5: Optical amplifiers - Part 2: Single channel applications - Performance specification template, 09/23/2022

86C/1800/CDV, IEC 62149-4 ED3: Fibre optic active components and devices - Performance standards - Part 4: 1 300 nm fibre optic transceivers for Gigabit Ethernet application, 09/23/2022

86B/4636/CD, IEC 63267-2-1 ED1: Fibre optic interconnecting devices and passive components - Connector optical interfaces for enhanced macro bend multimode fibres - Part 2-1: Connection parameters of physically contacting 50 m core diameter fibres non-angled, 09/23/2022

**Hydraulic turbines (TC 4)**

4/442/CD, IEC 63461 ED1: Pelton hydraulic turbines - Model acceptance tests, 09/23/2022

**Industrial-process measurement and control (TC 65)**

65E/907(F)/FDIS, IEC 62453-309 ED3: Field device tool (FDT) interface specification - Part 309: Communication profile integration - IEC 61784 CPF 9, 07/29/2022

65E/928/NP, PNW 65E-928 ED1: IEC 6xxxx DB - Common data concepts for smart manufacturing, 09/23/2022

**Lamps and related equipment (TC 34)**

34D/1664/CD, IEC 60598-1/FRAG16 ED10: Fragment 16 - Luminaires - Part 1: General requirements and tests, 09/23/2022

**Maritime navigation and radiocommunication equipment and systems (TC 80)**

80/1043/CD, IEC 61108-7 ED1: Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 7: Satellite Based Augmentation System (SBAS) L1 - Receiver Equipment - Performance standards, methods of testing and required test results, 08/26/2022

80/1042/CDV, IEC 62287-1/AMD1 ED3: Amendment 1 - Maritime navigation and radiocommunication equipment and systems - Class B shipborne equipment of the automatic identification system (AIS) - Part 1: Carrier-sense time division multiple access (CSTDMA) techniques, 09/23/2022

**Measuring equipment for electromagnetic quantities (TC 85)**

85/834/CDV, IEC 61557-13 ED2: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 13: Hand-held and hand-manipulated current clamps and sensors for measurement of leakage currents in electrical distribution systems, 09/23/2022

**Measuring relays and protection equipment (TC 95)**

95/496/NP, PNW 95-496 ED1: Measuring relays and protection equipment - Part 216-3: Digital Interface - Test specification for protection data communication of Line Current Differential Protection, 09/23/2022

**Nanotechnology standardization for electrical and electronic products and systems (TC 113)**

113/686/CD, IEC TS 62565-5-1 ED1: Nanomanufacturing - Material specification - Part 5-1: Nanoporous activated carbon - Blank detail specification: Electrochemical capacitors, 09/23/2022

**Performance of household electrical appliances (TC 59)**

59D/486/CDV, IEC 60456/AMD1 ED5: Amendment 1 - Clothes washing machines for household use - Methods for measuring the performance, 09/23/2022

**Power system control and associated communications (TC 57)**

57/2505/DTS, IEC TS 62351-100-4 ED1: Power systems management and associated information exchange - Data and communication security - Part 100-4: Cybersecurity conformance testing for IEC 62351-4, 09/23/2022

**Solar photovoltaic energy systems (TC 82)**

82/2053/CDV, IEC 60904-2 ED4: Photovoltaic devices - Part 2: Requirements for photovoltaic reference devices, 09/23/2022

**Standard voltages, current ratings and frequencies (TC 8)**

8B/120/DTR, IEC TR 62898-4 ED1: Microgrids: Part 4 - Use cases, 08/26/2022

8A/109/DTR, IEC TR 63401-1 ED1: Interconnecting inverter-based resources to low short circuit ratio AC networks, 08/26/2022

**Surface mounting technology (TC 91)**

91/1802/CD, IEC 62878-2-603 ED1: Device embedding assembly technology - Part 2-603: Guideline for stacked electronic module - Test method of intra-module electrical connectivity, 09/23/2022

**Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)**

121B/157/CDV, IEC 62208 ED3: Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements, 09/23/2022

**(SmartCities)**

SyCSmartCities/259/NP, PNW TS SYCSMARTCITIES-259 ED1: Systems Reference Deliverable (SRD) Smart city system Ontology – Part 1: Gap Analysis, 09/23/2022

**Tools for live working (TC 78)**

78/1397/FDIS, IEC 62819 ED1: Live working - Eye, face and head protectors against the effects of electric arc - Performance requirements and test methods, 08/12/2022



# 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

### Aircraft and space vehicles (TC 20)

[ISO 24246:2022](#), Space systems - Requirements for global navigation satellite system (GNSS) positioning augmentation centers, \$175.00

[ISO 24330:2022](#), Space systems - Rendezvous and Proximity Operations (RPO) and On Orbit Servicing (OOS) - Programmatic principles and practices, \$149.00

### Anaesthetic and respiratory equipment (TC 121)

[ISO 18778:2022](#), Respiratory equipment - Particular requirements for basic safety and essential performance of infant cardiorespiratory monitors, \$225.00

### Dentistry (TC 106)

[ISO 7494-2:2022](#), Dentistry - Stationary dental units and dental patient chairs - Part 2: Air, water, suction and wastewater systems, \$175.00

### Fasteners (TC 2)

[ISO 4014:2022](#), Fasteners - Hexagon head bolts - Product grades A and B, \$111.00

[ISO 4015:2022](#), Fasteners - Hexagon head bolts with reduced shank (shank diameter  $\approx$  pitch diameter) - Product grade B, \$73.00

[ISO 4016:2022](#), Fasteners - Hexagon head bolts - Product grade C, \$73.00

[ISO 4017:2022](#), Fasteners - Hexagon head screws - Product grades A and B, \$73.00

[ISO 4018:2022](#), Fasteners - Hexagon head screws - Product grade C, \$73.00

[ISO 8676:2022](#), Fasteners - Hexagon head screws, with fine pitch thread - Product grades A and B, \$73.00

[ISO 8765:2022](#), Fasteners - Hexagon head bolts, with fine pitch thread - Product grades A and B, \$73.00

### Ferrous metal pipes and metallic fittings (TC 5)

[ISO 4370:2022](#), Environmental life cycle assessment and recycling of ductile iron pipes for water applications, \$111.00

### Industrial automation systems and integration (TC 184)

[ISO 23704-1:2022](#), General requirements for cyber-physically controlled smart machine tool systems (CPSMT) - Part 1: Overview and fundamental principles, \$175.00

[ISO 23704-2:2022](#), General requirements for cyber-physically controlled smart machine tool systems (CPSMT) - Part 2: Reference architecture of CPSMT for subtractive manufacturing, \$200.00

### Internal combustion engines (TC 70)

[ISO 8528-5:2022](#), Reciprocating internal combustion engine driven alternating current generating sets - Part 5: Generating sets, \$200.00

### Light metals and their alloys (TC 79)

[ISO 6362-1:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 1: Technical conditions for inspection and delivery, \$111.00

[ISO 6362-2:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 2: Mechanical properties, \$149.00

[ISO 6362-3:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 3: Tolerances on form and dimensions for extruded rectangular bars, \$73.00

[ISO 6362-4:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 4: Tolerances on form and dimensions for profiles, \$111.00

[ISO 6362-5:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 5: Tolerances on form and dimensions for round, square and hexagonal bars, \$73.00

[ISO 6362-7:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 7: Chemical composition, \$73.00

[ISO 6363-1:2022](#), Wrought aluminium and aluminium alloys - Cold-drawn rods/bars, tubes and wires - Part 1: Technical conditions for inspection and delivery, \$111.00

[ISO 6363-2:2022](#), Wrought aluminium and aluminium alloys - Cold-drawn rods/bars, tubes and wires - Part 2: Mechanical properties, \$111.00

[ISO 6363-3:2022](#), Wrought aluminium and aluminium alloys - Cold-drawn rods/bars, tubes and wires - Part 3: Tolerances on form and dimensions for drawn rods/bars and wires, \$48.00

[ISO 6363-4:2022](#), Wrought aluminium and aluminium alloys - Cold-drawn rods/bars, tubes and wires - Part 4: Tolerances on form and dimensions for drawn rectangular bars and wires, \$73.00

[ISO 6363-5:2022](#), Wrought aluminium and aluminium alloys - Cold-drawn rods/bars, tubes and wires - Part 5: Tolerances on form and dimensions for drawn square and hexagonal bars and wires, \$48.00

[ISO 6363-6:2022](#), Wrought aluminium and aluminium alloys - Cold-drawn rods/bars, tubes and wires - Part 6: Tolerances on form and dimensions for drawn round tubes, \$48.00

### **Microbeam analysis (TC 202)**

[ISO 24639:2022](#), Microbeam analysis - Analytical electron microscopy - Calibration procedure of energy scale for elemental analysis by electron energy loss spectroscopy, \$111.00

### **Mining (TC 82)**

[ISO 23875:2021/Amd 1:2022](#), - Amendment 1: Mining - Air quality control systems for operator enclosures - Performance requirements and test methods - Amendment 1, \$20.00

### **Natural gas (TC 193)**

[ISO 23219:2022](#), Natural gas - Format for data from gas chromatograph analysers for natural gas - XML file format, \$175.00

### **Other**

[ISO 14087:2022](#), Leather - Physical and mechanical tests - Determination of bending force, \$48.00

### **Railway applications (TC 269)**

[ISO 4975:2022](#), Railway applications - Braking system - Quality of compressed air for pneumatic apparatus and systems, \$111.00

### **Road vehicles (TC 22)**

[ISO 21448:2022](#), Road vehicles - Safety of the intended functionality, \$250.00

### **Round steel link chains, chain slings, components and accessories (TC 111)**

[ISO 2415:2022](#), Forged shackles for general lifting purposes - Dee shackles and bow shackles, \$149.00

### **Rubber and rubber products (TC 45)**

[ISO 19983:2022](#), Rubber - Determination of precision of test methods, \$175.00

[ISO 4664-1:2022](#), Rubber, vulcanized or thermoplastic - Determination of dynamic properties - Part 1: General guidance, \$200.00

### **Soil quality (TC 190)**

[ISO 11271:2022](#), Soil quality - Determination of redox potential - Field method, \$111.00

### **Surface chemical analysis (TC 201)**

[ISO 18115-3:2022](#), Surface chemical analysis - Vocabulary - Part 3: Terms used in optical interface analysis, \$48.00

### **Technical systems and aids for disabled or handicapped persons (TC 173)**

[ISO 21856:2022](#), Assistive products - General requirements and test methods, \$225.00

### **Terminology (principles and coordination) (TC 37)**

[ISO 704:2022](#), Terminology work - Principles and methods, \$225.00

### **Thermal insulation (TC 163)**

[ISO 24260:2022](#), Thermal insulation products - Hemp fiber mat and board - Specification, \$111.00

### **Timber (TC 218)**

[ISO 13061-8:2022](#), Physical and mechanical properties of wood - Test methods for small clear wood specimens - Part 8: Determination of ultimate strength in shearing parallel to grain, \$48.00

### **Tobacco and tobacco products (TC 126)**

[ISO 24199:2022](#), Vapour products - Determination of nicotine in vapour product emissions - Gas chromatographic method, \$73.00

**Tractors and machinery for agriculture and forestry (TC 23)**

[ISO 24120-1:2022](#), Agricultural irrigation equipment - Guideline on the implementation of pressurized irrigation systems - Part 1: General principles of irrigation, \$175.00

**ISO Technical Reports****Personal safety - Protective clothing and equipment (TC 94)**

[ISO/TR 8546:2022](#), Hand protection - Guidance for selection and use, \$175.00

**Steel (TC 17)**

[ISO/TR 20580:2022](#), Preparation of metallographic specimens, \$111.00

**ISO Technical Specifications****Paper, board and pulps (TC 6)**

[ISO/TS 23885:2022](#), Paper, board and graphic technology - Determination of the coating strength in the inner fold, \$111.00

**Sieves, sieving and other sizing methods (TC 24)**

[ISO/TS 4807:2022](#), Reference materials for particle size measurement - Specification of requirements, \$149.00

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

[ISO/IEC 23003-4:2020/Amd 1:2022](#), - Amendment 1: Information technology - MPEG audio technologies - Part 4: Dynamic range control - Amendment 1: Side chain normalization, \$20.00

[ISO/IEC 30150-1:2022](#), Information technology - Affective computing user interface (AUI) - Part 1: Model, \$111.00

**IEC Standards****Lamps and related equipment (TC 34)**

[IEC 60598-2-11 Amd.1 Ed. 2.0 b:2022](#), Amendment 1 - Luminaires - Part 2-11: Particular requirements - Aquarium luminaires, \$25.00

[IEC 60598-2-11 Ed. 2.1 b:2022](#), Luminaires - Part 2-11: Particular requirements - Aquarium luminaires, \$164.00

# International Organization for Standardization (ISO)

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## Call for U.S. TAG Administrator

### ISO/TC 324 - Sharing Economy

**Comment Deadline: July 15, 2022**

ANSI directly administers the U.S. TAG Administrator for ISO/TC 324 with the support of the Organization for the Advancement of Structured Information Standards (OASIS). OASIS has advised ANSI to relinquish its role as U.S. TAG Administrator for this committee.

ISO/TC 324 operates under the following scope:

*Standardization in the field of sharing economy.*

*Excluded: Technical aspects of information security or risk management guidelines already covered by ISO/IEC JTC 1/SC27 and ISO/TC 262, respectively.*

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)).

## Establishment of ISO Technical Committee

### ISO/IEC 341 - Heat Supply Network

**Comment Deadline: July 15, 2022**

A new ISO Technical Committee, ISO/TC 341 – *Heat supply network*, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 341 operates under the following scope:

*Standardization in the field of HSN including design, construction, integration, control and regulation based on heating and cooling supply pipeline system.*

*Exclude: Standardization of heat sources and space heating systems covered by ISO/TC 11 Boilers and pressure vessels, ISO/TC 86 Refrigeration and air-conditioning, ISO/TC 163 Thermal performance and energy use in the built environment, ISO/TC 138 Plastics pipes, fittings and valves for the transport of fluids, ISO/TC 205 Building environment design, ISO/TC 267 Facility management, ISO/TC 268 Sustainable cities and communities, ISO/TC 301 Energy management and energy savings, and IEC SyC Smart Cities, IEC SyC Smart Energy.*

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

## **International Organization for Standardization (ISO)**

### **Establishment of ISO Technical Committee**

#### **ISO/TC 339 – Small hydropower plants**

**Comment Deadline: July 8, 2022**

A new ISO Technical Committee, ISO/TC 339 – *Small hydropower plants*, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 339 operates under the following scope:

*Standardization in the field of small hydropower plants*

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

### **Establishment of ISO Technical Committee**

#### **ISO/TC 340 – Natural gas fueling stations**

**Comment Deadline: July 8, 2022**

A new ISO Technical Committee, ISO/TC 340 – *Natural gas fueling stations*, has been formed. The Secretariat has been assigned to France (AFNOR).

ISO/TC 340 operates under the following scope:

*Standardization in the field of design, construction and operation of stations for fuelling compressed natural gas (CNG) and liquefied natural gas (LNG) to vehicles. It includes equipment, safety devices and maintenance.*

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

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 a to  
ANSI/ASHRAE Standard 145.1-2015**

**Public Review Draft**

**Proposed Addendum a to Standard  
145.1-2015, Laboratory Test Method  
for Assessing the Performance of  
Gas-Phase Air Cleaning Systems:  
Loose Granular Media**

**First Public Review (July 2022)  
(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, Peachtree Corners GA 30092**

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 145.1-2015, *Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media*  
First Public Review Draft

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## FOREWORD

The main purpose of proposing changes to these definitions is to harmonize them as much as possible with definitions in Standard 145.2 (as amended by RP-1838) and Chapter 47 in the Applications Handbook.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes.

## 3. DEFINITIONS AND ACRONYMS

**3.1 Definitions.** Some terms are defined here for the purposes of this standard. When definitions are not provided, refer either to *ASHRAE Terminology of Heating, Ventilation, Air Conditioning and Refrigeration*<sup>1</sup> or to ASTM D-2652-05A, *Standard Terminology Relating to Activated Carbon*.<sup>2</sup> Otherwise, common usage shall apply.

***adsorbent:*** ~~any solid material having the ability to retain gaseous or vapor contaminants on its surface by physical or chemical processes having the ability to concentrate significant quantities of other substances on its surface.~~

***adsorption, chemical (chemisorption):*** ~~binding of a gas or vaporecontaminant to the surface of a solid by forces with energy levels approximately those of a chemical bond. Binding occurs to both inner and outer pore surfaces. BindingThis process is usually followed by a chemical reaction that removes the compoundcontaminant from the airstream but may add other gasses to it. Chemisorption is an irreversible process.~~

***adsorption, physical:*** ~~attraction of a contaminant to the outer surface and inner pore surface of adsorbent media by physical forces (Van der Waals forces). process in which the molecules of a gas or vapor adhere by physical forces (Van der Waals forces) to the surface, both the outer surface and the inner pore surfaces, of a solid substance. Physical adsorption is a reversible process.~~

***airflow rate:*** ~~volume of air passing-flowing through the test sample per unit time.~~

***breakthrough:*** ~~first appearance in the effluent of a challenge contaminant under specified conditions. see penetration.~~

***breakthrough (penetration) curve:*** ~~plot of challenge compoundcontaminant penetration versus time for a particular challenge concentration and airflow.~~

***catalyst:*** any substance of which a small amount relative to the reactantsproportion notably affects the rate of a chemical reaction without itself being consumed or undergoing a chemical change. Most catalysts accelerate reactions, but a few ~~retard them~~ (negative catalysts or inhibitors) retard them.

***Note:*** catalysts may become poisoned, fouled, or deactivated during use.

***Challenge gas:*** ~~chemical compoundgas or vapor that is being used as the challenge-contaminant of interest for any given test. For examples, see Tables 1, 2, and 3.~~

***Challenge (air) stream:*** test contaminant(s) of interest diluted with clean air to the concentration(s) and airflow conditions of the test ~~prior to filtration.~~

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 145.1-2015, *Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media*  
First Public Review Draft

**Note:** This is the gas stream that contacts the media bed at a defined face velocity to produce a desired residence time.

**chemisorption:** see *adsorption, chemical*.

**concentration:** quantity of one substance dispersed in a defined amount of another.

**density, apparent (density, bulk):** mass under specified conditions of a unit volume of a solid physical adsorbent or chemisorbent, including its pore volume and inter-particle voids.

**density, packing:** (a) weight of adsorbent per unit volume determined using ASTM D-2854<sup>3</sup> as specified in Section 5.4.3 of this standard; (b) mass of a substance per unit volume described as the ratio between the actual density and what is theoretically possible if voids did not exist.

**desorption:** process by which adsorbed molecules leave the surface of a physical adsorbent and re-enter the air stream.

**Note:** Desorption is the Opposite of adsorption.

**removal efficiency curve:** a plot of contaminant removal efficiency (or mass of challenge compound removed) against time for a particular challenge concentration and airflow.

**end point:** the point at which the test is stopped due to (a) specified elapsed time or (b) reaching the maximum specified concentration of a challenge gas in the air downstream of the media bed. ~~occurrence of the maximum permissible concentration of the challenge gas in the air downstream of a media bed or, alternatively, the time when a predetermined contaminant penetration is reached.~~

**mean particle diameter:** weighted average particle size, in millimetres (inches), of a granular adsorbent. It is computed by multiplying the percent retained in a size fraction by the respective mean sieve openings, summing these values, and dividing by 100.

**media:** a granular or pelletized physical adsorbents or chemisorbents used in gaseous contaminant removal equipment.

**penetration:** ratio of challenge gas contaminant concentration downstream of the media bed to the upstream (challenge) concentration, sometimes expressed as a percentage.

**Note 1:** Related to removal efficiency by the following removal expression:

$$\text{Efficiency} = (1 - \text{Penetration})$$

**Note 2:** the term “breakthrough” is often used to denote the first measurable penetration of challenge gas through a media bed.

**pressure drop:** difference in absolute (static) pressure between two points in an airflow system.

**Note:** it is caused by frictional resistance to airflow in a duct, filter, or other system component such as a media bed or air-cleaning device.

**removal efficiency:** ~~that fraction or percentage of a challenge gas molecules that are~~ is removed from the challenge air stream at a given time by physical and/or chemical means.

**residence time:** theoretical time that an increment of air (or gas or vapour molecule or contaminant) is within the confines of a media bed, ignoring the fraction of internal volume that is occupied by the media. ~~This standard neglects the fact that the media occupies at least 40% of the volume of the bed (empty bed contact time).~~

**Note:** the media may occupy more than 40% of the volume of the bed.

# Public Review Draft

Proposed Addendum t to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July 2022)  
(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 Pkwy NW, Peachtree Corners, GA 30092**



BSR/ASHRAE/ICC/USGBC/IES Addendum t 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

*Indoor agriculture energy usage is projected to grow significantly nationwide in this decade, driven in large part by state legalization of medical and recreational marijuana and growing demand for locally grown produce. In 2017, a total of 20 million square feet of building space was dedicated to growing crops indoors which can have energy use intensities that rival data centers. Energy use in these facilities is dominated by lighting systems which accounts for 25 to 70% of the facilities energy use and HVAC and dehumidification systems which accounts of the bulk of the remaining energy use. This addendum addresses the energy use of these facilities in three ways.*

*The proposal adds additional lighting efficacy and renewable energy requirements to these facilities. Lighting in non-stacked indoor operations operate on average 4,600 hours per year or 12 hours per day. Proposed Addendum ar to ASHRAE 90.1 which concluded its first public review November of 2021 establishes efficacy requirements for lighting in indoor horticulture at 1.9 PPE, and 1.7 PPE for greenhouses. This proposal increases the efficacy requirement to 2.1 PPE. 92% of LED products that meet the Design Light Consortium criteria already meet an efficacy of 2.1 PPE which is a 10% savings over a 1.9PPE standard and 20% savings over a 1.7PPE standard. This proposal will also require lighting from these facilities be provided by renewable energy to account for increased carbon emissions from indoor grow and greenhouse facilities compared with growing crops outdoors. This measure will increase construction costs but reduce operating costs.*

*This proposal also addresses the energy use of HVAC systems. Indoor grow facilities typically prefer to not use economizers because they can introduce contaminants into the growing space, and required economizers are frequently disabled. The proposed language would allow indoor grow facilities and greenhouses to be exempt from economizer requirements if these facilities use equipment that is 10% more efficient than federal minimum standards. The proposal is similar to a code requirement in Seattle, WA which allows indoor grow facilities that install cooling equipment that is 20% more efficient than federal minimum standards to be exempt from economizer requirements. This proposal adds a compliance option so will not increase the cost of construction.*

***[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]***

BSR/ASHRAE/ICC/USGBC/IES Addendum *t* 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

## Addendum *t* to 189.1-2020

*Add Definitions to Section 3 as follows:*

**greenhouse**: a space with a skylight roof ratio of 50% or more above the growing area, used exclusively for horticultural production, cultivation or maintenance by utilizing a sunlit environment. Greenhouses are those that are erected for a period of 180 days or more.

**horticultural lighting**: electric lighting used for horticultural production, cultivation or maintenance with either cord-and-plug or hard-wired connections for electric power.

**indoor grow space**: a space, other than a *greenhouse*, used exclusively for horticultural production, cultivation, or maintenance.

**photosynthetic photon efficacy (PPE)**: photosynthetic photon flux between 400- 700nm emitted by a light source divided by its electrical input power, expressed in units of micromoles per second per watt, or micromoles per joule ( $\mu\text{mol}/\text{J}$ ) as defined by ANSI/ASABE S640

*Add Sections 7.3.6 as follows:*

### **7.3.6 Energy Systems for Horticulture.**

**7.3.6.1 Horticultural Lighting.** *Luminaires* in *indoor grow spaces* and *greenhouse* spaces used for *horticultural lighting* shall have a *photosynthetic photon efficacy (PPE)* of at least 2.1  $\mu\text{mol}/\text{J}$ . Additional renewable energy for *horticultural lighting* shall be provided and sized to provide the amount of adjusted renewable energy calculated in accordance with Section 7.4.1.2 and qualified in accordance with Section 7.4.1.3. The adjusted renewable energy shall be equal to or greater than the installed *horticultural lighting* wattage multiplied by 4,600 full load hours per year for *indoor grow spaces* and the installed *horticultural lighting* wattage multiplied by 2,100 full load hours per year for *greenhouses*.

*Add Normative Reference as follows:*

American Society of Agricultural and Biological Engineers (ASABE) 2950 Niles Road St. Joseph, MI 49085 USA 1-269-429-0300; www.asabe.org		
<u>ANSI/ASABE S640-2017</u>	<u>Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms)</u>	<u>3</u>
United States Department of Energy (USDOE) Energy Information Administration Washington, DC 20585, United States 1-202-586-500; www.eia.doe.gov/emeu/cbecs/content.html and http://tonto.eia.doe.gov/state		
<u>10 CFR, Part 430</u>	<u>Energy Conservation Program for Consumer Products</u>	<u>7.3.6</u>



# Public Review Draft

Proposed Addendum x to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July 2022)  
(Draft Shows Proposed Changes to Current Standard)

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BSR/ASHRAE/ICC/USGBC/IES Addendum x 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

This addendum adds a normative reference to Chapter 3, the occupancy classification and use chapter of the *International Building Code*® (IBC). Standard 189.1 already references IBC occupancy groups in Section 5.3.7.3 and has other sections that are applicable to specific building uses. Some of these existing sections, and potentially future provisions, may benefit from the ability to make a reference to the defined occupancy classifications of the IBC. This change will also enhance the correlation between the International Green Construction Code and the other International Codes, of most which reference the IBC for occupancy classification.

The International Codes are available free of charge at the International Code Council's website. Standard 189.1 users who wish to access Chapter 3 of the IBC can do so at this location:

<https://codes.iccsafe.org/content/IBC2021P2/chapter-3-occupancy-classification-and-use>

*[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

## Addendum x to 189.1-2020

*Add a new Section 4.5 as follows:*

**4.5 Occupancy classification.** Where occupancy classifications are specified by this standard they shall be as defined in Chapter 3 of the International Building Code.

*Add a new Section 11 reference as follows:*

International Code Council  
500 New Jersey Ave NW # 300  
Washington, DC 20001, United States  
1-800-786-4452; [www.iccsafe.org](http://www.iccsafe.org)

2021 IBC

International Building Code

5.3.7.3

# Public Review Draft

Proposed Addendum y to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (July, 2022)  
(Draft Shows Proposed Changes to Current Standard)

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BSR/ASHRAE/ICC/USGBC/IES Addendum y 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

*This addendum adds language to 8.3.1.7 to add a prohibition on vaping.*

*These changes do not add cost or scope to the existing language of the standard.*

*[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]*

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**Modify section 8.3.1.7 as follows:**

### **8.3.1.7 Environmental Tobacco Smoke Smoking and Vaping**

- a. Smoking and vaping shall ~~not be allowed~~ be prohibited inside the building. Signage stating such shall be posted within 10 ft (3 m) of each *building entrance*.
- b. Any ~~exterior~~ designated smoking or vaping areas shall be exterior to the building and shall be located not less than a minimum of 25 ft (7.5 m) ~~away~~ from *building entrances, outdoor air intakes, and operable windows*.



**BSR/ASHRAE/IES Addendum bp  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

# **Proposed Addendum bp to Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings**

**First Public Review (July 2022)  
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## FOREWORD

*This addendum removes the exception for captive card key controls for hotel guestrooms since captive card key technology is often bypassed and not a commonly used technology.*

*Captive card key controls are a manual control (not automatic) that are easily and often bypassed thereby negating any potential energy savings. Most of the time upon check-in, the hotel provides two keys to the guest and tells them to always keep one key in the slot to get power into the room, so even when the guests leave the room, one of their keys is left in the slot, the lighting stays on, and no energy savings is realized. What's more, when no key cards are in the slot there is no power to the lighting. So, guests who are not familiar with their hotel room will have limited visibility (especially upon entry into the room) which can cause a safety or dissatisfaction issue for the guest. Lastly, green building design standards like ASHRAE 189.1 have recognized the captive key card shortcomings and don't allow for their use to comply. ASHRAE 90.1 should not allow them for compliance either. The standard should require only automatic guestroom controls that will guarantee the energy savings and provide guests with a more satisfactory experience.*

*This addendum should not negatively impact cost effectiveness. This removes an obsolete option with declining use in the market. Installation of the newer technology automatic controls that will be required are similar or lower in cost.*

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## Addendum BP to 90.1-2019

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*Modify the standard as follows (IP and SI Units)*

### **6.4.3.3.5.3 Automatic Control**

~~Card key card controls shall be permitted to be used to indicate occupancy.~~

### **9.4.1.3 Special Applications [...]**

#### **b. Guestrooms**

1. All lighting and all-switched receptacles in guestrooms and suites in hotels, motels, boarding houses, or similar buildings shall be *automatically* controlled such that the power to the lighting and switched receptacles

in each *enclosed space* will be turned off within 20 minutes after all occupants leave that *space*. Card key controls shall not be used to comply with this provision.

**Exception to 9.4.1.3(b)(1)**

~~*Enclosed spaces* where the lighting and switched receptacles are controlled by card key *controls* and bathrooms are exempt.~~

2. Bathrooms shall have a separate *control device* installed to *automatically* turn off the bathroom lighting within 30 minutes after all occupants have left the bathroom.

**Exception to 9.4.1.3(b)(2)**

Night lighting of up to 5 W per bathroom is exempt.

[...]



**BSR/ASHRAE/IES Addendum cv  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

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**Proposed Addendum cv to  
Standard 90.1-2019, Energy Standard  
for Buildings Except Low-Rise  
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## FOREWORD

Tables 6.8.1-13 and 6.8.1-14 of ANSI/ASHRAE/IES Standard 90.1-2019 address the minimum efficiency requirements for Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, without and with Energy Recovery, respectively. Presently, these minimum efficiency requirements are based on ISMRE for dehumidification and ISCOP for heating, referencing AHRI 920-2015, *Performance Rating of Direct Expansion-Dedicated Outdoor Air System Units*.

In 2020, AHRI published a significant revision to the test procedure AHRI 920-2020 with Addendum 1, *Performance Rating of Direct Expansion-Dedicated Outdoor Air System Units* (available for free on AHRI's website, here:

[https://ahrinet.org/App\\_Content/ahri/files/STANDARDS/AHRI/AHRI\\_Standard\\_920\\_I-P\\_2020\\_add1.pdf](https://ahrinet.org/App_Content/ahri/files/STANDARDS/AHRI/AHRI_Standard_920_I-P_2020_add1.pdf))

AHRI 920-2020 is technically superior to AHRI 920-2015. AHRI 920-2020 transitioned the primary metric from ISMRE to ISMRE2. DX-DOAS units are no longer required to reheat to “neutral air” (70-75 °F) on the supply airstream. With changed standard rating conditions, a name change was important to avoid confusion with ISMRE calculated using the 2015 standard. ISMRE2 calculation weights used with MRE values at conditions A, B, C, and D are different than ISMRE's. Conditions C and D vary between the 2015 and 2020 versions and the return air condition changes at Point D are unfavorable with ERV. Supply Air Fan (SAF) external static pressure (ESP) increased about 0.6 in.wg., or 150-percent, between the 2015 and 2020 versions depending on unit size. Return air flow (RAF) ESP, required with ERV, increased static pressure similarly to SAF ESP. It should also be noted that part-load unloading requirements are much more demanding. A  $C_d$  penalty of 35-percent is applied whenever compressor capacity cannot be reduced to match load. Excess moisture removal capacity beyond the design leaving dew point is no longer credited at part load conditions.

Likewise, ISCOP has transitioned to ISCOP2. ISCOP2 includes a new  $COP_{DOAS}$  metric, which essentially includes the same changes as the transition from ISMRE to ISMRE2.

Developing a crosswalk between ISMRE and ISCOP to ISMRE2 and ISCOP2 has been difficult because of the testing difficulties with 920-2015 and the many changes between the editions. AHRI has held approximately 23 meetings since June 2020 to discuss the crosswalk with relevant stakeholders, including DOE contractors and California utility consultants (CA IOUs). During the process, AHRI collected 21 data points that were < 324 lb/hr MRC and had both ISMRE & ISMRE2 ratings. DOE gathered four data points and the CA IOUs collected one data point. All AHRI data collected was provided to DOE consultant, Guidehouse, under a non-disclosure agreement to protect sensitive technical information.

While work was ongoing to map the relationship between IS COP to IS COP2 through the AHRI group, the U.S. Department of Energy (DOE) and DOE consultants continued a separate analysis culminating in the February 1, 2022, publication of a proposed rule to adopt energy conservation standards.<sup>1</sup>

To ensure marketplace consistency with DOE’s proposed adoption of ISMRE2 and IS COP2 levels based on AHRI 920-2020, this addendum proposes the following changes:

1. Updates existing ASHRAE Standard 90.1-2019 ISMRE and IS COP standards to ISMRE2 and IS COP2 standards using the crosswalk analysis proposed by DOE in the February 1, 2022, notice of proposed rule for eight equipment classes.
2. For the four equipment classes covered by 90.1, but not considered by DOE, this addendum updates existing ASHRAE Standard 90.1-2019 ISMRE and IS COP standards to ISMRE2 and IS COP2 standards based on an industry analysis. Four of these equipment classes will be combined into two.
3. Adds AHRI Standard 920-2020 to Section 12, Normative References

### Economic Analysis

This is an update to the test procedure referenced and will have no economic impact.

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## Addendum cv to ANSI/ASHRAE/IES Standard 90.1-2019

*Make the following changes to Tables 6.8.1-13 and 6.8.1-14 (IP)*

**Table 6.8.1-13 Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, without Energy Recovery— Minimum Efficiency Requirements**

Equipment Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
Air cooled (dehumidification mode)		4.0 <del>3.8</del> <u>ISMRE2</u>	AHRI 920
Air source heat pumps (dehumidification mode)		4.0 <del>3.8</del> <u>ISMRE2</u>	AHRI 920
Water cooled (dehumidification mode)	Cooling tower condenser water	4.9 <del>4.7</del> <u>ISMRE2</u>	AHRI 920
	Chilled Water	6.0 <del>3.8</del> <u>ISMRE2</u>	
Air source heat pump (heating mode)		2.7 <del>2.05</del> <u>ISCOP2</u>	AHRI 920
Water source heat pump (dehumidification mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	4.8 <del>4.6</del> <u>ISMRE2</u>	AHRI 920
	<del>Ground-water source</del>	<del>5.0 ISMRE</del>	
	Water source	4.0 <del>3.8</del> <u>ISMRE2</u>	
Water source heat pump (heating mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	2.0 <del>2.13</del> <u>ISCOP2</u>	AHRI 920
	<del>Ground-water source</del>	<del>3.2 ISCOP</del>	
	Water source	3.5 <del>2.05</del> <u>ISCOP2</u>	

<sup>1</sup> 87 FR 5560 (February 1, 2022) <https://www.regulations.gov/document/EERE-2017-BT-STD-0017-0008>

- a. For minimum efficiency compliance purposes, open loop systems shall be rated using closed-loop test conditions.

**Table 6.8.1-14 Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, with Energy Recovery— Minimum Efficiency Requirements**

Equipment Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
Air cooled (dehumidification mode)		<del>5.2</del> <u>5.0</u> <i>ISMRE<sub>2</sub></i>	AHRI 920
Air source heat pumps (dehumidification mode)		<del>5.2</del> <u>5.0</u> <i>ISMRE<sub>2</sub></i>	AHRI 920
Water cooled (dehumidification mode)	Cooling tower condenser water	<del>5.3</del> <u>5.1</u> <i>ISMRE<sub>2</sub></i>	AHRI 920
	Chilled Water	<del>6.6</del> <u>4.6</u> <i>ISMRE<sub>2</sub></i>	
Air source heat pump (heating mode)		<del>3.3</del> <u>3.20</u> <i>ISCOP<sub>2</sub></i>	AHRI 920
Water source heat pump (dehumidification mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	<del>5.2</del> <u>5.0</u> <i>ISMRE<sub>2</sub></i>	AHRI 920
	<del>Ground-water source</del>	<del>5.8</del> <i>ISMRE</i>	
	Water source	<del>4.8</del> <u>4.6</u> <i>ISMRE<sub>2</sub></i>	
Water source heat pump (heating mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	<del>3.8</del> <u>3.5</u> <i>ISCOP<sub>2</sub></i>	AHRI 920
	<del>Ground-water source</del>	<del>4.0</del> <i>ISCOP</i>	
	Water source	<del>4.8</del> <u>4.04</u> <i>ISCOP<sub>2</sub></i>	

- a. For minimum efficiency compliance purposes, open loop systems shall be rated using closed-loop test conditions.

## 12 Normative References

Reference	Title
ANSI/AHRI 920- <del>2015</del> <u>2020</u> with Addendum 1	Performance Rating of DX-Dedicated Outdoor Air System Units

*Make the following changes to Tables 6.8.1-13 and 6.8.1-14 (SI)*

**Table 6.8.1-13 Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, without Energy Recovery— Minimum Efficiency Requirements**

Equipment Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
Air cooled (dehumidification mode)		<del>4.8</del> <u>1.7</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
Air source heat pumps (dehumidification mode)		<del>4.8</del> <u>1.7</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
Water cooled (dehumidification mode)	Cooling tower condenser water	<del>2.2</del> <u>2.1</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
	Chilled Water	<del>2.7</del> <u>1.7</u> <i>ISMRE<sub>2</sub></i>	
Air source heat pump (heating mode)		<del>4.2</del> <u>2.05</u> <i>ISCOP<sub>2</sub></i>	AHRI 921
Water source heat pump (dehumidification mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	<del>2.2</del> <u>2.1</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
	<del>Ground-water source</del>	<del>2.3</del> <i>ISMRE</i>	
	Water source	<del>4.8</del> <u>1.7</u> <i>ISMRE<sub>2</sub></i>	
Water source heat pump (heating mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	<del>2.0</del> <u>2.10</u> <i>ISCOP<sub>2</sub></i>	AHRI 921
	<del>Ground-water source</del>	<del>3.2</del> <i>ISCOP</i>	
	Water source	<del>3.5</del> <u>2.13</u> <i>ISCOP<sub>2</sub></i>	

- a. For minimum efficiency compliance purposes, open loop systems shall be rated using closed-loop test conditions.

**Table 6.8.1-14 Electrically Operated DX-DOAS Units, Single-Package and Remote Condenser, with Energy Recovery— Minimum Efficiency Requirements**

Equipment Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
Air cooled (dehumidification mode)		<del>2.4</del> <u>2.3</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
Air source heat pumps (dehumidification mode)		<del>2.4</del> <u>2.3</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
Water cooled (dehumidification mode)	Cooling tower condenser water	<del>2.4</del> <u>2.3</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
	Chilled Water	<del>3.0</del> <u>2.1</u> <i>ISMRE<sub>2</sub></i>	
Air source heat pump (heating mode)		<del>3.3</del> <u>3.20</u> <i>ISCOP<sub>2</sub></i>	AHRI 921
Water source heat pump (dehumidification mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	<del>2.4</del> <u>2.3</u> <i>ISMRE<sub>2</sub></i>	AHRI 921
	<del>Ground-water source</del>	<del>2.6</del> <i>ISMRE</i>	
	Water source	<del>2.2</del> <u>2.1</u> <i>ISMRE<sub>2</sub></i>	
Water source heat pump (heating mode)	Ground source, closed <u>and open</u> loop <sup>a</sup>	<del>3.8</del> <u>3.50</u> <i>ISCOP<sub>2</sub></i>	AHRI 921
	<del>Ground-water source</del>	<del>4.0</del> <i>ISCOP</i>	
	Water source	<del>4.8</del> <u>4.04</u> <i>ISCOP<sub>2</sub></i>	

- a. For minimum efficiency compliance purposes, open loop systems shall be rated using closed-loop test conditions.

## 12 Normative References

Reference	Title
ANSI/AHRI 921-2015 <del>2020</del> with Addendum 1	Performance Rating of DX-Dedicated Outdoor Air System Units



**BSR/ASHRAE/IES Addendum cw  
to ANSI/ASHRAE/IES Standard 90.1-2019**

**Public Review Draft**

**Proposed Addendum cw to  
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## **FOREWORD**

This addendum is being proposed in response to a change in the IBC 2021 identified by the IALD. The IBC 2021 added a requirement that along exit access stairways the illumination level must be a minimum of 10 fc (108 Lx) at the walking surface when the stairway is in use. Prior to this the illumination level for means of egress was required to be at least 1 fc (11 Lx) at the walking surface. This is a potential 10-fold increase in lighting in exit stairways.

To maintain current energy efficiency levels and to limit trading of this power to non-stair spaces, we propose to create a new additional lighting power allowance for exit access stairways. The additional power is limited to this space only and prevents the trading of power to other spaces.

No cost-effectiveness analysis was completed because this addendum proposes an additional lighting power allowance which is optional. In addition, the addendum is in response to a change in the model building code. It is anticipated that this will increase cost in exit stairways.

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## Addendum cw to 90.1-2019

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Modify the standard as follows (IP and SI Units)

### 9.5.2.2 Additional Lighting Power

[...]

(d) For interior exit stairways in which lighting is designed for egress and to provide 10 fc (108 Lx) minimum at the walking surface when the stairway is in use, additional lighting power shall be allowed per Table 9.5.3.1.

**Table 9.5.2.2 Additional Lighting Power**

Section	Description	Additional Lighting Power	Required Controls
9.5.2.2(a)	Decorative	0.70 W/ft <sup>2</sup> (7.53 W/m <sup>2</sup> )	9.4.1.1(j)
9.5.2.2(b)	Retail Sales	750 W + (Retail Area 1 × 0.40 W/ft <sup>2</sup> ) + (Retail Area 2 × 0.40 W/ft <sup>2</sup> ) + (Retail Area 3 × 0.70 W/ft <sup>2</sup> ) + (Retail Area 4 × 1.00 W/ft <sup>2</sup> )  750 W + (Retail Area 1 × 4.30 W/m <sup>2</sup> ) + (Retail Area 2 × 4.30 W/m <sup>2</sup> ) + (Retail Area 3 × 7.53 W/m <sup>2</sup> ) + (Retail Area 4 × 10.76 W/m <sup>2</sup> )	9.4.1.1(j)
9.5.2.2(c)	Video Conferencing	0.50 W/ft <sup>2</sup> (5.53 W/m <sup>2</sup> )	See Table 9.5.2.1 <i>space</i> types for required controls
9.5.2.2(d)	Interior exit stairway	2.0 W/ft <sup>2</sup> (21.52 W/m <sup>2</sup> )	9.4.1.1(g), 9.4.1.1(j)

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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 grey 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 Wastewater Technology –

# Non-liquid Saturated Treatment Systems

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## 1 General

### 1.1 Purpose

The purpose of this Standard is to establish minimum materials, design and construction, and performance requirements for non-liquid saturated treatment systems. It is intended to protect public health and the environment as well as minimize nuisance factors. This Standard also specifies the minimum literature that manufacturers shall supply to authorized representatives and owners.

### 1.2 Scope

This Standard contains minimum requirements for treatment systems that do not utilize a liquid saturated media as a primary means of storing or treating human excreta or human excreta mixed with other organic household materials. It addresses treatment systems that treat both solid and liquid waste, as well as those that only treat solid waste. Management methods for the end products of these systems are not addressed by this Standard.

System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements contained in those other standards. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

### 1.3 Systems classification

For the purpose of this Standard, systems are classified according to the use environment for which they are intended to be installed. The systems classifications identified in this Standard are residential systems, commercial systems, day-use systems, and cottage systems. Performance testing and evaluation requirements for each of these systems classifications are described herein.

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## 11 New system (“controlled”) performance testing and evaluation

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### 11.1 Loading patterns

#### 11.1.1 Residential systems

Residential systems are those systems that are intended for use in home settings, apartment complexes and other settings that receive daily residential use.

A residential system shall be subjected to the loading that is representative of the 24 h excrement cycles of humans. A population equivalent (p.e.) shall be defined as 1.2 fecal events and 4 urine events per person per day. The system shall be loaded according to each of the eight loading patterns described in this section. These loading patterns shall be conducted sequentially in the order described. Annex C, figure 4 illustrates graphically how these loading patterns shall be conducted.

NOTE 1 — For those loading patterns that are conducted for seven or more days, the actual loading for both feces and urine may vary by  $\pm 10\%$  on a weekly basis. For loading patterns that are conducted for less than 7 d, the actual loading for both feces and urine may vary by  $\pm 10\%$  over the course of each loading pattern.

NOTE 2 — Design rated capacity (DRC) is calculated by multiplying the manufacturer’s population rating (the maximum number of people the system is designed to service in one 24 h period) by the p.e. for both urine and feces.

- a) Start-up: The system shall be installed, started, loaded, and operated according to the manufacturer’s instructions. The duration of the start-up period shall be specified by the manufacturer.
- b) Preliminary routine operation: Following start-up, the system shall be loaded daily for 30 d at 100% of the DRC. See example calculations in Figure 2.
- c) Vacation stress: A vacation stress shall be simulated by 17 consecutive days of nonuse.
- d) Routine operation: The system shall be returned to routine operation by loading the system daily for 7 d at 100% of the DRC.
- e) Overload stress: An overload stress shall be simulated by loading at 200% of DRC, applied over an 8 h period, during each 24 h/d for 5 d.
- f) Routine operation: The system shall be returned to routine operation by loading the system daily for 7 d at 100% of the DRC.
- g) Party stress: The party stress is a hydraulic overload stress in excess of the routine operation. This stress shall be simulated by loading urine at the rate of 500% of the DRC for one 8 h period. It is not necessary to load the system with feces during this stress. However, if feces loading does occur, it shall not exceed 100% of the DRC. Figure 3 demonstrates how the urine loading shall be conducted.

Routine operation: The system shall be returned to routine operation by loading the system daily at 100% of the DRC. This loading pattern shall continue for the duration of the 6 mo test period and shall not be less than 3 mo in duration.

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The total number of fecal events and urine events that are to be loaded weekly during the 30-d preliminary routine operation pattern is demonstrated below.

Manufacturer's population rating = 10 people

$$10 \text{ person} \times \frac{1.2 \text{ f.e.}}{(\text{person}) (\text{d})} \times \frac{7 \text{ d}}{\text{wk}} = \frac{84 \text{ f.e.}}{\text{wk}}$$

f.e. = fecal event

With the  $\pm 10\%$  allowable deviation, the total loading shall be between 76 and 92 fecal events per week.

$$10 \text{ person} \times \frac{4 \text{ u. e.}}{(\text{person}) (\text{d})} \times \frac{7 \text{ d}}{\text{wk}} = \frac{280 \text{ u. e.}}{\text{wk}}$$

u.e. = urine event

With the  $\pm 10\%$  allowable deviation, the total loading shall be between 252 and 308 urine events per week.

**Figure 2 – Preliminary routine operation**

Manufacturer's population rating = 10 people

$$\frac{10 \text{ persons}}{8 \text{ hr party}} \times \frac{4 \text{ u. e.}}{(\text{person}) (\text{d})} \times 500\% \times \frac{1}{3} \text{ d} = \frac{67 \text{ u. e.}}{8 \text{ hr party}}$$

These 67 urine events are added to the 40 urine events that the system would receive during normal daily usage (100% of the DRC) to yield a total loading of 107 urine events. With the  $\pm 10\%$  allowable deviation, the total loading shall be between 96 and 118 urine events.

**Figure 3 – Party stress**

### 11.1.2 Commercial use systems

Commercial use systems are intended for use in a workplace environment where the toilet system is expected to accommodate a rated number of individuals during a typical 40-hour work week. Commercial use systems are tested as residential systems, however since they are used 64.3% fewer hours per week, they are rated at 2.8 times the residential systems rating.

**NOTE** - If the systems are to be used beyond a typical 40-hour work week or there is potential for additional loading, the capacity rating will need to be re-evaluated. Therefore, the manufacturer should be contacted to provide the appropriate guidance.

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### 11.1.23 Day-use systems

Day-use systems are those systems that are not intended for overnight use in parks, roadside stops, commercial offices, schools, and other similar settings.

A day-use system shall be subjected to the loadings representative of day-use installations. The system shall be loaded according to each of the four loading patterns described in this section. These loading patterns shall be conducted sequentially in the order described. Annex C, figure 5 illustrates graphically how these loading patterns shall be conducted.

The manufacturer's designated population rating is defined as the total number of uses or the combination of the total number of urine events and fecal events the system is designed to handle in a 24 h period.

NOTE — Day-use systems typically receive a greater proportion of urine to feces than residential and cottage systems. Efforts should be made during testing to assure that the relative proportion of six urine events to one fecal event is maintained or exceeded during each of the loading patterns described in this section.

For those loading patterns that are conducted for seven or more days, the actual loading for both feces and urine may vary by  $\pm 10\%$  on a weekly basis. For loading patterns that are conducted for less than 7 d, the actual loading for both feces and urine may vary by  $\pm 10\%$  over the course of each loading pattern.

- a) Start-up: The system shall be installed, started, loaded, and operated according to the manufacturer's instructions. The duration of the start-up period shall be specified by the manufacturer.
- b) Preliminary routine operation: Following start-up, the system shall be loaded daily at 100% of the manufacturer's designated population rating (the total number of uses, combined urine and fecal events, the system is designed to handle in a 24 h period) for five consecutive days each week for a period of 1 mo (30 d). Two days of overload stress shall be conducted on the two remaining days of each week. Overload shall be conducted by loading the system at 200% of the manufacturer's designated population rating.
- c) Peak season stress: Peak season stress shall be simulated by loading the system at 200% of the manufacturer's designated population rating. This loading shall be conducted daily for 14 consecutive days.
- d) Routine operation: The system shall be returned to routine operation by loading the system daily at 100% of the manufacturer's designated population rating for five consecutive days per week. Two days of overload stress shall be conducted on the two remaining days of each week. Overload shall be conducted by loading the system at 200% of the manufacturer's designated population rating. This loading pattern shall continue for the duration of the 6 mo test period and shall not be less than 3 mo in duration.

### 11.1.34 Cottage (seasonal) systems

Cottage systems are those systems that are intended for occasional use. Cottage settings can include vacation homes, weekend cottages, and cabins.

A cottage system shall be subjected to the loading pattern representative of the 24 h excrement cycles of humans. One population equivalent (p.e.) shall be defined as approximately 1.2 fecal events and 4 urine events per person per day. The system shall be loaded according to each of the 6 loading patterns described in this section. These loading patterns shall be conducted sequentially in the order described.

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Annex C, figure 6 illustrates graphically how these loading patterns shall be conducted.

NOTE — For those loading patterns that are conducted for 7 or more d, the actual loading for both feces and urine may vary by  $\pm 10\%$  on a weekly basis. For loading patterns that are conducted for less than 7 d, the actual loading for both feces and urine may vary by  $\pm 10\%$  over the course of each loading pattern.

- a) Start-up: The system shall be installed, loaded, and operated according to the manufacturer's instructions. The duration of the start-up period shall be specified by the manufacturer.
- b) Preliminary routine operation: Following start-up, the system shall be loaded at 100% of the DRC for 2 consecutive d each week for a period of 2 mo. Five d of no loading shall be conducted on the 5 remaining d of each week.

NOTE — For an example of how to calculate daily loadings based on DRC and p.e., refer to Note 2 and Figure 2 in 11.1.1.

- c) Peak season stress: Peak season stress shall be simulated by 14 consecutive d of use. For the first week of peak season stress, the system shall be loaded at 100% of the DRC for 5 consecutive d followed by 2 consecutive d of loading at 200% of the DRC. During the second week of peak season stress, this pattern of loading at 100% of the DRC for 5 consecutive d and 200% of the DRC for 2 consecutive d shall be repeated.
- d) Routine operation: The system shall be returned to routine operation by loading at 100% of the DRC for 2 consecutive d each week. The system shall receive no loading on the 5 remaining d of each week. This loading pattern shall continue for a total of 2 weeks.
- e) Seasonal stress: The seasonal use stress shall be simulated by 42 consecutive d of use at 100% of the DRC.
- f) Routine operation: The system shall be returned to routine operation by loading at 100% of the DRC for 2 consecutive d each week. The system shall receive no loading on the 5 remaining d of each week. This loading pattern shall continue for the duration of the 6-mo test period and shall not be less than 30 d in duration.

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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 grey 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 Wastewater Technology –

## Onsite Residential and Commercial Water Reuse Treatment Systems

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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 most recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.

~~ANSI/AWS D.1.1/D1.1M:2015~~ 2020, *Structural Welding Code – Steel*, with Errata<sup>2</sup>

~~ANSI/AWS D1.3/D1.3M:2018~~, *Structural Welding Code – Sheet Steel*, 5th Edition, with Errata<sup>2</sup>

APHA/AWWA/WEF, *Standard Methods for the Examination of Water and Wastewater* (hereinafter referred to as *Standard Methods*)<sup>1</sup>

NFPA 70®, *National Electrical Code*® (NEC®), 2011<sup>3</sup>

ISO 12103-1, *Road Vehicles – Test Dust for Filter Evaluation*<sup>4</sup>

## BSR/UL 428B, Standard for Safety for Electrically Operated Valves for Diesel Fuel, Biodiesel Fuel, Diesel/Biodiesel Blends with Nominal Biodiesel Concentrations Up To 20 Percent (B20), Kerosene, and Fuel Oil

### 1. ANSI approval of the revisions covering the a) deletion of redundant requirements in UL 428B, and b) Operations Test.

1.1 Electrically operated valves are intended for use with the following:

- a) Kerosene formulated in accordance with the Standard Specification for Kerosene, ANSI/ASTM D3699., and
- b) Fuel oil (heating oil) formulated in accordance with the Standard Specification for Fuel Oils, ANSI/ASTM D396, and.
- c) Diesel fuel, which includes renewable diesel and diesel/biodiesel blends with nominal biodiesel concentrations up to 5 percent (B0 – B5) formulated in accordance with the Standard Specification for Diesel Fuel Oils, ANSI/ASTM D975, and
- d) Diesel/biodiesel, renewable diesel/biodiesel blends, blends with nominal biodiesel concentrations from 5 percent up to 20 percent (B6 – B20) formulated in accordance with the Standard Specification for Diesel Fuel Oil, Biodiesel Blends (B6 – B20), ANSI/ASTM D7467, and/or
- e) Biodiesel (~~B99.9~~/B100) formulated in accordance with the Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, ANSI/ASTM D6751.

4.2.1.4 Nonmetallic materials in contact with the fuels anticipated by these requirements shall not be constructed of the following:

- a) Polysulfide rubber;
- b) Ethylene propylene diene monomer (EPDM) rubber;
- c) Methyl-Methacrylate;
- d) Polyvinyl Chloride (PVC); or
- e) ~~Nylon 6/6~~; or
- f) Polyurethane as elastomer.

### 6.1 General

6.1.1 The test outlined in 6.2 – 6.4 is to be performed on one or two samples of the valve, with one sample for each rating. If the product is rated for use with diesel fuel, diesel/biodiesel blends with biodiesel concentrations up to 20 percent (B20), kerosene, or fuel oil, then the test shall be performed using the FB25a test fluid. If the product is rated for use with a biodiesel fluid (~~B99.9~~/B100), then the test shall be performed using the B100a test fluid. See Supplement SB.

11.1 The following information shall be permanently marked on each valve:

- a) Valves shall be marked to indicate the fuel rating for which they are intended. The marking shall be "Diesel Fuel" or "B5" for valves rated for diesel fuel only, shall be "B20" for valves rated for diesel fuel and diesel fuel/biodiesel blends with nominal biodiesel concentrations up to 20 percent biodiesel (B0 – B20), shall be "~~B99.9~~/B100" for valves rated for biodiesel fuel, "Kerosene" for valves rated for kerosene, or "Fuel Oil" for valves rated for use with fuel oil. This marking shall be prominently displayed to identify the valve.

## SUPPLEMENT SB – Test Fluids

### SB.1 Representative Aggressive Combustible Test Fuel Mixtures

There are two test fluids that are applicable for tests in this standard. The fluids are designated as FB25a and B100a. The test fluids represent chemical and physical characteristics of the fuels covered by this standard. See [1.2](#). The aggressive biodiesel contains elements that are used to represent contaminants that can be found in actual use and are used to help represent the worst case test fluid.

The test fluid designations represent the following:

FB25a – An aggressive test fluid containing 25 percent biodiesel with aggressive elements:

F = Reference Fuel F (No. 2 Grade S500) in accordance with the Standard Specification for Standard Test Method for Rubber Property – Effects of Liquids, ASTM D471.

B = Biodiesel (100 percent Soy feedstock) in accordance with the Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, ASTM D6751.

a = Aggressive components to be mixed with B to form B100 as an aggressive Biodiesel Stock.

B100a – An aggressive test fluid containing 100 percent biodiesel with aggressive elements:

B = Biodiesel (100 percent Soy feedstock) in accordance with the Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, ASTM D6751.

a = Aggressive components to be mixed with B to form B100 as an aggressive Biodiesel Stock.

The aggressive biodiesel containing <0.5 percent volume combined water and decanoic acid shall be based on the approximate formula below<sup>1</sup> to achieve a final  $1.00 \pm 0.02$  acid number of the mixture when measured in accordance with the Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration, ASTM 664.

0.2 percent volume acid water [2.60 g decanoic acid crystals / 1000 g of deionized water]<sup>2</sup>

The resulting solution, after mixing the above elements, shall have an acid number of  $1.0 \pm 0.02$ . After the measurement is determined, an acid number not within the specification of  $1.0 \pm 0.02$  shall be adjusted with additional biodiesel fuel or decanoic acid added until the acid number is  $1.0 \pm 0.02$ .

These two fluids may be used to condition samples as noted in each specific test that indicates that these fluids are to be used. The test fluids are to be prepared just prior to use to minimize effects on the test fluid. The aggressive biodiesel is corrosive and changes can occur to the solution from interactions with the storage and transfer containers. Exposure to air and or moisture may also effect the test fluid.

Products intended to be rated for use with diesel fuel or diesel/biodiesel fuel blends with nominal biodiesel concentrations up to 20 percent (B0 – B20) shall be evaluated using the FB25a test fluid as the only applicable test fluid. Products intended to be rated for use with biodiesel fuel (B99.9/B100) shall be evaluated using the B100a test fluid. For products evaluated using the FB25a test fluid or B100a test fluid, one sample is required to be conditioned in accordance with the test sequence in [6.5.1](#).

<sup>1</sup> Note the formula is approximate since each source of biodiesel may have variations in specific gravity and initial acid number that require measurement and final adjustment as specified.

<sup>2</sup> Note decanoic acid crystals are insoluble in water, so are recommended to be finely ground and thoroughly mixed in the overall solutions before acid number measurements are taken.

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## **BSR/UL 705, Standard for Safety for Power Ventilators**

### **2. Update internal wiring for hazardous voltage**

#### **PROPOSAL**

2.7 DUCT FAN – A ~~straight-through~~ ventilator installed within a duct or provided with flanges for connection to a duct and which may be used with heated air within the duct.

### **3. Addition of solid state speed controller test requirements**

#### **PROPOSAL**

**31A Ventilator motors of permanent split capacitor (PSC) or shaded pole type and provided with solid-state speed controls**

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## BSR/UL 1581, Standard for Safety for Reference Standard for Electrical Wires, Cables, and Flexible Cords

### PROPOSAL(S)

#### 11 Requirements for Copper-Clad Aluminum Conductors

11.1 The requirements in this section (11.1) cover copper-clad aluminum conductors. Copper-clad aluminum conductors shall be drawn from copper-clad aluminum rod. The copper shall be metallurgically bonded to the aluminum core, shall occupy 10 percent or more of the cross section of a solid conductor and of each wire (strand) of a stranded conductor, and shall be concentric with the aluminum. The thickness of the copper shall not be less than 2.56 percent of the diameter of the solid conductor or wire (strand) as determined by microscopic examination of a polished right cross section of the round strand or round solid conductor. The tensile strength of a finished copper-clad aluminum conductor tested as a unit or of the wires (strands) from a finished stranded copper-clad aluminum conductor and of a finished solid copper-clad aluminum conductor shall not exceed 20,000 lbf/in<sup>2</sup> or 138 MPa when specimens are tested at the speed and using the equipment and procedure indicated in ASTM B 566-04a. The elongation of the same specimens shall not be less than 15 percent in 10 inches or 250 mm.

### NEW SECTION

#### 12 Requirements for Copper-Clad Aluminum Conductors Used in Building Wire

##### Material Requirement

12.1 The requirements in this section cover finished, copper-clad aluminum conductors and the individual strands of a finished copper-clad aluminum conductor. Copper-clad aluminum conductors shall be drawn from copper-clad aluminum rod. Copper-clad aluminum strands shall be limited to sizes 0.02257 - 0.2043 in diameter (23 – 4 AWG).

12.2 The aluminum core shall be an AA8000 series alloy as described in Section 10. The elemental analysis of the aluminum core shall be determined in accordance with ASTM E227. The results of the elemental analysis on the aluminum core used shall meet the requirements for an AA 8000 series alloy as described in UL 44, Chemical composition of ACM, AA 8000 series aluminum alloy conductor materials.

12.3 The copper shall be high-conductivity, oxygen-free copper with an oxygen content not to exceed 0.001% meeting the requirements of ASTM B 152. The copper shall be metallurgically bonded to the aluminum core as determined by the methods in 12.12 and 12.14. The copper shall occupy 10 percent or more by volume of the cross section of a solid conductor and of each wire (strand) of a stranded conductor as determined by the methods in 12.17. The thickness of the copper shall not be less than 4.0 percent of the radius of the solid conductor or wire (strand).

##### Test Requirement

##### 12.4 Tensile strength and elongation test

12.4.1 The tensile strength of a finished copper-clad aluminum conductor or of the wires (strands) from a finished stranded copper-clad aluminum conductor and of a finished solid copper-clad aluminum conductor shall not exceed 20,000 lbf/in<sup>2</sup> or 138 MPa. The elongation of the same specimens shall not be less than 15 percent. The tensile and elongation of a finished conductor or an individual strand shall be tested in accordance with the test, Physical properties of conductors (tensile strength, elongation at break, and ultimate strength) as described in UL 2556. The test shall be conducted at a speed of 12 in/min (305 mm/min), with 10 inches (254 mm) between the benchmarks.

##### 12.5 DC resistance test

12.5.1 The DC resistance of the finished copper-clad aluminum conductor shall not exceed 0.02743  $\Omega$ ·mm<sup>2</sup>/m when tested in accordance with the method, DC Resistance as described in UL 2556.

## 12.6 Density test

12.6.1 The density of the copper-clad aluminum shall be 3.32 g/cm<sup>3</sup> (0.1200 lb/in<sup>3</sup>) nominal when the conductor material is tested using the method described in Annex B of UL 2556.

## 12.7 Diameter Measurement

12.7.1 The diameter of the solid conductor or any individual strands from a stranded conductor shall meet the requirements in Table 20.1 when measured in accordance with the test Conductor Diameter as described in UL 2556.

## 12.8 Adhesion test

12.8.1 A specimen of finished copper-clad aluminum conductor shall be fixed in a vice or other securement means. The free end of the conductor shall be flexed back and forth thru 180 degrees using any suitable means until the conductor breaks. The fractured area (not including the clamped area) shall be examined for delamination using magnification of 10X. There shall be no delamination between the copper and the aluminum.

## 12.9 Cohesion Test

12.9.1 A specimen of finished copper-clad aluminum conductor shall be fixed in a clamp or other securement means. The conductor shall be twisted three complete turns in one direction, untwisted to the original position, twisted three turns in the opposite direction and finally returned to the original position. The length over which the twisting occurs shall be 15 times the diameter of wire under test. A longer length specimen may be used to facilitate the test. If a longer length is used, the number of twists shall be increased accordingly.

12.9.2 After completion of the twists, the specimen shall be examined for seams or splits in the copper using 10X magnification. There shall be no seams or splits in the copper.

## 12.10 Copper Construction

12.10.1 The surface of wire shall be free from pits, slivers, exposed aluminum, or other imperfections when examined under normal vision.

12.10.2 Three specimens of copper-clad aluminum, each specimen located at least 10 feet from the previous specimen, shall be mounted (in a suitable material if needed) so that a polished, right cross section of the conductor can be obtained. The minimum thickness at any point (MinAAP) shall be located and measured. The diameter of the overall conductor (D<sub>c</sub>) and the diameter of the aluminum core (D<sub>a</sub>) shall be each be measured at three locations and averaged. The three measurement locations shall be at the maximum diameter, the minimum diameter and at a location bisecting the maximum and minimum diameters. The measurements shall be made using a micrometer microscope with a resolution and accuracy of 0.001 mm (0.0001 in)

12.10.3 The thickness of copper T<sub>c</sub> shall be calculated using

$$T_c = 100 \left( \text{MinAAP} / \left( \frac{D_c}{2} \right) \right)$$

Where: MinAAP – Minimum thickness at any point of copper cladding

D<sub>c</sub> – Average overall conductor diameter

The ratio of copper with respect to the overall radius R<sub>ca</sub> shall not be less than 4 % of the radius of the overall conductor, where:

$$R_{ca} = 100 \times \left( \frac{T_c}{D_c/2} \right)$$

12.10.4 The percent copper volume %C<sub>v</sub> shall be calculated using

$$\%C_v = 100 \times \left( \frac{Dc^2 - Da^2}{Dc^2} \right)$$

The copper shall occupy 10 percent or more by volume of the cross section

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## BSR/UL 2034, Standard for Safety for Single and Multiple Station Carbon Monoxide Alarms

### 1. New Commercial Vehicles Definition

#### PROPOSAL

87.1 An alarm shall be permanently marked on a Class III C marking material with the following information unless specifically indicated that it appears on the installation wiring diagram. The marking shall be in a contrasting color, finish, or equivalent. Unless the letter height is specified, all markings shall be at least 3/64 inch (1.2 mm) high.

- i) The following warning shall be placed on the carbon monoxide alarm. The warning label shall be of Class III C marking material. The hazard symbol and letters used for the word "WARNING" shall be boldfaced type having a minimum uppercase letter height of 0.120 inch (3.05 mm). The minimum vertical spacing between lines of type shall be 0.046 inch (1.17 mm). (These dimensions correspond to 12 point type.) Lowercase letters shall be compatible with the uppercase letter specification.



"Carbon Monoxide cannot be seen or smelled but can kill you.

If alarm signal sounds:

- 1) Operate reset/silence button.
- 2) Call your emergency services (fire department or 911).
- 3) Immediately move to fresh air – outdoors or by an open door/window."

(for commercial vehicles)

"Carbon Monoxide cannot be seen or smelled but can kill you.

If alarm signal sounds:

- 1) Immediately move to fresh air – outdoors or by an open door/window.
- 2) Contact your supervisor."

### 6. New Velocity Sensitivity Test

#### PROPOSAL

##### 44A.2 Duct Test Equipment

44A.2.1 The following items refer to Figure 44A.1. Alternate configurations may be used provided that they produce a homogeneous mixture of carbon monoxide across the detector head or gas sampling tubes and are adjustable from 300 to 4000 fpm (1.52 to 20.3 m/s). At the carbon monoxide alarm test location the cross section is to be 1 square foot (0.093 m<sup>2</sup>) and the alarm is to be located at least eight duct widths downstream [8 feet (2.44 m)] from the nearest bend.

- d) Air Stream Straightener<sup>b</sup> - Aluminum honeycomb, 1/4 inch (6.4 mm) cell size. Overall dimensions are to be 12 by 12 by 3 inches (304 by 304 by 76 mm). An equivalent honeycomb shall be employed only when the cell size length-to-diameter ratio greater than 10.

<sup>b</sup> Expanded Commercial Grade Honeycomb 1/4 CGH-5.2N American Cyanamid Co., is intended for this purpose.

## BSR/UL 2594, Standard for Safety for Electric Vehicle Supply Equipment

### 1. The Proposed Third Edition of the Standard for Electric Vehicle Supply Equipment, ANCE J-677/CSA 280/UL 2594

#### PROPOSAL

1.1 This Standard ~~covers~~ applies to conductive electric vehicle (EV) supply equipment with a primary source voltage of 1000 V ac or less, with a frequency of 50 or 60 Hz, and intended to provide ac power to an electric vehicle with an on-board charging unit. This Standard covers electric vehicle supply equipment intended for use where ventilation is not required.

#### 67.3 UV exposure

67.3.1 The enclosure is considered to comply with this test if at the conclusion of the test method for the UV Exposure/Weathering Test in Annex A, Ref. No. 21, all the minimum property retention requirements in Table 28 are met.

72.12 Equipment field-wiring terminals shall be marked with the following:

- a) "Use Copper Conductors Only" when the terminal is intended only for connections to copper wire.
- b) "Use Aluminum Conductors Only" or "Use Aluminum or Copper-Clad Aluminum Conductors Only" when the terminal is intended only for connection to aluminum wire.
- c) "Use Copper or Aluminum Conductors" or "Use Copper, Copper-Clad Aluminum, or Aluminum Conductors" when the terminal is intended for connection to either copper or aluminum wire.
- d) Temperature rating for the field-installed conductors for which the unit has been evaluated.

#### Annex C – French and Spanish Translations (Informative) Normative for Canada and Mexico, Informative for the US

72.18 In Canada, a power supply that is intended to be fixed in place to a structure and is provided with a supply cord in accordance with 12.1.1.1 shall be marked with the following or equivalent: "THE SUITABILITY OF THE USE OF FLEXIBLE CORD IN ACCORDANCE WITH CE CODE, PART I, RULE 4-012, IS TO BE DETERMINED BY THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION".

In Mexico and the United States, this does not apply.

#### C1 French and Spanish Translations

72.18	THE SUITABILITY OF THE USE OF FLEXIBLE CORD IN ACCORDANCE WITH CE CODE, PART I, RULE 4-012, IS TO BE DETERMINED BY THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION <u>N/A</u>	C'EST À L'AUTORITÉ LOCALE COMPÉTENTE EN MATIÈRE D'INSPECTION QU'INCOMBE DE DÉTERMINER SI UN CORDON SOUPLE PEUT ÊTRE UTILISÉ CONFORMÉMENT À L'ARTICLE 4-012 DU CCÉ, PREMIÈRE PARTIE  LA PERTINENCE DE L'UTILISATION DE CORDONS FLEXIBLES SELON LE CODE CE, PREMIÈRE PARTIE	LA IDONEIDAD DEL USO DEL CORDÓN FLEXIBLE DE ACUERDO CON LA REGLA 4-012 DE LA PARTE I DEL CEC, SE DETERMINA POR LA AUTORIDAD DE INSPECCIÓN LOCAL QUE TENGA JURISDICCIÓN <u>N/A</u>
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## **WMA 100 Revisions Recirculation – June 27, 2022**

Additional changes submitted by the WMA 100 Consensus Body have been found to be persuasive and substantive, and have been incorporated into the latest draft of revisions.

This recirculation is limited in scope to these changes and are reflected below.

*Cover Page through Section 3. – No Additional Changes*

### **4. REFERENCED STANDARDS AND PUBLICATIONS**

ASTM E330/E330M-14(2021) — *Standard Test Method for Structural Performance of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference*

ASTM E1300-2016 – *Standard Practice for Determining Load Resistance of Glass in Buildings*

16 CFR 1201-2012 – *Safety Standard for Architectural Glazing Materials*

AWC-NDS–2018 – *National Design Specification for Wood Construction*

ANSI/BHMA A156.1-2021 - *Butts and Hinges*

ANSI/BHMA A156.2-2017 - *Bored and Preassembled Locks and Latches*

ANSI/BHMA A156.5-2020 - *Cylinders and Input Devices for Locks*

ANSI/BHMA A156.12-2018 - *Interconnected Locks*

ANSI/BHMA A156.13-2017 - *Mortise Locks*

ANSI/BHMA A156.35-2020 – *Power Supplies for Electronic Access Control*

ANSI/BHMA A156.37-2020 – *Multipoint Locks*

ANSI/BHMA A156.39-~~2015~~-2020 – *Residential Locksets and Latches*

ANSI/BHMA A156.40-~~2015~~-2020 – *Residential Deadbolts*

*Section 5 through end of document – No Additional Changes*