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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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## **AAMI (Association for the Advancement of Medical Instrumentation)**

Chenai Maguwah; [cmaguwah@aami.org](mailto:cmaguwah@aami.org) | 901 N. Glebe Road, Suite 300 | Arlington, VA 22203 [www.aami.org](http://www.aami.org)

### ***New Standard***

BSR/AAMI HIT1000-2-202x, Safety and effectiveness of health IT software and systems - Part 2: Application of quality systems principles and practices (new standard)

Stakeholders: Health care providers, health software and health IT vendors and users regulators, patients. medical device manufacturers and patent safety advocates, EHR vendors, health IT system integrators and implementers.

Project Need: AAMI HIT1000-2 will facilitate shared responsibility for quality principles and practices among the many organizations and individuals involved in developing, maintaining, and implementing health IT systems and software, in order to promote health IT safety and efficacy.

Interest Categories: Industry, User, General Interest, and Regulatory members.

Scope: Specifies a process to build on the principles in existing quality systems principles and practices, as well as identify the specific roles and responsibilities needed to ensure health IT safety and quality as well as patient safety hazards associated with health IT software and systems, to estimate and evaluate the associated risks, to control these risks, and to monitor the effectiveness of the controls.

## **AAMI (Association for the Advancement of Medical Instrumentation)**

Chenai Maguwah; [cmaguwah@aami.org](mailto:cmaguwah@aami.org) | 901 N. Glebe Road, Suite 300 | Arlington, VA 22203 [www.aami.org](http://www.aami.org)

### ***New Standard***

BSR/AAMI HIT1000-3-202x, Safety and effectiveness of health IT software and systems - Part 3: Application of risk management (new standard)

Stakeholders: Health care providers, health software and health IT vendors and users regulators, patients. medical device manufacturers and patent safety advocates, EHR vendors, health IT system integrators and implementers.

Project Need: AAMI HIT1000-3 will facilitate shared responsibility for addressing safety risks associated with health IT systems and software among the many organizations and individuals involved in developing, maintaining, and implementing health IT systems and software.

Interest Categories: Industry, User, General Interest, and Regulatory members.

Scope: This part of AAMI HIT1000 (Part 3: Application of risk management) identifies the core concepts and principles needed to maintain safe and effective health IT software and systems in order to estimate and evaluate the associated risks, to control these risks, and to monitor the effectiveness of the controls.

**AAMI (Association for the Advancement of Medical Instrumentation)**

Chenai Maguwah; cmaguwah@aami.org | 901 N. Glebe Road, Suite 300 | Arlington, VA 22203 www.aami.org

***New Standard***

BSR/AAMI HIT1000-4-202x, Safety and effectiveness of health IT software and systems - Part 4: Application of human factors engineering (new standard)

Stakeholders: Health care providers, health software and health IT vendors and users regulators, patients, medical device manufacturers and patent safety advocates, EHR vendors, health IT system integrators and implementers.

Project Need: AAMI HIT1000-4 will detail a human engineering process for use in developing, maintaining, and implementing health IT systems and software, in order to promote good usability of these products and systems while improving their safety and efficacy.

Interest Categories: Industry, User, General Interest, and Regulatory members.

Scope: Part 4 of the HIT1000 standard describes an approach to developing and validating a health IT system's user interface so that such systems are safe and effective. The intent is to promote good development practices without being overly prescriptive. As such, this standard covers the development, acquisition, integration, implementation, and operational use lifecycle stages. Additionally, this standard includes a section describing usability considerations for health IT system replacement and decommissioning.

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

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

***National Adoption***

BSR/ARESCA 61400-5.1-202x, Wind energy generation systems - Part 5: Wind turbine blades (identical national adoption of IEC 61400-5:2020/AMD1:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI).

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an American National Standard for such projects.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: Identical adoption of IEC standard.

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

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

***National Adoption***

BSR/ARESCA 61400-12-1-202x, Wind energy generation systems - Part 12-1: Power performance measurement of electricity producing wind turbines (identical national adoption of IEC 61400-12-1:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI).

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an American National Standard for such projects.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: Identical adoption of IEC standard.

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

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

**National Adoption**

BSR/ARESCA 61400-12-2-202x, Wind energy generation systems - Part 12-2: Power performance of electricity producing wind turbines based on nacelle anemometry (identical national adoption of IEC 61400-12-2:2023)  
Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI).

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an American National Standard for such projects.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: Identical adoption of IEC standard.

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

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

**National Adoption**

BSR/ARESCA 61400-12-3-202x, Wind energy generation systems - Part 12-3: Power performance - Measurement based site calibration (identical national adoption of IEC 61400-12-3:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI).

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an American National Standard for such projects.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: Identical adoption of IEC standard

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

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

**National Adoption**

BSR/ARESCA 61400-12-5-202x, Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain (identical national adoption of IEC 61400-12-5:2023)

Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI).

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an American National Standard for such projects.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: Identical adoption of IEC standard.

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

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

**National Adoption**

BSR/ARESCA 61400-12-6-202x, Wind energy generation systems - Part 12-6: Measurement based nacelle transfer function of electricity producing wind turbines (identical national adoption of IEC 61400-12-6:2023)  
Stakeholders: U.S. wind developers and investors, Certified Verification Agents (CVAs), Bureau of Safety and Environmental Enforcement (BSEE), Bureau of Ocean Energy Management (BOEM), U.S. Department of the Interior (DOI).

Project Need: The ambitious plans for development of wind energy projects requires a consistent and comprehensive set of industry-based consensus standards. This IEC document is directly applicable as an American National Standard for such projects.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: Identical adoption of IEC standard.

**AWWA (American Water Works Association)**

Paul Olson; polson@awwa.org | 6666 W. Quincy Avenue | Denver, CO 80235 www.awwa.org

**Supplement**

BSR/AWWA C300a-202x, Addendum to ANSI/AWWA C300-22, Reinforced Concrete Pressure Pipe, Steel-Cylinder Type (supplement to ANSI/AWWA C300-2022)

Stakeholders: Drinking water treatment and supply industry, water utilities, consulting engineers, water treatment equipment manufacturers, etc.

Project Need: The intent of this addendum to provide updated requirements for the type of cement used in the manufacture of reinforced concrete pressure pipe.

Interest Categories: End Users, OEMs, Industry, General Interest.

Scope: This standard provides the minimum requirements for the manufacture of reinforced concrete pressure pipe, steel-cylinder type, including fabrication and testing requirements.

**AWWA (American Water Works Association)**

Paul Olson; polson@awwa.org | 6666 W. Quincy Avenue | Denver, CO 80235 www.awwa.org

**Supplement**

BSR/AWWA C302a-202x, Addendum to ANSI/AWWA C300-22, Reinforced Concrete Pressure Pipe, Noncylinder Type (supplement to ANSI/AWWA C302-2022)

Stakeholders: Drinking water treatment and supply industry, water utilities, consulting engineers, water treatment equipment manufacturers, etc.

Project Need: The intent of this addendum to provide updated requirements for the type of cement used in the manufacture of reinforced concrete pressure pipe.

Interest Categories: General Interest, Producer and User members.

Scope: This standard provides the minimum requirements for the manufacture of reinforced concrete pressure pipe, noncylinder type, including fabrication and testing requirements.

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

Debbie Chesnik; ansi.contact@csagroup.org | 8501 East Pleasant Valley Road | Cleveland, OH 44131-5575 www.csagroup.org

***New Standard***

BSR/CSA V701-202x, Hydrogen Fuel Storage Containers for Aviation Applications (new standard)

Stakeholders: Consumers, manufacturers, regulators, and users.

Project Need: The development of this standard will support the safe deployment and the use of hydrogen fuel in aviation applications.

Interest Categories: Consumers, manufacturers, regulators, and users.

Scope: This Standard contains requirements and recommendations for the material, design, manufacture, marking, and testing of serially produced, refillable hydrogen fuel storage containers intended only for the storage of compressed hydrogen gas or liquid hydrogen fuel for aviation applications. Excludes containers covered by CSA HGV 2 Compressed Hydrogen Gas Vehicle Fuel Containers.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 www.neca-neis.org

***Revision***

BSR/NECA 169-202x, Standard for Installing and Maintaining Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs) (revision of ANSI/NECA 169-2016)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: Standard for Installing and Maintaining Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs).

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 www.neca-neis.org

***Revision***

BSR/NECA 200-202x, Standard for Installing and Maintain Temporary Electric Power at Construction Sites (revision of ANSI/NECA 200-2016)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes temporary electrical power and lighting systems at construction sites, operating at 600 volts or less. It covers the planning, installation, expansion, maintenance, cutover, and removal of the temporary power system. This standard is intended to ensure a safe, adequate, functional, and reliable temporary electrical power system for all trades at construction sites.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 [www.neca-neis.org](http://www.neca-neis.org)

**Revision**

BSR/NECA 202-202x, Standard for Installing and Maintaining Industrial Heat Tracing Systems (revision of ANSI/NECA 202-2013)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes procedures for the installation, testing, and documentation of electrical freeze protection and process heat-tracing systems. Heat-tracing cable types covered by this publication include: self-regulating, constant wattage, and zone heating cables and mineral insulated (MI) heating cables. System components used with these types of heat-tracing cables included power transformers, control panels, temperature sensors, temperature controllers, contactors, circuit breakers, enclosures, conduit, wire, and all necessary auxiliary equipment and controls.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 [www.neca-neis.org](http://www.neca-neis.org)

**Revision**

BSR/NECA 230-202x, Standard for Selecting, Installing, and Maintaining Electric Motors and Motor Controllers (1000 Volts and Less) (revision of ANSI/NECA 230-2016)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes recommended procedures for selecting and installing stationary electric motors and motor controllers rated 1000 volts or less. It also covers routine maintenance procedures to be followed after the installation is complete.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 [www.neca-neis.org](http://www.neca-neis.org)

**Revision**

BSR/NECA 409-202x, Standard for Installing and Maintaining Dry-Type Transformers (revision of ANSI/NECA 409-2015)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes the installation and maintenance procedures for single- and three-phase general-purpose dry-type transformers and associated accessories rated 1000 Volts AC or less, and 0.25 kVA or more. This publication applies to indoor and outdoor, ventilated and non-ventilated, two-winding transformers used for supplying power, heating, and lighting loads for commercial, institutional, and industrial use in nonhazardous locations both indoors and outdoors. It also covers periodic routine maintenance and troubleshooting procedures for transformers, and special procedures used after adverse operating conditions such as a short-circuit, ground-fault, or immersion in water.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 [www.neca-neis.org](http://www.neca-neis.org)

**Revision**

BSR/NECA 410-202x, Standard for Installing and Maintaining Liquid-Filled Transformers (revision of ANSI/NECA 410-2013)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes installation procedures for pad-mounted, sealed, self-cooled or fan-cooled, compartmental, single- and three-phase liquid-filled distribution and power transformers with primary windings rated from 2400 volts to 35 kV AC, nominal, and rated from 75 kVA through 5000 kVA, and associated accessories, designed for outdoor installation at grade level with underground entrance of primary and secondary conductors, and used for supplying power, heating and lighting loads for commercial, institutional, and industrial use in non-hazardous locations. It also covers periodic routine maintenance procedures for transformers, and special procedures used after adverse operating conditions such as short-circuit, ground-fault, or immersion in water.



**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 www.neca-neis.org

**Revision**

BSR/NECA 416-202x, Recommended Practices for Installing Energy Storage Systems (revision of ANSI/NECA 416-2016)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This Recommended Practice describes installation practices for Energy Storage Systems (ESS) such as battery systems, flywheels, ultra-capacitors, and smart chargers used for electric vehicle (EV) vehicle-to-grid (V2G) applications.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 www.neca-neis.org

**Revision**

BSR/NECA 430-202x, Standard for Installing and Maintaining Medium Voltage Switchgear (revision of ANSI/NECA 430-2016)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes site preparation and installation of new medium-voltage switchgear and maintenance procedures for existing medium-voltage switchgear nominally rated up to a maximum operating voltage of 38 kV AC. Medium-voltage switchgear may be classified as either metal-clad switchgear or metal-enclosed switchgear. Medium-voltage switchgear may also be arc-resistant or non-arc-resistant construction.

**NECA (National Electrical Contractors Association)**

Michael Johnston; me@necanet.org | 1201 Pennsylvania Avenue, Suite 1200 | Washington, DC 20004 [www.neca-neis.org](http://www.neca-neis.org)

**Revision**

BSR/NECA/FOA 301-202x, Standard for Installing and Testing Fiber Optic Cables (revision of ANSI/NECA/FOA 301-2016)

Stakeholders: Electrical Contractors, Specifiers, Electrical Workers, Inspectors, Building Owners, Maintenance Engineers.

Project Need: National Electrical Installation Standards (developed by NECA in partnership with other industry organizations) are the first performance standards for electrical construction. They go beyond the basic safety requirements of the National Electrical Code to clearly define what is meant by installing products and systems in a “neat and workmanlike” manner.

Interest Categories: Construction, Producer, General Interest, Government.

Scope: This standard describes procedures for installing and testing cabling networks that use fiber optic cables and related components to carry signals for communications, security, control, and similar purposes. It defines a minimum level of quality for fiber optic cable installations.

**ULSE (UL Standards & Engagement)**

Derrick Martin; Derrick.L.Martin@ul.org | 47173 Benicia Street | Fremont, CA 94538 <https://ul.org/>

**New Standard**

BSR/UL 746P-202x, Standard for Safety for the Evaluation of Plastics Processed by Additive Manufacturing (AM) for Use in Electrical Equipment (new standard)

Stakeholders: Polymeric material manufacturers, 3D Printer manufacturers, end-product producers of products that accept components that are processed by Additive Manufacturing (AM) techniques.

Project Need: To obtain national recognition of a standard for the evaluation of plastics used in electrotechnical products processed by Additive Manufacturing (AM). AM poses challenges not seen with traditional production methods, such as Injection Molding, Extrusion, Compression Molding, etc. For example, the AM process introduces variability which can significantly impact properties and performance based on how materials are printed. A material processed by AM can have vastly different tensile strength, impact resistance, resistance to ignition, flammability, etc., than the same material processed by a different way. Addressing concerns of AM in a separate standard would provide clarification and insight to assure the safety performance of materials using these processes.

Interest Categories: Producers, Testing and Standard Organizations, General, Supply Chain, Commercial/Industrial Users.

Scope: These requirements cover polymeric materials processed by AM that are used in electrical equipment and describe the various test procedures. The materials are processed using any of the Additive Manufacturing (AM) Techniques mentioned below:

- Material Extrusion;
- Powder Bed Fusion;
- VAT Polymerization; and
- Other AM Processes.

The standard will also specify requirements for:

- Variations in Materials and Printers (Ex., formulation, orientation, software, process, etc.) affecting performance;
- Post-processing effects on material performance; and
- Other variables and processes that are identified to affect the performance of 3D-printed materials.

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

Jing Kwok; jing.kwok@vita.com | 929 W. Portobello Avenue | Mesa, AZ 85210 [www.vita.com](http://www.vita.com)

***New Standard***

BSR/VITA 91-202x, Connector for Higher Density VITA 46 Applications Standard (new standard)

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

Project Need: As modular embedded computers increase in speed and functionality, there is a need for a high density and higher speed connector to connect to the backplane while maintaining the same form factor as VITA 46.

Interest Categories: General Interest, Producers, Users.

Scope: This standard defines a connector system that provides higher pin density to the backplane for VITA 46 3U and 6U VPX applications.

# 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: October 9, 2022

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

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

#### Addenda

BSR/ASHRAE Addendum t to BSR/ASHRAE Standard 15-202x, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019)

This proposed addendum t addresses changes for application of cooling equipment specific to information technology equipment (ITE) and data center installations. The same mitigation principles (refrigerant charge size restrictions, refrigerant detection, air circulation and product listing) are the same as other applications using flammable refrigerants. One significant difference in ITE applications, due to the sensitive nature of electronic equipment to cleanliness, is that emergency ventilation of outside air is not an acceptable mitigation strategy.

[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>

### HI (Hydraulic Institute)

300 Interpace Parkway, Building A, 3rd Floor, #280, Parsippany, NJ 07054 | [amoser@pumps.org](mailto:amoser@pumps.org), [www.pumps.org](http://www.pumps.org)

#### Addenda

BSR/HI 14.3A-202x, Rotodynamic Pumps for Design and Application (addenda to ANSI/HI 14.3-2019)

The purpose of this standard is to provide guidance and recommendations for the general application and design of rotodynamic pumps. This standard provides accepted methods for the evaluation of the hydraulic performance and design of all related and supporting equipment. It does not include detailed hydraulic design methods. This standard recognizes and identifies application requirements, principal features, performance considerations, and the necessary precautions for proper use of rotodynamic pumps.

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

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

## Comment Deadline: October 9, 2022

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

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

#### **Revision**

BSR/NSF 455-2-202x (i36r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)

This standard is intended to define a standardized approach for auditing to determine the level of compliance of dietary supplement products to 21 CFR Part 111, as well as incorporating additional retailer requirements.

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

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

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

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

#### **Revision**

BSR/NSF 455-2-202x (i38r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)

This standard is intended to define a standardized approach for auditing to determine the level of compliance of dietary supplement products to 21 CFR Part 111, as well as incorporating additional retailer requirements.

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

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

## Comment Deadline: October 9, 2022

### ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062 | Elizabeth.Northcott@ul.org, <https://ul.org/>

#### **National Adoption**

BSR/UL 62841-4-3-202x, Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Particular Requirements for Pedestrian Controlled Walk-Behind Lawnmowers (national adoption with modifications of IEC 62841-3-4)

1 Scope This clause of Part 1 is applicable, except as follows: Addition: This document applies to pedestrian controlled-cylinder lawnmowers; and rotary lawnmowers designed for use around the home or for similar purposes, equipped with metallic cutting means; and/or non-metallic cutting means with one or more cutting elements pivotally mounted on a generally circular drive unit, where these cutting elements rely on centrifugal force to achieve cutting, and have a kinetic energy for each single cutting element of greater than 10 J. This standard does not apply to:

- robotic lawnmowers;
- remote-controlled lawnmowers;
- flail mowers or flail-type attachments;
- scissors-type lawnmowers;
- grassland mowers;
- sickle bar mowers;
- towed/semi-mounted grass-cutting machines;
- scrub-clearing machines;
- lawn trimmers and lawn edge trimmers;
- lawn edgers;
- grass trimmers;
- brush cutters;
- brush saws;
- agricultural mowers;
- trailing seat/sulky units;
- ride-on machines;
- non-powered lawnmowers;
- combustion engine powered lawnmowers;
- hybrid and fuel cell powered machines and associated charging systems; and
- garden tractors or their attachments.

NOTE 101: Robotic lawnmowers are covered by IEC 60335-2-107, and will be covered by a future part of IEC 62841.

NOTE 102: Lawn trimmers and lawn edge trimmers are covered by IEC 60335-2-91.

NOTE 103: Lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws will be covered by a future part of IEC 62841.

NOTE 104: Lawn edgers will be covered by a future part of IEC 62841.

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

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

## Comment Deadline: October 9, 2022

### ULSE (UL Standards & Engagement)

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

#### **National Adoption**

BSR/UL 62990-1-202x, Standard for Safety for Workplace Atmospheres - Part 1: Gas Detectors - Performance Requirements of Detectors for Toxic Gases (national adoption with modifications of IEC 62990-1)

This proposal provides revisions to the proposal document dated March 25, 2022 per comments received.

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

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

### ULSE (UL Standards & Engagement)

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

#### **Revision**

BSR/UL 583-202x, Standard for Electric-Battery-Powered Industrial Trucks (September 9, 2022) (revision of ANSI/UL 583-2021)

This proposal covers: (1) Proposed adoption of the eleventh edition of the Standard for Electric-Battery-Powered Industrial Trucks, UL 583, as a UL standard for the United States and Canada.

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

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

### ULSE (UL Standards & Engagement)

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

#### **Revision**

BSR/UL 711-202x, Standard for Rating and Fire Testing of Fire Extinguishers (September 9, 2022) (revision of ANSI/UL 711-2018)

This proposal covers: (1) Revision to 8.1.4.

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

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

## Comment Deadline: October 9, 2022

### ULSE (UL Standards & Engagement)

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

#### Revision

BSR/UL 970-202x, Standard for Retail Fixtures and Merchandising Displays (September 9, 2022) (revision of ANSI/UL 970-2020)

This proposal covers: (1) Revision to the scope to clarify the products covered by the Standard; (2) Revisions and additions to Section 2, Glossary, to clarify and align the defined terms with the requirements in the Standard; (3) Revisions to add references to UL 62368-1 to provide manufacturers an alternative to compliance with requirements in UL 60950-1, with related revisions to replace references LPS circuits with Low Voltage, Low Energy (LVLE) circuits in applicable requirements; (23) Revisions to Paragraph 101.2 to clarify construction of power supplies/drivers with respect to luminaires; (29) Revision to Table 95.1 to specify that flammability requirements apply to showcases.

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

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

### ULSE (UL Standards & Engagement)

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

#### Revision

BSR/UL 1277-202X, Standard for Safety for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members (revision of ANSI/UL 1277-2021)

Jacket thickness comparison, Revised Table 12.3 and new 12.3.2; Editorial change to Table 11.1 and new item (c) to Clause 11.1.5; Add laser marking on cable surface, new 30.3(c).

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

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

## Comment Deadline: October 24, 2022

### ADA (American Dental Association)

211 East Chicago Avenue, Chicago, IL 60611-2678 | [bralowerp@ada.org](mailto:bralowerp@ada.org), [www.ada.org](http://www.ada.org)

#### National Adoption

BSR/ADA Standard No. 136-202x, Dentistry - External Tooth Bleaching Products (national adoption of ISO 28399:2021 with modifications and revision of ANSI/ADA Standard 136-2015)

This document specifies the requirements and test methods for external tooth bleaching products. These products are intended for use in the oral cavity, either by professional application (in-office tooth bleaching products) or consumer application (professional or non-professional home use of tooth bleaching products), or both. It also specifies requirements for their packaging, labeling, and manufacturer's instructions for use.

Single copy price: \$98.00

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

Order from: [standards@ada.org](mailto:standards@ada.org)

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



## Comment Deadline: October 24, 2022

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 | kbest@ahrinet.org, www.ahrinet.org

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

BSR/AHRI Standard 1430-202x (I-P), Demand Flexible Electric Storage Water Heaters (new standard)

This standard establishes requirements for Demand Flexible Water Heaters that are capable of supporting load management strategies to benefit the electric grid in a predictable manner, and to facilitate end users to participate in DR, TOU scheduling, price response, or incentive programs offered by electric utilities or consumer authorized third parties. These requirements include applicable definitions, test requirements, methods of testing and verification, operating and physical requirements, minimum data requirements for published ratings, marking and nameplate data, conformance conditions, values of load shifting minimum requirements, and product literature requirements.

Single copy price: Free

Obtain an electronic copy from: <https://connect.ahrinet.org/standards-public-review/stdsunderpublicreview>

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

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

113 Seaboard Lane, Suite C250, Franklin, TN 37067 | dorf@aptech.org, www.printtechnologies.org

#### ***Reaffirmation***

BSR CGATS/ISO 15930-1-2004/ISO 15930-1-2001 (R202x), Graphic technology - Prepress digital data exchange - Use of PDF - Part 1: Complete exchange using CMYK data (PDF/X-1 and PDF/X-1a) (reaffirm a national adoption ANSI CGATS/ISO 15930-1-2004/ISO 15930-1-2001 (R2017))

This part of 15930 specifies the methods for the use of the Portable Document Format (PDF) for the dissemination of compound CMYK digital data, in a single exchange, that is complete and ready for final print reproduction.

Single copy price: \$74.00

Obtain an electronic copy from: dorf@aptech.org

Order from: Debra Orf; dorf@aptech.org

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

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

113 Seaboard Lane, Suite C250, Franklin, TN 37067 | dorf@aptech.org, www.printtechnologies.org

#### ***Withdrawal***

ANSI/CGATS/ISO 15790-2005 (R2013), Graphic technology and photography - Certified reference materials for reflection and transmission metrology - Documentation and procedures for use (withdrawal of ANSI CGATS/ISO 15790-2005 (R2013))

This standard specifies the documentation requirements for certified reference materials (CRMs), procedures for the use of CRMs, and procedures for the computation and reporting of the combined standard uncertainty of reflectance and transmittance measurement systems used in graphic arts, photographic, and other imaging industries.

Single copy price: \$39.00

Obtain an electronic copy from: dorf@aptech.org

Order from: Debra Orf; dorf@aptech.org

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

## Comment Deadline: October 24, 2022

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

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

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

BSR/ASHRAE Standard 224-202x, Standard for the Application of Building Information Modeling (new standard)  
ASHRAE Standard 224-202x provides minimum requirements for the application of Building Information Modeling (BIM) to the planning, design, construction, and operation of buildings. This standard defines how to incorporate BIM requirements in design, construction, and operations services contracts.

Single copy price: \$35.00

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

Order from: [standards.section@ashrae.org](mailto:standards.section@ashrae.org)

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

### **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

#### ***Revision***

BSR/ASME NM-2-202x, Fiber-Reinforced Thermosetting-Resin Piping Systems (revision of ANSI/ASME NM-2-2020)

This Standard provides requirements for the design, materials, manufacture, fabrication, installation, examination, and testing of fiber-reinforced thermosetting resin and dual laminate piping systems.

Single copy price: Free

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Andres Carrion; [CarrionA@asme.org](mailto:CarrionA@asme.org)

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

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

#### ***Revision***

BSR/BHMA A156.2-202x, Bored and Preassembled Locks and Latches (revision of ANSI/BHMA A156.2-2017)

This Standard establishes performance requirements for bored and preassembled locks and latches, and includes dimensional criteria, operational tests, strength tests, cycle tests, security tests, and material evaluation tests.

Single copy price: \$36.00

Obtain an electronic copy from: [mptierney@snet.net](mailto:mptierney@snet.net)

Order from: [mptierney@snet.net](mailto:mptierney@snet.net)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

## Comment Deadline: October 24, 2022

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

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

#### **Revision**

BSR/BHMA A156.12-202x, Standard for Interconnected Locks (revision of ANSI/BHMA A156.12-2018)

This Standard establishes performance requirements for Interconnected Locks and includes operational, cycle, strength, material evaluation, and security tests.†

Single copy price: \$36.00

Obtain an electronic copy from: [mptierney@snet.net](mailto:mptierney@snet.net)

Order from: [mptierney@snet.net](mailto:mptierney@snet.net)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

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

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

#### **Revision**

BSR/BHMA A156.13-202x, Standard for Mortise Locks & Latches (revision of ANSI/BHMA A156.13-2017)

This Standard establishes performance requirements for Series 1000 and Narrow Stile Mortise Locks and Latches and includes operational, cycle, strength, material evaluation, security, and dimensional criteria.†

Single copy price: \$36.00

Obtain an electronic copy from: [mptierney@snet.net](mailto:mptierney@snet.net)

Order from: [mptierney@snet.net](mailto:mptierney@snet.net)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

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

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

#### **Revision**

BSR/BHMA A156.24-202x, Standard for Delayed Egress Locking Systems (revision of ANSI/BHMA A156.24-2018)

This standard covers products used in connection with conventional exit devices or locks causing the doors to remain locked after releasing actuation for a predetermined length of time. Performance criteria are included for functional, cycle, operational, fail-safe, and overload requirements.†

Single copy price: \$36.00

Obtain an electronic copy from: [mptierney@snet.net](mailto:mptierney@snet.net)

Order from: [mptierney@snet.net](mailto:mptierney@snet.net)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Michael Tierney; [mtierney@kellencompany.com](mailto:mtierney@kellencompany.com)

## Comment Deadline: October 24, 2022

### HI (Hydraulic Institute)

300 Interpace Parkway, Building A, 3rd Floor, #280, Parsippany, NJ 07054 | [achatterjee@pumps.org](mailto:achatterjee@pumps.org), [www.pumps.org](http://www.pumps.org)

#### **Reaffirmation**

BSR/HI 4.1-4.6-2017 (R202x), Sealless, Magnetically Driven Rotary Pumps for Nomenclature, Definitions, Application, Operation, and Test (reaffirmation of ANSI/HI 4.1-4.6-2017)

This standard covers the unique features of sealless, magnetically driven rotary pumps and includes sections on types and nomenclature; definitions; design and applications; installation, operation, and maintenance; and test. This standard covers magnetically coupled rotary pumps, which eliminate the shaft seal.

Single copy price: \$50.00

Obtain an electronic copy from: [achatterjee@pumps.org](mailto:achatterjee@pumps.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Arunima Chatterjee; [achatterjee@pumps.org](mailto:achatterjee@pumps.org)

### NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | [mweiker@ncdpd.org](mailto:mweiker@ncdpd.org), [www.ncdpd.org](http://www.ncdpd.org)

#### **Revision**

BSR/NCPDP FB v60-202x, NCPDP Formulary and Benefit Standard v60 (revision and redesignation of ANSI/NCPDP FB v55-2022)

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

Single copy price: \$200.00 (non-members)

Obtain an electronic copy from: [mweiker@ncdpd.org](mailto:mweiker@ncdpd.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Margaret Weiker; [mweiker@ncdpd.org](mailto:mweiker@ncdpd.org)

### NCPDP (National Council for Prescription Drug Programs)

9240 East Raintree Drive, Scottsdale, AZ 85260 | [mweiker@ncdpd.org](mailto:mweiker@ncdpd.org), [www.ncdpd.org](http://www.ncdpd.org)

#### **Revision**

BSR/NCPDP SC WG1100902023xx-202x, NCPDP SC WG1100902023xx (revision and redesignation of ANSI/NCPDP SC V2022071-2022)

The standard provides general guidelines for developers of pharmacy or physician management systems who wish to provide prescription transmission functionality to their clients. The standard addresses the electronic transmission of new prescriptions, prescription refill requests, prescription fill status notifications, and cancellation notifications.

Single copy price: \$200.00

Obtain an electronic copy from: [mweiker@ncdpd.org](mailto:mweiker@ncdpd.org)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Margaret Weiker; [mweiker@ncdpd.org](mailto:mweiker@ncdpd.org)

## Comment Deadline: October 24, 2022

### **NCPDP (National Council for Prescription Drug Programs)**

9240 East Raintree Drive, Scottsdale, AZ 85260 | mweiker@ncpdp.org, www.ncpdp.org

#### **Revision**

BSR/NCPDP Specialized Standard WG1100902023xx-202x, NCPDP Specialized Standard WG1100902023xx (revision and redesignation of ANSI/NCPDP Specialized Standard v2022071-2022)

The NCPDP Specialized Standard will house transactions that are not eprescribing but are part of the NCPDP XML environment. The standard provides general guidelines for developers of systems who wish to provide business functionality of these transactions to their clients. The guide describes a set of transactions and the implementation of these transactions.

Single copy price: \$200.00 (non-members)

Obtain an electronic copy from: mweiker@ncpdp.org

Send comments (copy psa@ansi.org) to: Margaret Weiker; mweiker@ncpdp.org

### **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | me@necanet.org, www.neca-neis.org

#### **New Standard**

BSR/NECA LPI 781-202x, Recommended Practices for Installing and Maintaining Lightning Protection Systems (new standard)

This recommended practice covers quality and workmanship for lightning protection system installation and maintenance operations and to provide coordination with ANSI-approved lightning protection system design installation requirements of NFPA 780. Fundamental information related to lightning protection system design and system maintenance are also included.

Single copy price: \$30.00 (NECA Members); \$60.00 (Non-Members)

Obtain an electronic copy from: Neis@necanet.org

Order from: Neis@necanet.org

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

### **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | me@necanet.org, www.neca-neis.org

#### **Revision**

BSR/NECA 1-202x, Standard for Good Workmanship in Electrical Construction (revision of ANSI/NECA 1-2006 (R2015))

This standard describes what is meant by installing equipment in a “neat and workmanlike manner” as required by the National Electrical Code, Section 110.12.

Single copy price: \$30.00 (NECA Members); \$60.00 (Non-Members)

Obtain an electronic copy from: neis@necanet.org

Order from: Neis@necanet.org

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

## Comment Deadline: October 24, 2022

### **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

#### **Revision**

BSR/NECA 90-202x, Recommended Practice for Commissioning Building Electrical Systems (revision of ANSI/NECA 90-2015)

This Standard describes installation procedures for start-up, testing, and commissioning newly installed or retrofitted building electrical systems, equipment, and components. It defines the commissioning process and provides sample guidelines for attaining optimum system performance that conform to design, specification, and industry-accepted Codes and Standards. This Standard addresses those commissioning activities that typically involve the Electrical Contractor and that are completed during and after the construction phase. The commissioning process also involves activities that are beyond the scope of this Standard.

Single copy price: \$25.00 (NECA Members); \$55.00 (Non-Members)

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

Order from: [Neis@necanet.org](mailto:Neis@necanet.org)

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

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

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 | [David.Richmond@nema.org](mailto:David.Richmond@nema.org), [www.nema.org](http://www.nema.org)

#### **Revision**

BSR C136.53-202X, Roadway and Area Lighting Equipment - Enclosed Pendant Mounted Luminaires (revision of ANSI C136.53-2017)

This standard covers dimensional, maintenance, and light distribution features that permit the interchange of enclosed pendant-mounted luminaires whose center mass is directly below the mounting bracket. Luminaires of similar size, shape, and weight meeting the requirements of this standard may be used interchangeably within a system with the assurance that: (a) They will fit the mounting pendant; (b) Pole strength requirements will not change; (c) Light distribution will be similar; and (d) Similar maintenance procedures can be used.

Single copy price: \$46.00

Obtain an electronic copy from: [David.Richmond@nema.org](mailto:David.Richmond@nema.org)

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

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

## Comment Deadline: October 24, 2022

### **NEMA (ASC C50) (National Electrical Manufacturers Association)**

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

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

BSR NEMA 61800-9-2-202x, Adjustable speed drives - Electrical power drive system - Part 9-2: Ecodesign for power drive systems, motor starters, power electronics and their driven applications - Energy efficiency indicators for power drive systems and motor starters (identical national adoption of IEC 61800-9-2-2017 Ed. 1)

This part of IEC 61800 specifies energy efficiency indicators of power electronics (complete drive modules, CDM), power drive systems (PDS) and motor starters, all used for motor-driven equipment. It specifies the methodology for the determination of losses of the complete drive module (CDM), the power drive system (PDS) and the motor system. It defines IE and IES-classes, their limit values, and provides test procedures for the classification of the overall losses of the motor system. Furthermore, this document proposes a methodology for the implementation of the best energy efficiency solution of drive systems. This depends on the architecture of the motor-driven system, on the speed/load profile and on the operating points over time of the driven equipment.

Single copy price: \$417.00

Obtain an electronic copy from: [https://webstore.ansi.org/Standards/IEC/IEC61800Ed2017-1651536?](https://webstore.ansi.org/Standards/IEC/IEC61800Ed2017-1651536?gclid=EAlaIqobChMlgYvtjqnp9wIVlorlCh1U9A5UEAAAYASAAEgJZKfD_BwEEglWb_D_BwE)

[gclid=EAlaIqobChMlgYvtjqnp9wIVlorlCh1U9A5UEAAAYASAAEgJZKfD\\_BwEEglWb\\_D\\_BwE](https://webstore.ansi.org/Standards/IEC/IEC61800Ed2017-1651536?gclid=EAlaIqobChMlgYvtjqnp9wIVlorlCh1U9A5UEAAAYASAAEgJZKfD_BwEEglWb_D_BwE)

Order from: [https://webstore.ansi.org/Standards/IEC/IEC61800Ed2017-1651536?](https://webstore.ansi.org/Standards/IEC/IEC61800Ed2017-1651536?gclid=EAlaIqobChMlgYvtjqnp9wIVlorlCh1U9A5UEAAAYASAAEgJZKfD_BwEEglWb_D_BwE)

[gclid=EAlaIqobChMlgYvtjqnp9wIVlorlCh1U9A5UEAAAYASAAEgJZKfD\\_BwEEglWb\\_D\\_BwE](https://webstore.ansi.org/Standards/IEC/IEC61800Ed2017-1651536?gclid=EAlaIqobChMlgYvtjqnp9wIVlorlCh1U9A5UEAAAYASAAEgJZKfD_BwEEglWb_D_BwE)

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: David Richmond; David.Richmond@nema.org

### **TIA (Telecommunications Industry Association)**

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org), [www.tiaonline.org](http://www.tiaonline.org)

#### ***Revision***

BSR/TIA 5017-A-202x, Telecommunications - Physical Network Security Standard (revision and redesignation of ANSI/TIA 5017-2016)

This document covers the security of telecom cables, pathways, spaces, and other elements of the physical infrastructure. It includes design guidelines, installation practices, administration, and management. It addresses guidelines for new construction as well as renovation of existing buildings. The document also provides installation guidelines, for implementing security cabling systems for premise security systems with an integrated security approach. Justification: This Standard will enable the planning and installation of physical network security systems that protect critical telecommunications infrastructure elements.

Single copy price: \$112.00

Obtain an electronic copy from: [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org)

Order from: TIA ([standards-process@tiaonline.org](mailto:standards-process@tiaonline.org))

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

## Comment Deadline: October 24, 2022

### ULSE (UL Standards & Engagement)

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

#### **Reaffirmation**

BSR/UL 2738-2018 (R202x), Standard for Safety for Induction Power Transmitters and Receivers for Use with Low Energy Products (reaffirmation of ANSI/UL 2738-2018)

Reaffirmation and continuance of the second edition of the Standard for Safety for Induction Power Transmitters and Receivers for Use with Low Energy Products, UL 2738, as a standard.

Single copy price: Free

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

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

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

## Comment Deadline: November 8, 2022

### ULSE (UL Standards & Engagement)

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

#### **New Standard**

BSR/UL 12402-3-202X, Standard for Personal Flotation Devices - Part 3: Lifejackets, Performance Level 150 - Safety Requirements (new standard)

ULSE proposes the adoption of the first edition of the Standard for Personal Flotation Devices - Part 3: Lifejackets, Performance Level 150 - Safety Requirements.

Single copy price: Free

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Nicolette Weeks, [Nicolette.A.Weeks@ul.org](mailto:Nicolette.A.Weeks@ul.org)

### ULSE (UL Standards & Engagement)

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

#### **New Standard**

BSR/UL 12402-6-202X, Standard for Personal Flotation Devices - Part 6: Special Purpose Lifejackets and Buoyancy Aids - Safety Requirements and Additional Test Methods (new standard)

ULSE proposes the adoption of the first edition of the Standard for Personal Flotation Devices - Part 6: Special Purpose Lifejackets and Buoyancy Aids - Safety Requirements and Additional Test Methods.

Single copy price: Free

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

Send comments (copy [psa@ansi.org](mailto:psa@ansi.org)) to: Nicolette Weeks, [Nicolette.A.Weeks@ul.org](mailto:Nicolette.A.Weeks@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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## **ASME (American Society of Mechanical Engineers)**

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

### **Reaffirmation**

ANSI/ASME A17.7/CSA B44.7-2006 (R2022), Performance-based safety code for elevators and escalators (reaffirmation of ANSI/ASME A17.7/CSA B44.7-2006 (R2012)) Final Action Date: 9/2/2022

### **Reaffirmation**

ANSI/ASME B89.1.6-2002 (R2022), Measurement of Plain Internal Diameters for Use as Master Rings or Ring Gages (reaffirmation of ANSI/ASME B89.1.6-2002 (R2017)) Final Action Date: 9/1/2022

## **ASTM (ASTM International)**

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

### **New Standard**

ANSI/ASTM D8428-2022, Standard Guide for Establishing Analyst Competence to Perform a Test Method (new standard) Final Action Date: 12/1/2021

### **New Standard**

ANSI/ASTM E860-2022, Practice for Examining and Preparing Items that Are or May Become Involved In Criminal or Civil Litigation (new standard) Final Action Date: 9/1/2022

### **Revision**

ANSI/ASTM E119-2022, Test Methods for Fire Tests of Building Construction and Materials (revision of ANSI/ASTM E119-2020) Final Action Date: 9/1/2022

### **Revision**

ANSI/ASTM F1166-2022, Practice for Human Engineering Design for Marine Systems, Equipment, and Facilities (revision of ANSI/ASTM F1166-2021) Final Action Date: 9/1/2022

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

120 Wall Street, Floor 17, New York, NY 10005-4001 | [pmcgillicuddy@ies.org](mailto:pmcgillicuddy@ies.org), [www.ies.org](http://www.ies.org)

### **Revision**

ANSI/IES LS-1-22-2022, Lighting Science: Nomenclature & Definitions (revision of ANSI/IES LS 1-2020) Final Action Date: 9/2/2022

## **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)

### **Reaffirmation**

INCITS 149-1986 [R2022], Financial Transaction Card Formsets - Location of Imprinted Information (reaffirmation of INCITS 149-1986 [R2017]) Final Action Date: 8/29/2022

### **Reaffirmation**

INCITS 358-2002 [R2022], Information technology - BioAPI Specification (Version 1.1) (reaffirmation of INCITS 358-2002 [R2017]) Final Action Date: 9/1/2022

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**Reaffirmation**

INCITS 358-2002/AM 1-2007 [R2022], Information technology - BioAPI Specification (Version 1.1) - Amendment 1: Support for Biometric Fusion (reaffirmation of INCITS 358-2002/AM 1-2007 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 359-2012 [R2022], Information technology - Role Based Access Control (reaffirmation of INCITS 359-2012 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS 365-2002 [R2022], Information Technology - SCSI RDMA Protocol (SRP) (reaffirmation of INCITS 365-2002 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 415-2006 [R2022], Information technology - Homeland Security Mapping Standard - Point Symbology for Emergency Management (reaffirmation of INCITS 415-2006 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 431-2007 [R2022], Information technology - SCSI/ATA Translation (SAT) (reaffirmation of INCITS 431-2007 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 434-2007 [R2022], Information technology - Tenprint Capture Using BioAPI (reaffirmation of INCITS 434-2007 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 468-2010/AM1-2012 [R2022], Information technology - Multi-media Command Set - 6 (MMC-6) - Amendment 1 (reaffirmation of INCITS 468-2010/AM1-2012 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 482-2012 [R2022], Information technology - ATA/ATAPI Command Set - 2 (ACS-2) (reaffirmation of INCITS 482-2012 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS 484-2012 [R2022], Information Technology - SCSI Media Changer Commands - 3 (reaffirmation of INCITS 484-2012 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 491-2017 [R2022], Information technology - SCSI/ATA Translation - 4 (SAT-4) (reaffirmation of INCITS 491-2017) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS 493-2012 [R2022], Information Technology - AT Attachment-8 - Serial Transport (ATA8-AST) (reaffirmation of INCITS 493-2012 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS 494-2012 [R2022], Information technology - Role Based Access Control - Policy Enhanced (reaffirmation of INCITS 494-2012 [R2017]) Final Action Date: 8/29/2022

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**Reaffirmation**

INCITS 497-2012 [R2022], Information Technology - Automation/Drive Interface Commands - 3 (ADC - 3) (reaffirmation of INCITS 497-2012 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS 518-2017 [R2022], Information technology - SCSI Enclosure Services - 3 (SES-3) (reaffirmation of INCITS 518-2017) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19136-2:2015 [R2022], Geographic Information - Geography Markup Language (GML) - Part 2: Extended Schemas and Encoding Rules (reaffirmation of INCITS/ISO 19136-2:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19150-2:2015 [R2022], Geographic Information - Ontology - Part 2: Rules for Developing Ontologies in the Web Ontology Language (OWL) (reaffirmation of INCITS/ISO 19150-2:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19160-1:2015 [R2022], Addressing - Part 1: Conceptual Model (reaffirmation of INCITS/ISO 19160-1:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 9542:1988 [R2022], Information processing systems - Telecommunications and information exchange between systems - End system to Intermediate system routing exchange protocol for use in conjunction with the Protocol for providing the connectionless-mode network service (ISO 8473) (reaffirmation of INCITS/ISO 9542:1988 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO 19103:2015 [R2022], Geographic information - Conceptual schema language (reaffirmation of INCITS/ISO 19103:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19118:2011 [R2022], Geographic Information - Encoding (reaffirmation of INCITS/ISO 19118:2011 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19131:2007 [R2022], Geographic Information - Data Product Specifications (reaffirmation of INCITS/ISO 19131:2007 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19134:2007 [R2022], Geographic Information - Location-Based Services - Multimodal Routing and Navigation (reaffirmation of INCITS/ISO 19134:2007 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19137:2007 [R2022], Geographic Information - Core Profile of the Spatial Schema (reaffirmation of INCITS/ISO 19137:2007 [R2017]) Final Action Date: 9/1/2022

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**Reaffirmation**

INCITS/ISO 19149:2011 [R2022], Geographic Information - Rights Expression Language for Geographic Information - GeoREL (reaffirmation of INCITS/ISO 19149:2011 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19156:2011 [R2022], Geographic Information - Observations and Measurements (reaffirmation of INCITS/ISO 19156:2011 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO 19131:2007/AM1:2011 [R2022], Geographic Information - Data Product Specifications - Amendment 1: Requirements Relating to the Inclusion of An Application Schema and Feature Catalogue and the Treatment of Coverages in an Application Schema (reaffirmation of INCITS/ISO 19131:2007/AM1:2011 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 7816-3:2006 [R2022], Identification cards - Integrated circuit(s) cards with contacts - Part 3: Electronic interface and transmission protocols (reaffirmation of INCITS/ISO/IEC 7816-3:2006 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-1:2016 [R2022], Information technology - Database languages - SQL - Part 1: Framework (SQL/Framework) (reaffirmation of INCITS/ISO/IEC 9075-1:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-2:2016 [R2022], Information technology - Database languages - SQL - Part 2: Foundation (SQL/Foundation) (reaffirmation of INCITS/ISO/IEC 9075-2:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-4:2016 [R2022], Information technology - Database languages - SQL - Part 4: Persistent stored modules (SQL/PSM) (reaffirmation of INCITS/ISO/IEC 9075-4:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-9:2016 [R2022], Information technology - Database languages - SQL - Part 9: Management of External Data (SQL/MED) (reaffirmation of INCITS/ISO/IEC 9075-9:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-10:2016 [R2022], Information technology - Database languages - SQL - Part 10: Object language bindings (SQL/OLB) (reaffirmation of INCITS/ISO/IEC 9075-10:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-11:2016 [R2022], Information technology - Database languages - SQL - Part 11: Information and definition schemas (SQL/Schemata) (reaffirmation of INCITS/ISO/IEC 9075-11:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9075-13:2016 [R2022], Information technology - Database languages - SQL - Part 13: SQL Routines and types using the Java TM programming language (SQL/JRT) (reaffirmation of INCITS/ISO/IEC 9075-13:2016 [2017]) Final Action Date: 8/30/2022

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**Reaffirmation**

INCITS/ISO/IEC 9075-14:2016 [R2022], Information technology - Database languages - SQL - Part 14: XML-Related Specifications (SQL/XML) (reaffirmation of INCITS/ISO/IEC 9075-14:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9796-2:2010 [R2022], Information technology - Security techniques - Digital signature schemes giving message recovery - Part 2: Integer factorization based mechanisms (reaffirmation of INCITS/ISO/IEC 9796-2:2010 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 9797-3:2011 [R2022], Information technology - Security techniques - Message Authentication Codes (MACs) - Part 3: Mechanisms using a universal hash-function (reaffirmation of INCITS/ISO/IEC 9797-3:2011 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9798-1:2010 [R2022], Information technology - Security techniques - Entity authentication - Part 1: General (reaffirmation of INCITS/ISO/IEC 9798-1:2010 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 9798-6:2010 [R2022], Information technology - Security techniques - Entity authentication - Part 6: Mechanisms using manual data transfer (reaffirmation of INCITS/ISO/IEC 9798-6:2010 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 10373-5:2014 [R2022], Identification cards - Test methods - Part 5: Optical memory cards (reaffirmation of INCITS/ISO/IEC 10373-5:2014 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 10746-1:1998 [R2022], Information Technology - Open Distributed Processing - Reference Model: Overview (reaffirmation of INCITS/ISO/IEC 10746-1:1998 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 10746-4:1998 [R2022], Information technology - Open Distributed Processing - Reference Model: Architectural semantics - Part 4: Architectural Semantics (reaffirmation of INCITS/ISO/IEC 10746-4:1998 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 10746-4:1998/AM1:2001 [R2022], Information Technology - Open Distributed Processing - Reference Model: Architectural Semantics - Part 4 - Amendment 1: Computational Formalization (reaffirmation of INCITS/ISO/IEC 10746-4:1998/AM1:2001 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13211-1:1995 [R2022], Information technology - Prolog Language Standard - Part 1: General Core (reaffirmation of INCITS/ISO/IEC 13211-1:1995 [R2017]) Final Action Date: 8/29/2022

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**Reaffirmation**

INCITS/ISO/IEC 13235-1:1998 [R2022], Information technology - Open Distributed Processing - Trading function: Specification - Part 1: Specification (reaffirmation of INCITS/ISO/IEC 13235-1:1998 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13235-3:1998 [R2022], Information technology - Open Distributed Processing - Trading Function - Part 3: Provision of Trading Function using OSI Directory service (reaffirmation of INCITS/ISO/IEC 13235-3:1998 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13249-1:2016 [R2022], Information technology - Database languages - SQL multimedia and application packages - Part 1: Framework (reaffirmation of INCITS/ISO/IEC 13249-1:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13249-3:2016 [R2022], Information technology - Database languages - SQL multimedia and application packages - Part 3: Spatial (reaffirmation of INCITS/ISO/IEC 13249-3:2016 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13249-6:2006 [R2022], Information technology - Database languages - SQL multimedia and application packages - Part 6: Data mining (reaffirmation of INCITS/ISO/IEC 13249-6:2006 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13818-3:1998 [R2022], Information Technology - Generic Coding of Moving Pictures and Associated Audio Information - Part 3: Audio (reaffirmation of INCITS/ISO/IEC 13818-3:1998 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13818-6:1998 [R2022], Information technology - Generic coding of moving pictures and associated audio information - Part 6: Extensions for DSM-CC (reaffirmation of INCITS/ISO/IEC 13818-6:1998 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13818-9:1996 [R2022], Information technology - Generic coding of moving pictures and associated audio information - Part 9: Extension for real time interface for systems decoders (reaffirmation of INCITS/ISO/IEC 13818-9:1996 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13818-6:1998/AM3:2001 [R2022], Information technology - Generic coding of moving pictures and associated audio information - Part 6: Extensions for DSM-CC - Amendment 3: Transport buffer model in support of synchronized user-to-network download protocol (reaffirmation of INCITS/ISO/IEC 13818-6:1998/AM3:2001 [R2017]) Final Action Date: 8/30/2022

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

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**Reaffirmation**

INCITS/ISO/IEC 13888-2:2010 [R2022], Information technology - Security techniques - Non-repudiation - Part 2: Mechanisms using symmetric techniques (reaffirmation of INCITS/ISO/IEC 13888-2:2010 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 14496-1:2010 [R2022], Information technology - Coding of audio-visual objects - Part 1: Systems (reaffirmation of INCITS/ISO/IEC 14496-1:2010 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 14496-2:2004 [R2022], Information technology - Coding of audio-visual objects - Part 2: Visual (reaffirmation of INCITS/ISO/IEC 14496-2:2004 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 15408-1:2009 [R2022], Information technology - Security techniques - Evaluation criteria for IT security - Part 1: Introduction and general model (reaffirmation of INCITS/ISO/IEC 15408-1:2009 [2012]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 15938-1:2002 [R2022], Information technology - Multimedia content description interface - Part 1: Systems (reaffirmation of INCITS/ISO/IEC 15938-1:2002 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 15938-2:2002 [R2022], Information Technology - Multimedia Content Description Interface - Part 2: Description Definition Language (reaffirmation of INCITS/ISO/IEC 15938-2:2002 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 15938-3:2002 [R2022], Information technology - Multimedia content description interface - Part 3: Visual (reaffirmation of INCITS/ISO/IEC 15938-3:2002 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 15938-4:2002 [R2022], Information technology - Multimedia content description interface - Part 4: Audio (reaffirmation of INCITS/ISO/IEC 15938-4:2002 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 15944-8:2012 [R2022], Information technology - Business Operational View - Part 8: Identification of privacy protection requirements as external constraints on business transactions (reaffirmation of INCITS/ISO/IEC 15944-8:2012 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 15946-5:2009 [R2022], Information technology - Security techniques - Cryptographic techniques based on elliptic curves - Part 5: Elliptic curve generation (reaffirmation of INCITS/ISO/IEC 15946-5:2009 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 18024-4:2006/AM1:2012 [R2022], Information technology - Synthetic Environment Data Representation and Interchange Specification (SEDRIS) Language Bindings - Part 4: C - Amendment 1 (reaffirmation of INCITS/ISO/IEC 18024-4:2006/AM1:2012 [R2017]) Final Action Date: 9/1/2022

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**Reaffirmation**

INCITS/ISO/IEC 18033-3:2010 [R2022], Information technology - Security techniques - Encryption algorithms - Part 3: Block ciphers (reaffirmation of INCITS/ISO/IEC 18033-3:2010 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 18033-4:2011 [R2022], Information technology - Security techniques - Encryption algorithms - Part 4: Stream ciphers (reaffirmation of INCITS/ISO/IEC 18033-4:2011 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 19763-1:2015 [R2022], Information technology - Metamodel framework for interoperability (MFI) - Part 1: Framework (reaffirmation of INCITS/ISO/IEC 19763-1:2015 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 19776-1:2015 [R2022], Information technology - Computer graphics, image processing and environmental data representation - Extensible 3D (X3D) encodings - Part 1: Extensible Markup Language (XML) encoding (reaffirmation of INCITS/ISO/IEC 19776-1:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 19776-3:2015 [R2022], Information technology - Computer graphics, image processing and environmental data representation - Extensible 3D (X3D) encodings - Part 3: Compressed binary encoding (reaffirmation of INCITS/ISO/IEC 19776-3:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 27033-1:2015 [R2022], Information technology - Security techniques - Network security - Part 1: Overview and concepts (reaffirmation of INCITS/ISO/IEC 27033-1:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 27033-3:2010 [R2022], Information technology - Security techniques - Network security - Part 3: Reference networking scenarios - Threats, design techniques and control issues (reaffirmation of INCITS/ISO/IEC 27033-3:2010 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 10030:1995 [R2022], Information technology - Telecommunications and information exchange between systems - End system routing information exchange protocol for use in conjunction with ISO/IEC 8878 (reaffirmation of INCITS/ISO/IEC 10030:1995 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 10589:2002 [R2022], Information Technology - Intermediate System to Intermediate System Intra-Domain-Routing Routine Information Exchange Protocol for Use in Conjunction with the Protocol for Providing the Connectionless-Mode Network Service (ISO 8473) (reaffirmation of INCITS/ISO/IEC 10589:2002 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 13568:2002 [R2022], Information technology - Z formal specification notation - Syntax, type system and semantics (reaffirmation of INCITS/ISO/IEC 13568:2002 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 16680:2012 [R2022], Information technology - The Open Group Service Integration Maturity Model (OSIMM) (reaffirmation of INCITS/ISO/IEC 16680:2012 [R2017]) Final Action Date: 8/30/2022



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**Reaffirmation**

INCITS/ISO/IEC 17788:2014 [R2022], Information technology - Cloud computing - Overview and vocabulary (reaffirmation of INCITS/ISO/IEC 17788:2014 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 17789:2014 [R2022], Information technology - Cloud computing - Reference architecture (reaffirmation of INCITS/ISO/IEC 17789:2014 [2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 17823:2015 [R2022], Colour terminology for office colour equipment (reaffirmation of INCITS/ISO/IEC 17823:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 18031:2011 [R2022], Information technology - Security techniques - Random bit generation (reaffirmation of INCITS/ISO/IEC 18031:2011 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 18180:2013 [R2022], Information Technology - Specification for the Extensible Configuration Checklist Description Format (XCCDF) Version 1.2 (reaffirmation of INCITS/ISO/IEC 18180:2013 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 19395:2015 [R2022], Information technology - Sustainability for and by information technology - Smart data centre resource monitoring and control (reaffirmation of INCITS/ISO/IEC 19395:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 19464:2014 [R2022], Information Technology - Advanced Message Queuing Protocol (AMQP) V1.0 Specification (reaffirmation of INCITS/ISO/IEC 19464:2014 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 19510:2013 [R2022], Information Technology - Object Management Group Business Process Model and Notation (reaffirmation of INCITS/ISO/IEC 19510:2013) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 19678:2015 [R2022], Information Technology - BIOS Protection Guidelines (reaffirmation of INCITS/ISO/IEC 19678:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 19773:2011 [R2022], Information technology - Metadata Registries (MDR) modules (reaffirmation of INCITS/ISO/IEC 19773:2011 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 19792:2009 [R2022], Information technology - Security techniques - Security evaluation of biometrics (reaffirmation of INCITS/ISO/IEC 19792:2009 [R2017]) Final Action Date: 8/29/2022

**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)

**Reaffirmation**

INCITS/ISO/IEC 19831:2015 [R2022], Cloud Infrastructure Management Interface (CIMI) Model and RESTful HTTP-Based Protocol - An Interface for Managing Cloud Infrastructure (reaffirmation of INCITS/ISO/IEC 19831:2015 [2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 24745:2011 [R2022], Information technology - Security techniques - Biometric information protection (reaffirmation of INCITS/ISO/IEC 24745:2011 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 24790:2017 [R2022], Information technology - Office equipment - Measurement of image quality attributes for hardcopy output - Monochrome text and graphic images (reaffirmation of INCITS/ISO/IEC 24790:2017 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 26300:2006 [R2022], Information technology - Open Document Format for Office Applications (OpenDocument) v1.0 (reaffirmation of INCITS/ISO/IEC 26300:2006 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 27003:2017 [R2022], Information technology - Security techniques - Information security management systems - Guidance (reaffirmation of INCITS/ISO/IEC 27003:2017 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 27006:2015 [R2022], Information technology - Security techniques - Requirements for bodies providing audit and certification of information security management systems (reaffirmation of INCITS/ISO/IEC 27006:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 27010:2015 [R2022], Information technology - Security techniques - Information security management for inter-sector and inter-organizational communications (reaffirmation of INCITS/ISO/IEC 27010:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 27039:2015 [R2022], Information technology - Security techniques - Selection, deployment and operations of intrusion detection and prevention systems (IDPS) (reaffirmation of INCITS/ISO/IEC 27039:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 27040:2015 [R2022], Information technology - Security techniques - Storage security (reaffirmation of INCITS/ISO/IEC 27040:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 27041:2015 [R2022], Information technology - Security techniques - Guidance on assuring suitability and adequacy of incident investigative method (reaffirmation of INCITS/ISO/IEC 27041:2015 [2017]) Final Action Date: 8/29/2022

**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)

**Reaffirmation**

INCITS/ISO/IEC 27043:2015 [R2022], Information technology - Security techniques - Incident investigation principles and processes (reaffirmation of INCITS/ISO/IEC 27043:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 29100:2011 [R2022], Information technology - Security techniques - Privacy framework (reaffirmation of INCITS/ISO/IEC 29100:2011 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 29102:2015 [R2022], Information technology - Office equipment - Method for the determination of ink cartridge photo yield for colour printing with inkjet printers and multi-function devices that contain inkjet printer components (reaffirmation of INCITS/ISO/IEC 29102:2015 [2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 29103:2011 [R2022], Information technology - Office equipment - Colour photo test pages for measurement of ink cartridge yield for colour photo printing (reaffirmation of INCITS/ISO/IEC 29103:2011 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 29128:2011 [R2022], Information technology - Security techniques - Verification of cryptographic protocols (reaffirmation of INCITS/ISO/IEC 29128:2011 [R2017]) Final Action Date: 8/30/2022

**Reaffirmation**

INCITS/ISO/IEC 29136:2012 [R2022], Information Technology - User Interfaces - Accessibility of Personal Computer Hardware (reaffirmation of INCITS/ISO/IEC 29136:2012 [R2017]) Final Action Date: 9/1/2022

**Reaffirmation**

INCITS/ISO/IEC 29150:2011 [R2022], Information technology - Security techniques - Signcryption (reaffirmation of INCITS/ISO/IEC 29150:2011 [R2017]) Final Action Date: 8/29/2022

**Reaffirmation**

INCITS/ISO/IEC 38500:2015 [R2022], Information technology - Governance of IT for the organization (reaffirmation of INCITS/ISO/IEC 38500:2015 [2017]) Final Action Date: 8/29/2022

**Stabilized Maintenance**

INCITS 483-2012 [S2022], Information Technology - Virtualization Management Specification (stabilized maintenance of INCITS 483-2012 [R2017]) Final Action Date: 8/29/2022

**Stabilized Maintenance**

INCITS 495-2012 [S2022], Information Technology -- Platform Management Specification, Volumes 1 And 2 (stabilized maintenance of INCITS 495-2012 [R2017]) Final Action Date: 8/29/2022

**Stabilized Maintenance**

INCITS 496-2012 [S2022], Information Technology - Fibre Channel - Security Protocols - 2 (FC-SP-2) (stabilized maintenance of INCITS 496-2012 [R2017]) Final Action Date: 8/29/2022

**Stabilized Maintenance**

INCITS 498-2012 [S2022], Information Technology - CIM Representations of Management Specification (stabilized maintenance of INCITS 498-2012 [R2017]) Final Action Date: 8/29/2022

**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)

**Stabilized Maintenance**

INCITS/ISO/IEC 18023-1:2006/AM1:2012 [S2022], Information technology - SEDRIS - Part 1: Functional specification - Amendment 1 (stabilized maintenance of INCITS/ISO/IEC 18023-1:2006/AM1:2012 [R2017]) Final Action Date: 8/29/2022

**Stabilized Maintenance**

INCITS/ISO/IEC 18023-3:2006/AM 1:2012 [S2022], Information Technology - Synthetic Environment Data Representation and Interchange Specification (SEDRIS): Part 3: Transmittal Format Binary Encoding - Amendment 1 (stabilized maintenance of INCITS/ISO/IEC 18023-3:2006/AM 1:2012 [R2017]) Final Action Date: 8/29/2022

**Stabilized Maintenance**

INCITS/ISO/IEC 18042-4:2006/AM1:2011 [S2022], Information technology - Computer graphics and image processing - Spatial Reference Model (SRM) language bindings - Part 4: C - Amendment 1 (stabilized maintenance of INCITS/ISO/IEC 18042-4:2006/AM1:2011 [R2017]) Final Action Date: 8/29/2022

**NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

**New Standard**

ANSI/NECA 5-2022, Recommended Practice for Prefabrication of Electrical Installations for Construction (new standard) Final Action Date: 8/30/2022

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

1300 North 17th Street, Suite 900, Arlington, VA 22209 | [Khaled.Masri@nema.org](mailto:Khaled.Masri@nema.org), [www.nema.org](http://www.nema.org)

**Revision**

ANSI NEMA WC 74/ICEA S-93-639-2022, 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) Final Action Date: 8/29/2022

# 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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## **AAMI (Association for the Advancement of Medical Instrumentation)**

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | [cmaguwah@aami.org](mailto:cmaguwah@aami.org), [www.aami.org](http://www.aami.org)

BSR/AAMI HIT1000-2-202x, Safety and effectiveness of health IT software and systems - Part 2: Application of quality systems principles and practices (new standard)

## **AAMI (Association for the Advancement of Medical Instrumentation)**

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | [cmaguwah@aami.org](mailto:cmaguwah@aami.org), [www.aami.org](http://www.aami.org)

BSR/AAMI HIT1000-3-202x, Safety and effectiveness of health IT software and systems - Part 3: Application of risk management (new standard)

## **AAMI (Association for the Advancement of Medical Instrumentation)**

901 N. Glebe Road, Suite 300, Arlington, VA 22203 | [cmaguwah@aami.org](mailto:cmaguwah@aami.org), [www.aami.org](http://www.aami.org)

BSR/AAMI HIT1000-4-202x, Safety and effectiveness of health IT software and systems - Part 4: Application of human factors engineering (new standard)

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 | [kbest@ahrinet.org](mailto:kbest@ahrinet.org), [www.ahrinet.org](http://www.ahrinet.org)

BSR/AHRI Standard 1430-202x (I-P), Demand Flexible Electric Storage Water Heaters (new standard)

## **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 61400-5.1-202x, Wind energy generation systems - Part 5: Wind turbine blades (identical national adoption of IEC 61400-5:2020/AMD1:2023)

## **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 61400-12-1-202x, Wind energy generation systems - Part 12-1: Power performance measurement of electricity producing wind turbines (identical national adoption of IEC 61400-12-1:2023)

## **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 61400-12-2-202x, Wind energy generation systems - Part 12-2: Power performance of electricity producing wind turbines based on nacelle anemometry (identical national adoption of IEC 61400-12-2:2023)

## **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 61400-12-3-202x, Wind energy generation systems - Part 12-3: Power Performance - Measurement Based Site Calibration (identical national adoption of IEC 61400-12-3:2023)

# 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, www.aresca.us

BSR/ARESCA 61400-12-5-202x, Wind energy generation systems - Part 12-5: Power performance - Assessment of obstacles and terrain (identical national adoption of IEC 61400-12-5:2023)

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

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

BSR/ARESCA 61400-12-6-202x, Wind energy generation systems - Part 12-6: Measurement based nacelle transfer function of electricity producing wind turbines (identical national adoption of IEC 61400-12-6:2023)

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

Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

BSR/ASME NM-2-202x, Fiber-Reinforced Thermosetting-Resin Piping Systems (revision of ANSI/ASME NM-2-2020)

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

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.2-202x, Bored and Preamsembled Locks and Latches (revision of ANSI/BHMA A156.2-2017)

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

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.12-202x, Standard for Interconnected Locks (revision of ANSI/BHMA A156.12-2018)

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

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.13-202x, Standard for Mortise Locks & Latches (revision of ANSI/BHMA A156.13-2017)

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

17 Faulkner Drive, Niantic, CT 06357 | mtierney@kellencompany.com, www.buildershardware.com

BSR/BHMA A156.24-202x, Standard for Delayed Egress Locking Systems (revision of ANSI/BHMA A156.24-2018)

## **HI (Hydraulic Institute)**

300 Interpace Parkway, Building A, 3rd Floor, #280, Parsippany, NJ 07054 | achatterjee@pumps.org, www.pumps.org

BSR/HI 4.1-4.6-2017 (R202x), Sealless, Magnetically Driven Rotary Pumps for Nomenclature, Definitions, Application, Operation, and Test (reaffirmation of ANSI/HI 4.1-4.6-2017)

## **HI (Hydraulic Institute)**

300 Interpace Parkway, Building A, 3rd Floor, #280, Parsippany, NJ 07054 | amoser@pumps.org, www.pumps.org

BSR/HI 14.3A-202x, Rotodynamic Pumps for Design and Application (addenda to ANSI/HI 14.3-2019)

# Call for Members (ANS Consensus Bodies)

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## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 1-202x, Standard for Good Workmanship in Electrical Construction (revision of ANSI/NECA 1-2006 (R2015))

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 90-202x, Recommended Practice for Commissioning Building Electrical Systems (revision of ANSI/NECA 90-2015)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 169-202x, Standard for Installing and Maintaining Arc-Fault Circuit Interrupters (AFCIs) and Ground-Fault Circuit Interrupters (GFCIs) (revision of ANSI/NECA 169-2016)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 200-202x, Standard for Installing and Maintain Temporary Electric Power at Construction Sites (revision of ANSI/NECA 200-2016)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 202-202x, Standard for Installing and Maintaining Industrial Heat Tracing Systems (revision of ANSI/NECA 202-2013)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 230-202x, Standard for Selecting, Installing, and Maintaining Electric Motors and Motor Controllers (1000 Volts and Less) (revision of ANSI/NECA 230-2016)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 409-202x, Standard for Installing and Maintaining Dry-Type Transformers (revision of ANSI/NECA 409-2015)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 410-202x, Standard for Installing and Maintaining Liquid-Filled Transformers (revision of ANSI/NECA 410-2013)



# Call for Members (ANS Consensus Bodies)

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## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 416-202x, Recommended Practices for Installing Energy Storage Systems (revision of ANSI/NECA 416-2016)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA 430-202x, Standard for Installing and Maintaining Medium Voltage Switchgear (revision of ANSI/NECA 430-2016)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA LPI 781-202x, Recommended Practices for Installing and Maintaining Lightning Protection Systems (new standard)

## **NECA (National Electrical Contractors Association)**

1201 Pennsylvania Avenue, Suite 1200, Washington, DC 20004 | [me@necanet.org](mailto:me@necanet.org), [www.neca-neis.org](http://www.neca-neis.org)

BSR/NECA/FOA 301-202x, Standard for Installing and Testing Fiber Optic Cables (revision of ANSI/NECA/FOA 301-2016)

## **NSF (NSF International)**

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

BSR/NSF 455-2-202x (i36r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)

## **NSF (NSF International)**

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

BSR/NSF 455-2-202x (i38r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021)

## **TIA (Telecommunications Industry Association)**

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | [standards-process@tiaonline.org](mailto:standards-process@tiaonline.org), [www.tiaonline.org](http://www.tiaonline.org)

BSR/TIA 5017-A-202x, Telecommunications Physical Network Security Standard (revision and redesignation of ANSI/TIA 5017-2016)

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

929 W. Portobello Avenue, Mesa, AZ 85210 | [jing.kwok@vita.com](mailto:jing.kwok@vita.com), [www.vita.com](http://www.vita.com)

BSR/VITA 91-202x, Connector for Higher Density VITA 46 Applications Standard (new standard)

# American National Standards (ANS) Announcements

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## Corrections

### ULSE - UL Standards & Engagement

#### **BSR/UL 60939-3-2017 (R2022) currently pending approval**

BSR/UL 60939-3-2017 (R2022) was mistakenly listed in the Final Actions section of the September 2, 2022 Standards Action. Approval of this national adoption is currently pending. Please direct inquiries to: Mitchell Gold; mitchell.gold@ul.org

## American National Standards (ANS) Process

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

### Where to find Procedures, Guidance, Interpretations and More...

#### Please visit ANSI's website ([www.ansi.org](http://www.ansi.org))

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

- 
- 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).

## AAMI

Association for the Advancement of  
Medical Instrumentation  
901 N. Glebe Road, Suite 300  
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## AHRI

Air-Conditioning, Heating, and Refrigeration  
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2311 Wilson Boulevard, Suite 400  
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## APTech (ASC CGATS)

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## ARESCA

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and Certification Association  
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## AWWA

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## BHMA

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## CSA

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## ITI (INCITS)

InterNational Committee for Information  
Technology Standards  
700 K Street NW, Suite 600  
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Deborah Spittle  
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## NCPDP

National Council for Prescription Drug  
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9240 East Raintree Drive  
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**NEMA (ASC C8)**

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**NSF**

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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

### Agricultural food products (TC 34)

ISO/DIS 24381, Bee propolis - Specifications - 11/18/2022, \$107.00

### Aircraft and space vehicles (TC 20)

ISO/DIS 5879, Space systems - Launch vehicle/spacecraft separation ground test requirements for combined separation test, horizontal separation test and individual falling separation test - 11/24/2022, \$98.00

ISO/DIS 24065, Aerospace - High power solid state power controller - General performance requirements - 11/20/2022, \$77.00

### Analysis of gases (TC 158)

ISO/DIS 6142-2, Gas analysis - Preparation of calibration gas mixtures - Part 2: Gravimetric method for Class II mixtures - 11/18/2022, \$71.00

### Building environment design (TC 205)

ISO/DIS 16484-1, Building automation and control systems (BACS) - Part 1: Project specification and implementation - 11/24/2022, \$82.00

### Corrosion of metals and alloys (TC 156)

ISO/DIS 4631, Corrosion of Metals and Alloys - Measurement of the Electrochemical Critical Localized Corrosion potential (E-CLCP) for Ti Alloys Fabricated via Additive Manufacturing Method in Simulated Biomedical Solutions - 11/18/2022, \$53.00

### Implants for surgery (TC 150)

ISO/DIS 8637-2, Extracorporeal systems for blood purification - Part 2: Extracorporeal blood and fluid circuits for haemodialysers, haemodiafilters, haemofilters and haemoconcentrators - 11/17/2022, \$88.00

### Occupational health and safety management systems (TC 283)

ISO/DIS 45006, Occupational health and safety management - Guidelines for organizations on preventing and managing infectious diseases - 11/18/2022, \$102.00

### Petroleum products and lubricants (TC 28)

ISO/DIS 12185, Crude petroleum, petroleum products and related products - Determination of density - Laboratory density meter with an oscillating U tube sensor - 11/17/2022, \$62.00

### Service activities relating to drinking water supply systems and wastewater systems - Quality criteria of the service and performance indicators (TC 224)

ISO/DIS 24591-1, Smart water management - Part 1: General guidelines and governance - 11/17/2022, \$82.00

### Small craft (TC 188)

ISO/DIS 6185-3, Inflatable boats - Part 3: Boats with a hull length less than 8 m with a motor rating of 15 kW and greater - 11/21/2022, \$93.00

### Traditional Chinese medicine (TC 249)

ISO/DIS 7450, Traditional Chinese Medicine -Pinellia ternata tuber - 11/20/2022, \$67.00

### Vacuum technology (TC 112)

ISO/DIS 21360-5, Vacuum technology - Standard methods for measuring vacuum-pump performance - Part 5: NEG vacuum pumps - 11/17/2022, \$88.00

**Water quality (TC 147)**

ISO/DIS 4685, Water quality - Radium 226 - Test method using ICP-MS - 11/18/2022, \$62.00

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

ISO/IEC DIS 27033-7, Information technology - Network security - Part 7: Guidelines for network virtualization security - 11/24/2022, \$82.00

**IEC Standards****Audio, video and multimedia systems and equipment (TC 100)**

100/3803/CDV, IEC 60728-101-1 ED1: RF cabling for two-way home networks with all-digital channels load (TA5), 11/25/2022

100/3804/CDV, IEC 60728-101-2 ED1: Performance requirements for signals delivered at the system outlet in operation with all-digital channels load, 11/25/2022

**Electric road vehicles and electric industrial trucks (TC 69)**

69/857/FDIS, IEC 61980-3 ED1: Electric vehicle wireless power transfer (WPT) systems - Part 3: Specific requirements for magnetic field wireless power transfer systems, 10/14/2022

**Electrical accessories (TC 23)**

23G/477(F)/FDIS, IEC 60799/AMD1 ED3: Amendment 1 - Electrical accessories - Cord sets and interconnection cord sets, 10/07/2022

23E/1267(F)/FDIS, IEC 62606/AMD2 ED1: Amendment 2 - General requirements for arc fault detection devices, 09/30/2022

**Electrical apparatus for explosive atmospheres (TC 31)**

31/1636/CDV, IEC 60079-2 ED7: Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p", 11/25/2022

31M/173/CDV, ISO/IEC 80079-49 ED1: Flame arresters - Performance requirements, test methods and limits for use, 11/25/2022

**Electrical installations for the lighting and beaconing of aerodromes (TC 97)**

97/241/NP, PNW 97-241 ED1: Electrical installation for lighting and beaconing of aerodromes - Principles of a data-based risk analysis to determine maintenance activities and their maintenance cycles, 10/28/2022

**Electrostatics (TC 101)**

101/670/CD, IEC TS 61340-6-2 ED1: Electrostatics - Part 6-2: Electrostatic control in healthcare, commercial and public facilities - Public spaces and office areas, 12/23/2022

**Evaluation and Qualification of Electrical Insulating Materials and Systems (TC 112)**

112/582/FDIS, IEC 60216-5 ED4: Electrical insulating materials - Thermal endurance properties - Part 5: Determination of relative temperature index (RTI) of an insulating material, 10/14/2022

112/583/FDIS, IEC 60216-6 ED3: Electrical insulating materials - Thermal endurance properties - Part 6: Determination of thermal endurance indices (TI and RTI) of an insulating material using the fixed time frame method, 10/14/2022

**Fibre optics (TC 86)**

86A/2232/CD, IEC 60793-1-22 ED2: Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement, 11/25/2022

86A/2234/CD, IEC 60794-2-20 ED4: Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables, 10/28/2022

86A/2233/CD, IEC 60974-1-209 ED1: Optical fibre cables - Part 1-209: Generic specification - Basic optical cable test procedures - Environmental test methods - Ageing, Method F9, 10/28/2022

86B/4639/CDV, IEC 61300-2-34 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-34: Tests - Resistance to solvents and contaminating fluids, 11/25/2022

86B/4656/FDIS, IEC 61300-3-4 ED4: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-4: Examinations and measurements - Attenuation, 10/14/2022

86B/4657/FDIS, IEC 63267-1 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector optical interfaces - Part 1: Enhanced macro bend loss multimode 50 um core diameter fibres - General and guidance, 10/14/2022

**Fuel Cell Technologies (TC 105)**

105/935/CD, IEC 62282-2-400 ED1: Fuel cell technologies - Part 2-400: Fuel cell modules - Calculation of Rated Power and Power Density of a PEM stack and PEM module, 11/25/2022

**High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV (TC 115)**

115/307/NP, PNW TS 115-307 ED1: DC Voltages for HVDC Grids, 10/28/2022



**Instrument transformers (TC 38)**

38/709(F)/FDIS, IEC 61869-99: Instrument transformers: Glossary, 09/16/2022

**Lamps and related equipment (TC 34)**

34/947/FDIS, IEC 62386-101 ED3: Digital addressable lighting interface - Part 101: General requirements - System components, 10/14/2022

34/948/FDIS, IEC 62386-102 ED3: Digital addressable lighting interface - Part 102: General requirements - Control gear, 10/14/2022

34/946/FDIS, IEC 62386-103 ED2: Digital addressable lighting interface - Part 103: General requirements - Control devices, 10/14/2022

**Marine energy - Wave, tidal and other water current converters (TC 114)**

114/448/CD, IEC TS 62600-200 ED2: Marine energy - Wave, tidal and other water current converters - Part 200: Electricity producing tidal energy converters - Power performance assessment, 11/25/2022

**Methods for the Assessment of Electric, Magnetic and Electromagnetic Fields Associated with Human Exposure (TC 106)**

106/586/CD, IEC/IEEE 63184 ED1: Basic standard for the assessment of the human exposure to electric and magnetic fields from wireless power transfer systems - models, instrumentation, numerical methods and procedures (Frequency range of 1 kHz to 10 MHz), 10/28/2022

**Nanotechnology standardization for electrical and electronic products and systems (TC 113)**

113/705/CD, IEC TS 62607-6-4 ED2: Nanomanufacturing - Key control characteristics - Part 6-4: Graphene-based materials - Surface conductance: microwave resonant cavity method, 11/25/2022

**Performance of household electrical appliances (TC 59)**

59M/150/CD, IEC 60704-2-14/AMD2 ED2: Amendment 2 - Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-14: Particular requirements for refrigerators, frozen-food storage cabinets and food freezers, 11/25/2022

59C/279/CD, IEC 60704-2-2 ED3: Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-2: Particular requirements for fan heaters, 11/25/2022

**Safety of hand-held motor-operated electric tools (TC 116)**

116/624/CDV, IEC 62841-3-15 ED1: Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-15: Particular requirements for transportable magnetic drills, 11/25/2022

**Safety of household and similar electrical appliances (TC 61)**

61/6671(F)/FDIS, IEC 60335-2-17 ED4: Household and similar electrical appliances - Safety - Part 2-17: Particular requirements for blankets, pads, clothing and similar flexible heating appliances, 09/16/2022

61/6668/CDV, IEC 60335-2-27 ED7: Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to optical radiation, 11/25/2022

61/6670(F)/FDIS, IEC 60335-2-3 ED7: Household and similar electrical appliances - Safety - Part 2-3: Particular requirements for electric irons, 09/16/2022

61/6672(F)/FDIS, IEC 60335-2-54 ED5: Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam, 09/16/2022

61/6673(F)/FDIS, IEC 60335-2-85 ED3: Household and similar electrical appliances - Safety - Part 2-85: Particular requirements for fabric steamers, 09/16/2022

**Secondary cells and batteries (TC 21)**

21/1151/CDV, IEC 63118 ED1: 12V Lithium-ion Secondary Battery for Automotive Starting, Lighting, Ignition (SLI) Applications and Auxiliary purposes Part 1 - General requirements and methods of test, 11/25/2022

**Semiconductor devices (TC 47)**

47E/792/CD, IEC 60747-15 ED3: Semiconductor devices - Discrete devices - Part 15: Isolated power semiconductor devices, 10/28/2022

47A/1145/FDIS, IEC 62228-6 ED1: Integrated circuit - EMC evaluation of transceivers - Part 6: PSIS transceivers, 10/14/2022

**Standard voltages, current ratings and frequencies (TC 8)**

8B/136/DTS, IEC TS 63189-2 ED1: Virtual Power Plants- Part 2: Use Cases, 11/25/2022

**(TC 127)**

127/42/CD, IEC TS 63346-1-1 ED1: Low-voltage auxiliary power systems - Part 1-1: Terminology, 11/25/2022

**Terminology (TC 1)**

1/2513/NP, PNW 1-2513 ED1: International Electrotechnical Vocabulary (IEV) - Part XXX: Circular economy and material efficiency, 09/30/2022

**Wind turbine generator systems (TC 88)**

88/897/CDV, IEC 61400-8 ED1: Wind energy generation systems  
- Part 8: Design of wind turbine structural components,  
11/25/2022

**Winding wires (TC 55)**

55/1925/CD, IEC 60317-89 ED1: Specifications for particular types of winding wires - Part 89: Polyesterimide enameled round aluminum wire, class 200, 10/28/2022

55/1926/CD, IEC 60317-93 ED1: Specifications for particular types of winding wires - Part 93: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular copper wire, class 220, 10/28/2022



# 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>).

## IEC Standards

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

[IEC 62680-1-2 Ed. 6.0 b:2022](#), Universal serial bus interfaces for data and power - Part 1-2: Common components - USB Power Delivery specification, \$443.00

[IEC 62680-1-3 Ed. 5.0 b:2022](#), Universal serial bus interfaces for data and power - Part 1-3: Common components - USB Type-C® cable and connector specification, \$443.00

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

[IEC 61196-1-125 Ed. 1.0 en:2022](#), <p>Coaxial communication cable - Part 1-125: Electrical test methods - Test for equivalent permittivity and equivalent dissipation factor of dielectric</p>, \$51.00

[IEC 61196-1-126 Ed. 1.0 en:2022](#), Coaxial communication cables - Part 1-126: Electrical test methods - Corona extinction voltage, \$51.00

### Fibre optics (TC 86)

[IEC 61300-2-43 Ed. 3.0 b:2022](#), Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-43: Tests - Screen testing of return loss of single-mode PC optical fibre connectors, \$89.00

[S+ IEC 61300-2-43 Ed. 3.0 en:2022 \(Redline version\)](#), Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-43: Tests - Screen testing of return loss of single-mode PC optical fibre connectors, \$115.00

### Industrial-process measurement and control (TC 65)

[IEC 62453-309 Ed. 3.0 b:2022](#), Field device tool (FDT) interface specification - Part 309: Communication profile integration - IEC 61784 CPF 9, \$310.00

[S+ IEC 62453-309 Ed. 3.0 en:2022 \(Redline version\)](#), Field device tool (FDT) interface specification - Part 309: Communication profile integration - IEC 61784 CPF 9, \$404.00

### Other

[IEC SRD 63188 Ed. 1.0 en:2022](#), Smart Cities Reference Architecture Methodology (SCRAM), \$430.00

### Piezoelectric and dielectric devices for frequency control and selection (TC 49)

[IEC 62604-2 Ed. 3.0 b:2022](#), Surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers of assessed quality - Part 2: Guidelines for the use, \$221.00

[S+ IEC 62604-2 Ed. 3.0 en:2022 \(Redline version\)](#), Surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers of assessed quality - Part 2: Guidelines for the use, \$288.00

### Safety of household and similar electrical appliances (TC 61)

[IEC 60335-2-40 Ed. 7.0 en:2022 EXV](#), Household and similar electrical appliances - Safety - Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers, \$375.00

### Small power transformers and reactors and special transformers and reactors (TC 96)

[IEC 61558-2-15 Ed. 3.0 en:2022 EXV](#), Safety of transformers, reactors, power supply units and combinations thereof - Part 2-15: Particular requirements and tests for isolating transformers for medical IT systems for the supply of medical locations, \$351.00

### Switchgear and controlgear (TC 17)

[IEC 62271-102 Ed. 2.1 en:2022 EXV](#), High-voltage switchgear and controlgear - Part 102: Alternating current disconnectors and earthing switches, \$363.00

[IEC 62271-204 Ed. 2.0 en:2022 EXV](#), High-voltage switchgear and controlgear - Part 204: Rigid gas-insulated transmission lines for rated voltage above 52 kV, \$339.00

[IEC 62271-209 Ed. 2.1 en:2022 EXV](#), High-voltage switchgear and controlgear - Part 209: Cable connections for gas-insulated metal-enclosed switchgear for rated voltages above 52 kV - Fluid-filled and extruded insulation cables - Fluid-filled and dry-type cable terminations, \$303.00

### Wind turbine generator systems (TC 88)

[IEC 61400-12 Ed. 1.0 b:2022](#), Wind energy generation systems - Part 12: Power performance measurements of electricity producing wind turbines - Overview, \$89.00

[IEC 61400-12-1 Ed. 3.0 b:2022](#), Wind energy generation systems - Part 12-1: Power performance measurement of electricity producing wind turbines, \$430.00

[IEC 61400-12-2 Ed. 2.0 b:2022](#), Wind energy generation systems  
- Part 12-2: Power performance of electricity producing wind  
turbines based on nacelle anemometry, \$392.00

## **IEC Technical Reports**

### **Ultrasonics (TC 87)**

[IEC/TR 61390 Ed. 2.0 en:2022](#), Ultrasonics - Real-time pulse-  
echo systems - Test procedures to determine performance  
specifications, \$354.00

# International Organization for Standardization (ISO)

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## Call for U.S. TAG Administrator

### ISO/TC 322 – Sustainable finance

**Comment Deadline: September 16, 2022**

ANSI has been informed that Accredited Standards Committee X9, Inc. Financial Industry Standards (ASC X9), the ANSI-accredited U.S. TAG Administrator for ISO/TC 322 – *Sustainable finance*, wishes to relinquish their role as U.S. TAG Administrator.

ISO/TC 322 operates under the following scope:

*Standardization in the field of sustainable finance to integrate sustainability considerations including environmental, social and governance practices in the financing of economic activities.*

Note : the TC for sustainable finance will have close cooperation with TC 68 in the field of financial services, TC 207 in the field of environmental management, TC 251 in the field of asset management and TC 309 in the field of governance of organizations.

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

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

### Ayush Systems

**Comment Deadline: October 14, 2022**

BIS, the ISO member body for India, has submitted to ISO a proposal for a new field of ISO technical activity on Ayush Systems, with the following scope statement:

*Standardization in the field of Ayush systems including Ayurveda, Yoga, Naturopathy, Unani, Siddha, Sowa rigpa and Homoeopathy. Both traditional and modern aspects of products and services of these systems are covered.*

*Excluded from its scope are products and services covered by ISO/TC 54 Essential oils, ISO/TC 215 Health Informatics, and ISO/TC 249 Traditional Chinese Medicine.*

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team ([isot@ansi.org](mailto:isot@ansi.org)), with a submission of comments to Steve Cornish ([scornish@ansi.org](mailto:scornish@ansi.org)) by close of business on Friday, October 14, 2022.

# 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 t  
to ANSI/ASHRAE Standard 15-2019**

**First Public Review Draft**

**Proposed Addendum t to  
Standard 15-2019, Safety Standard  
for Refrigeration Systems**

**First Public Review (September 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 <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts> and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore) or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, [www.ashrae.org](http://www.ashrae.org).

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092



**(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)**

## FOREWORD

Many of the proposed changes to ASHRAE 15 since 2015 have been associated with the impending refrigerant changes due to global warming and climate change, beginning with addendum d and addendum h to ASHRAE 15-2016, which addressed specific applications for A2L refrigerants. Several addenda to ASHRAE 15-2019 continued with addenda c addressing A3 refrigerant charge in self-contained equipment, addendum e addressing piping related changes, addendum l specifically focused on commercial refrigeration equipment using flammable refrigerants, addendum g addressing the concept of releasable charge, as well as a flurry of other addenda in the last year.

This proposed addendum *t* addresses changes for application of cooling equipment specific to information technology equipment (ITE) and data center installations. The same mitigation principles (refrigerant charge size restrictions, refrigerant detection, air circulation and product listing) are the same as other applications using flammable refrigerants. One significant difference in ITE applications, due to the sensitive nature of electronic equipment to cleanliness, is that emergency ventilation of outside air is not an acceptable mitigation strategy.

Further, this proposed addendum *t* is written in light of the addendum *g* (as noted above), which also makes major revisions to Sections 7.2 and 7.3, as well as several other addenda. The below definitions have been approved by other published addenda, and are used in this proposed addendum. As these defined terms are proposed for use in addendum *t*, they are included but not open for comment.

**connected spaces**: two or more spaces connected by natural ventilation, a ducted air distribution system, or mechanical ventilation

**effective dispersal volume**: the volume of a space or *connected spaces* in which leaked *refrigerant* will disperse

**effective dispersal volume charge (EDVC)**: the maximum *refrigerant* charge permitted for an *effective dispersal volume*.

**independent circuit**: a closed refrigeration circuit that is arranged in such a manner that, in the event of a single point failure, the release of *refrigerant* is limited to only the quantity contained within the refrigeration circuit.

**releasable refrigerant charge ( $m_{rel}$ )**: a portion of the *system refrigerant charge* that can be released into a space as a result of a single point of failure.

**system refrigerant charge ( $m_s$ )**: Actual *refrigerant charge* of a single *refrigerating system*

**Note**: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.

### Addendum *t* to Standard 15-2019

**Modify Section 3 as follows. The remainder of Section 3 remains unchanged.**

## 3. DEFINITIONS

### 3.1 Defined Terms

[...]

**computer room:** a room or portions of a building serving an *ITE* load less than or equal to 10 kW or 20 W/ft<sup>2</sup> (215 W/m<sup>2</sup>) or less of conditioned floor area.

**data center:** a room or building, or portions thereof, including *computer rooms* being served by the data center systems, serving a total *ITE* load greater than 10 kW and 20 W/ft<sup>2</sup> (215 W/m<sup>2</sup>) of conditioned floor area.

**group controller:** *An electrical or electronic control system that monitors and responds to multiple distinct inputs from more than one appliance or unit.*

**information technology equipment (ITE):** *ITE includes computers, data storage, servers, and network/communication equipment.*

**information technology equipment facilities (ITEF):** *Data centers and computer rooms used primarily to house ITE.*

**ITE area:** An area of a building where the *ITE room* is located, including support rooms served by the same special air-conditioning or air handling equipment as the *ITE room*.

**ITE cooling appliance:** *An appliance or equipment designed specifically for the cooling of ITE, ITE rooms, and ITE areas such as data centers or computer rooms.*

**ITE room:** A room within the *ITE area* that contains the *ITE*.

**maximum refrigerant charge,  $m_{max}$ :** *maximum refrigerant charge for a single refrigerating system resulting from a calculation for room volume.*

**safety shut-off valve (SSOV):** *an automatically controlled refrigerant valve for the purpose of limiting the amount of refrigerant released into a space when a refrigerant leak is detected.*

[...]

***Modify Section 7 as follows. The remainder of Section 7 remains unchanged.***

## 7. RESTRICTIONS ON REFRIGERANT USE

### 7.2 Refrigerant Concentration Limits.

[...]

Note to reviewer: The refrigerant charge restrictions of addendum g new Section 7.3 (formerly Section 7.2) will be applicable to *ITE* applications. The exception noted below to the published Section 7.2 will become Section 7.3.1.1 of the new addendum g.

#### Exceptions to 7.2:

[...]

3. Listed *ITE cooling appliances* installed per Section 7.9 with volume calculations per Section 7.3.3.

[...]

**7.3 Volume Calculations. ...**

[...]

Note to reviewer: addendum g makes extensive revisions to Sections 7.2 and 7.3. The new proposed Section 7.3.3 below will become section 7.2.3.5 of the new addendum g Section 7.2. The referenced Sections 7.3.1 and 7.3.2 of the published ASHRAE 15-2019 will become Sections 7.2.1 and 7.2.3 of the new addendum g.

**\*7.3.3 ITE Room Volume Calculations.** The effective dispersal volume (EDV) of an ITE room shall comply with Sections 7.3.1 and 7.3.2, except as modified by Section 7.3.3. The maximum height permitted to be included in the EDV shall be 4.0 ft (1.22 m) above the highest duct opening. Underfloor spaces utilized in airflow movement shall be permitted to be included in the EDV.

[...]

**7.9 Information Technology Equipment (ITE) Applications Using Group A2L Refrigerants.** High-probability systems using Group A2L refrigerants in ITEF shall comply with this section.

**7.9.1 Listing and Installation Requirements.** ITE cooling appliances shall be listed in accordance with UL 60335-2-40<sup>17</sup> or CSA C22.2 No. 60335-2-40<sup>xx</sup>. The ITE cooling appliance shall be installed in accordance with the listing, the manufacturer's instructions, and manufacturer's markings on the equipment restricting the installation.

**7.9.2 Location and Access.** Access to the ITE cooling appliances, ITE, ITE room(s) and ITE area(s) shall be restricted to authorized personnel. Doors shall be clearly marked, or permanent signs shall be posted at each entrance to indicate this restriction.

**7.9.3 Maximum Refrigerant Charge.** The permissible releasable refrigerant charge,  $m_{rel}$ , for listed ITE cooling appliances shall be determined using the requirements specified in 7.9.3.1 and 7.9.3.2, when system refrigerant charge,  $m_s$ , is adjusted per manufacturer's instructions.

**7.9.3.1** The releasable refrigerant charge,  $m_{rel}$ , shall not exceed the quantity determined by the following equation. If release mitigation controls per Section 7.9.5 are not used, then  $m_{rel}$  is equal to  $m_s$ .

$$m_{rel} = 0.50 \times LFL \times EDV$$

where

$m_{rel}$  = releasable refrigerant charge, lb (kg)

$LFL$  = lower flammability limit as specified in ASHRAE 34, lb/1000 ft<sup>3</sup>, (kg/m<sup>3</sup>)

$EDV$  = effective dispersal volume, as specified in 7.9.3.2.

**7.9.3.2** The effective dispersal volume, EDV, used shall be as specified in Section 7.3.3.

**7.9.3.2.1 Ventilation.** Spaces of the ITE area which are connected by ventilation shall be permitted to be included in EDV, provided that ventilation airflow meets the requirements of Section 7.6.4. Ventilation airflow shall either be continuous or initiated by a refrigerant detection system meeting the requirement of Section 7.9.4.

Note to reviewer: The Section 7.6.4 referenced in 7.9.3.2.1 above is Section 7.6.4 of addendum m.

**7.9.4 Refrigerant Detection System Requirements.** When a refrigerant detection system is utilized or required to meet the requirements of Section 7.9.5, Section 7.9.6, or Section 7.9.7, the refrigerant detection system shall meet the requirements of Section 7.6.5. When a group controller is utilized for multiple ITE cooling appliances, Sections 7.9.4.1 through 7.9.4.3 shall apply.

**7.9.4.1** The refrigerant detection system of each ITE cooling appliance shall provide an output signal for use in notifying the group controller or user that mitigation actions have been activated.

**7.9.4.2** If a group controller is capable of determining an output signal comes from one or more specific ITE cooling appliance(s), it shall be permissible for only that (those) ITE cooling appliance(s) to perform mitigation actions. If a group controller is not capable of determining the source of an output signal, the group controller shall command all appliances under its command to perform mitigation actions of 7.9.4.

**7.9.4.3** A group controller shall require the use of administrative controls.

**7.9.5 Release Mitigation Controls.** Sections 7.9.5.1 and Section 7.9.5.2 shall apply when safety shut-off valves (SSOV) are installed in refrigeration system.

**7.9.5.1 Location.** SSOV shall be positioned to enable access for service and maintenance by authorized personnel.

**7.9.5.2 Standby or Redundant ITE Cooling Appliances.** When applied to standby or redundant refrigeration systems, SSOV shall be in the closed position for both standby mode and off-mode.

**7.9.6 Circulation Airflow.** Circulation airflow shall either be provided continuously or initiated by a refrigerant detection system meeting the requirement of Section 7.9.4. The circulation airflow shall be of a minimum quantity per the equations below.

$$Q_{min} = 500 \times m_c \div LFL \quad \text{(I-P)}$$

$$Q_{min} = 30 \times m_c \div LFL \quad \text{(SI)}$$

where

$Q_{min}$  = minimum circulation airflow rate, ft<sup>3</sup>/min (m<sup>3</sup>/h)

$m_c$  = system refrigerant charge, lb (kg)

$LFL$  = lower flammability limit, lb/1000 ft<sup>3</sup> (kg/m<sup>3</sup>)

500 = conversion factor

30 = conversion factor

**7.9.7 Notification.** When a refrigerant detection system is used, the notification signal from the refrigerant detection system shall initiate an alarm, which shall annunciate visual and audible alarms inside the ITE area and outside each entrance to the ITE area.

**INFORMATIVE APPENDIX HEADER**

**A7.3.3.** The figure below is one example of an ITE room and the application of ITE cooling appliance. ITE room orientation of hot aisle containment, suspended ceiling, and raised floor, as well as their presence, may differ from that shown in the figure. Direction of airflow may differ from that shown in the figure. The ITE cooling appliance may be located within the ITE room or outside the ITE room and ducted to the space.

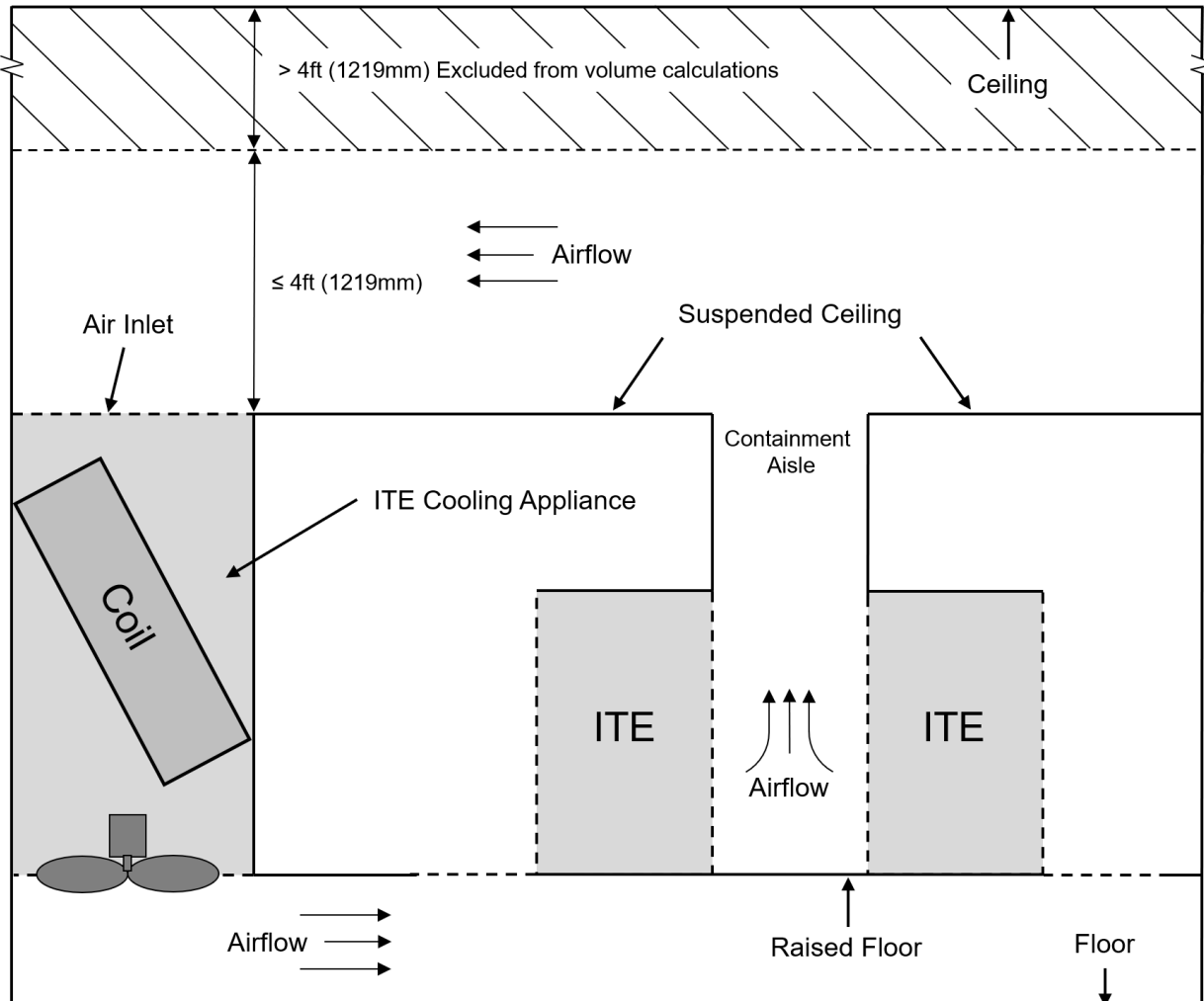


Figure 7-1

Example elevation view of an ITE Room for determination of the *effective dispersal volume (EDV)*.



**Title of Addendum:** Corrections to Equations in ANSI/HI 14.3  
**Standard ID and Name:** ANSI/HI 14.3-2019 American National  
 Standard for Rotodynamic Pumps for Design and Application  
**Date of Addendum:** August 17, 2022

The following addendum presents the corrections and revision of **ANSI/HI 14.3-2019 American National Standard for Rotodynamic Pumps for Design and Application**, approved on **February 1, 2019**. An addendum is issued to change or alter any technical information in a published standard, substantive in nature, from its original intended form.

The Hydraulic Institute and its affiliates caution and encourage all users to ensure that they have the latest edition of any HI standard by periodically checking the following URL: [www.pumps.org/standards/](http://www.pumps.org/standards/)

A ~~single strike through~~ of text indicates deletion, while a single underline indicates an addition. For formulas, figures and graphics, a dashed, gray line will be placed over the original reproduced object. The new or updated object will be presented in the same manner as it should appear in the standard.

Page Number	Change
131 (Document) 148 (PDF)	Paragraph 14.3.6.4.3.1 Method for calculating dry critical speed for pumps with overhung impellers (neglecting coupling weight)

Original Equation:

Shaft deflection at impeller location ( $X = 0$ )  $\delta_x$ :

$$\delta_x = \frac{M_I g}{3E} \left\{ \frac{Z^2 A}{I_A} + C_3 X \left( \frac{1}{I_C} - \frac{1}{I_B} \right) + \frac{Z^3}{I_B} \right\} \text{ mm (in)}$$

Corrected Equation:

Shaft deflection at impeller location ( $X = 0$ )  $\delta_x$ :

$$\delta_x = \frac{M_I g}{3E} \left\{ \frac{Z^2 A}{I_A} + C^3 \left( \frac{1}{I_C} - \frac{1}{I_B} \right) + \frac{Z^3}{I_B} \right\} \text{ mm (in)}$$

Note: The subscript 3 for dimension “C” changed to an exponent. The “X” was removed as multiplication symbols are not shown in this document.



**Title of Addendum:** Corrections to Equations in ANSI/HI 14.3  
**Standard ID and Name:** ANSI/HI 14.3-2019 American National  
 Standard for Rotodynamic Pumps for Design and Application  
**Date of Addendum:** August 17, 2022

Page Number	Change
139 (Document) 156 (PDF)	Paragraph 14.3.6.5.5 Method of calculating dry critical speed: open lineshaft vertical pumps

Original Equation:

Metric units:

$$F_n = 0.762 \times \frac{N}{L} \times 83.034 \times \sqrt{\frac{g}{w_L}} \times \left[ 1.4504 \times 10^{-4} \times E \times I \times \left( 7.9797 \times 10^{-2} \times \frac{N}{L} \right)^2 + 0.2249 \times F \right]^{0.5}$$

Corrected Equation:

Metric units:

$$F_n = 0.762 \times \frac{N}{L} \times 83.034 \times \sqrt{\frac{g}{w_L}} \times \left[ 3.4845 \times 10^{-10} \times E \times I \times \left( 7.9797 \times 10^{-2} \times \frac{N}{L} \right)^2 + 0.2249 \times F \right]^{0.5}$$

Note: Updated conversion factor when converting from in<sup>4</sup> to mm<sup>4</sup>.

Tracking number 455-2i36r1  
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Revision to NSF/ANSI 455-2-2021  
Issue 36 Revision 1 (August 2022)

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by **gray highlighting**. Rationale statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard  
for GMP for Dietary Supplements –

## Good Manufacturing Practices for Dietary Supplements

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### 4 Audit Requirements

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#### 4.2 Leadership

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4.2.1 Procedures shall be established for the responsibilities of the QC operations. [21 CFR § 111. 87 & 21 CFR § 111.103 & 21 CFR § 111.105 & 21 CFR § 111.140 (b1)]

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[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by **gray highlighting**. Rationale statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard  
for Health Sciences –

## Good Manufacturing Practices for Dietary Supplements

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- 4 Audit Requirements

- 
- 
- 
- 4.3 Planning

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- 4.3.6 Procedures shall be established to manage equipment, processes, software, utility and physical plant changes that can impact the safety or quality of dietary supplements. Changes included in the program shall be approved by QC. [21 CFR 111.130(e)]

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UL 62841-4-3  
2022

September 9,

**UL 62841-4-3 Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery – Safety – Part 4-3: Particular Requirements For Pedestrian Controlled Walk-Behind Lawnmowers**

**1. Proposed Adoption Of The First Edition Of IEC 62841-4-3, Standard For Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 4-3: Particular Requirements For Pedestrian Controlled Walk-Behind Lawnmowers, As The First Edition Of UL 62841-4-3**

**PROPOSAL**

**K.8.3 Battery** machines and **detachable battery packs** or **separable battery packs** shall be marked with additional information as follows:

- the business name and address of the manufacturer and, where applicable, his authorised representative. Any address shall be sufficient to ensure contact. Country or state, city and postal code (if any) are deemed sufficient for this purpose;
- designation of series or type, allowing the technical identification of the product. This may be achieved by a combination of letters and/or numbers and may be combined with the designation of the machine.

NOTE 1 The term “designation of series or type” is also known as model number.

**Battery** machines shall also be marked with additional information as follows:

- the year of manufacture and a date code identifying at least the month of manufacture;
- designation of the machine, designation of the machine may be achieved by a code that is any combination of letters, numbers or symbols providing that this code is explained by giving the explicit designation such as “**lawnmower**”, “mower” etc. in the instructions supplied with the machine;

NOTE 2 An example of such code is “A123-B”.

– for machines manufactured such that its parts are shipped separately for assembly by the end user, each part shall be marked with a distinct identification on the part or the package;

- “> 25 kg” if the mass of the machine is over 25 kg.

NOTE 3 In Europe, the following requirement applies:

*Replacement of the sixth dash:*

- the mass of the machine in kg.

UL 62841-4-3  
2022

September 9,

**K.8.3DV D2 Modification: Delete the fourth dash and NOTE 3 from Clause K.8.3 of the part 4.**

**K.19.102.5.5 Test procedure**

*Addition:*

*During the test, the **battery** shall be replaced with a **fully charged battery** as needed in order to maintain the speed of the **cutting means** to be not less than 90 % of **maximum speed**.*

*The test may be conducted with the machine powered by an external power source maintained at the nominal voltage of the **battery**, provided a suitable replacement part that simulates the mass of the **battery** is fitted to the machine during the test.*

**K.20.3.2DV D2 Addition: Add the following Clause K.20.3.2 to the Part 4:**

**K.20.3.2DV A BATTERY-operate machine with any DETACHABLE BATTERY PACK attached, placed in its normal operating position, is impacted with a smooth steel sphere having a diameter of (50 ±2) mm and weighing (0,55 ±0,03) kg. If a part of the machine can be impacted from above, the sphere is dropped from a rest position to strike the component. Otherwise, the sphere is suspended by a cord and is allowed to fall from a rest position as a pendulum to strike the area of the machine to be tested. In either case, the vertical travel of the sphere is (1,3 ±0,1) m.**

**A GUARD that becomes disassembled is acceptable, if it can be reassembled readily to function properly.**

**Deformation of a GUARD or other part is acceptable, if the part can be readily restored to its original shape.**

**Damage to the machine or a portion of the drive system, other than a GUARD is acceptable, if the tool is incapable of NORMAL OPERATION.**

***In addition for DETACHABLE BATTERY PACKS or SEPARABLE BATTERY PACKS with a mass greater than or equal to 3 kg the test is repeated on the BATTERY packs separately.***

***In addition for DETACHABLE BATTERY PACKS or SEPARABLE BATTERY PACKS with a mass less than 3 kg, the BATTERY pack shall withstand being dropped three times on a concrete surface from a height of 1 m. The sample shall be positioned to vary the point of impact.***

**The test is carried out with the machine resting on a smooth horizontal concrete surface. During the test, the machine is not restrained or placed against any other supporting structure.**

K.8.3

UL 62841-4-3  
2022

September 9,

- the year of manufacture and a date code identifying at least the month of manufacture;
- designation of the machine, designation of the machine may be achieved by a code that is any combination of letters, numbers or symbols providing that this code is explained by giving the explicit designation such as “**lawnmower**”, “mower” etc. in the instructions supplied with the machine;

NOTE 2 An example of such code is “A123-B”.

- for machines manufactured such that its parts are shipped separately for assembly by the end user, each part shall be marked with a distinct identification on the part or the package;
- “> 25 kg” if the mass of the machine is over 25 kg.

NOTE 3 In Europe, the following requirement applies:

*Replacement of the sixth dash:*

- the mass of the machine in kg.

**L.8.3DV D2 Modification: Delete the fourth dashed paragraph and NOTE 3 from Clause K.8.3 of the part 4.**

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## BSR/UL 62990-1, Standard for Safety for Workplace Atmospheres - Part 1: Gas Detectors – Performance Requirements of Detectors for Toxic Gases

1. Revisions to the product document dated March 25, 2022 per responses to comments received.

### PROPOSAL

1ADV.1 DR Addition of the following:

Where references are made to IEC and ISO standards, the reference requirements found in these standards shall apply as modified by any applicable US National Differences for the standard (see Clause 2).

4.2.3.2DV DE Modification of Clause 4.2.3.2, fourth paragraph to replace with the following:

If it is possible to temporarily de-activate alarm devices, output contacts or alarm signal outputs, this deactivation shall be indicated by a signal. For fixed equipment, ~~this shall include a contact or other transmittable output signal~~ the special state signal shall be capable of being transmitted to remote equipment. The output signal or contacts are not required if the alarms are automatically re-enabled within 15 minutes.

EXAMPLE: It might be necessary to de-activate alarm devices for calibration purposes.

4.4 Instruction manual

4.4DV DR Modification of Clause 4.4 Title to replace with the following:

4.4 ~~Instruction manual~~ Environmental ratings

5.2.1.1 Test samples

5.2.1.1DV.1 DE Modification of Clause 5.2.1.1, first paragraph to replace with the following:

The EMC test (5.4.7.3), the Fault signal tests (5.4.9), the Software controlled equipment tests (5.4.10), and the ~~Protection against water~~ Environmental exposure test (5.4.11) may be performed on a ~~separate single~~ separate equipment sample or ~~a~~ separate equipment samples for each test.

5.4.6.9DV DE Modification of Clause 5.4.6.9 to replace with the following:

Measurements shall be taken in clean air and standard test gas.

Expose the equipment to a step change from clean air to test gas with a volume fraction of 2 times the upper limit of indication and maintain for 10 min for portable equipment and 30 min for fixed and transportable equipment.

Expose the equipment to clean air for 60 min and record the final indication. Expose the equipment to standard test gas until stabilized and record the indication.

Acceptance Criteria for Type HM equipment: The deviation of the indications in clean air shall be less than or equal to the lower limit of measurement in Table A.1 or the value specified in the instruction manual, whichever is lower. The deviation of the indications in standard test gas shall be within  $\pm 20\%$  of the indication or shall latch when over-range is reached thus requiring recovery and re-calibration. An over-range condition shall be clearly indicated and, where fitted, an alarm shall be activated.

Acceptance Criteria for Type SM equipment: The deviation of the indications in clean air shall be less than or equal to 10 % of the upper limit of measurement or shall remain in a latched state. The deviation of the indications in standard test gas shall be within  $\pm 20$  % of the indication or shall latch when over-range is reached thus requiring recovery and re-calibration. An over-range condition shall be clearly indicated and, where fitted, an alarm shall be activated.

**5.4.8DV D1 Modification of Clause 5.4.8 to replace with the following:**

Battery powered equipment shall be operated for 8 h per working day in ambient air. All other equipment shall be operated continuously in ambient air.

The equipment shall be exposed to clean air and the standard test gas for a total of six times over the calibration period that is specified in the instruction manual. The first exposure shall be at the beginning of the manufacturer recommended calibration period and the last at the end of the manufacturer recommended calibration period ~~or after 6 months whichever is the shorter~~. The remaining four exposures shall be approximately evenly distributed over the calibration period.

Record the readings after each exposure to clean air and the standard test gas.

Additionally subject the sensor to a continuous toxic gas concentration equivalent to 3%  $\pm$  1% of the current NIOSH IDLH value for a period of 7 days or the manufacturer's claimed duration, whichever is lower. For equipment that provides a fault signal upon sensing element failure, the duration may be reduced to the manufacturer's claimed duration.

At termination of the exposure, immediately apply clean air for a period of 5 min  $\pm$  30 sec, or as defined by the manufacturer, whichever is less, and record the reading. Immediately following the clean air exposure, apply the standard test gas for 5 min  $\pm$  30 sec and record the reading.

Acceptance Criteria for Type HM equipment: The deviation of the indications in clean air shall be less than or equal to the lower limit of measurement in Error! Reference source not found. or the value specified in the instruction manual, whichever is lower. The deviation of the indications in standard test gas shall be within  $\pm 20$  % of the indication.

Acceptance Criteria for Type SM equipment: The deviation of the indications in clean air shall be less than or equal to 10 % of the upper limit of measurement. The deviation of the indications in standard test gas shall be within  $\pm 20$  % of the indication.

**5.4.11DV DR Modification of Clause 5.4.11 Title to replace with the following:**

Protection against water Environmental exposure

**5.4.11.2ADV Dust**

The equipment in normal operation shall be exposed to the dust test of the environmental rating as marked.

For equipment marked to indicate an environmental rating for protection against the ingress of dust, this test shall be performed within a dust chamber defined by ANSI/IEC 60529. The equipment shall be mounted in accordance with the manufacturer's instructions, set to the lowest alarm level or 10 % of the measuring range, whichever is greater, and then calibrated in accordance with 5.3.2, and the time to 90 % of the standard test gas application shall be recorded. No preconditioning of the equipment per 5.4.2, 5.4.12 and 5.4.13 is required. The equipment shall be exposed to the circulating dust cloud within the chamber for a period of 2 hours, -0/+5 minutes, with no vacuum applied to the sensor.

The equipment shall not give any false alarms during the 2 hour test. Upon completion of the 2 hour test, any trouble or fault conditions indicated may be cleared in accordance with the manufacturer's instructions and the equipment shall be allowed to undergo any stated maintenance conditions in accordance with the manufacturer's recommendations related to environmental exposure. The equipment shall be exposed to the standard test gas in accordance with 5.3.2, and the final value and time to 90 % of the standard test gas application shall be recorded.

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## BSR/UL 583, Standard for Electric-Battery-Powered Industrial Trucks

### 1. Proposed Adoption Of The Eleventh Edition Of The Standard For Electric-Battery-Powered Industrial Trucks, UL 583, As A UL Standard For The United States And Canada

## PROPOSAL

### 4 Referenced Publications

4.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

4.2 The following publications are referenced in this standard:

CSA C22.1, Canadian Electrical Code, Part I

CSA C22.2 No. 0.17, Evaluation of Properties of Polymeric Materials

CSA C22.2 No. 0.2, Insulation Coordination

CSA C22.2 No. 14, Industrial Control Equipment

CSA C22.2 No. 25, Enclosures for Use in Class II, Division 1, Groups E, F, and G Hazardous Locations

CSA C22.2 No. 30, Explosion-Proof Equipment

CSA CAN/CSA-C22.2 No. 49, Flexible Cords and Cables

CSA C22.2 No. 100, Motors and Generators

CSA CAN/CSA-C22.2 No. 107.2, Battery Chargers

CSA C22.2 No. 145, Electric Motors and Generators for Use in Hazardous (Classified) Locations

CSA CAN/CSA-C22.2 No. 157, Intrinsically Safe and Non-incendive Equipment for Use in Hazardous Locations

CSA C22.2 No. 243, Vacuum Cleaners, Blower Cleaners, and Household Floor Finishing Machines

CSA C22.2 No. 269.1, Surge Protective Devices – Type 1 – Permanently Connected

CSA C22.2 No. 269.2, Surge Protective Devices – Type 2 – Permanently Connected

CSA C22.2 No. 269.3, Surge Protective Devices – Type 3 – Cord Connected, Direct Plug-in and Receptacle Type

CSA C22.2 No. 269.4, Surge Protective Devices – Type 4 – Component Assemblies

CSA C22.2 No. 269.5, Surge Protective Devices – Type 5 - Components

CSA CAN/CSA-C22.2 No. 60079-11, Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety “I”

CSA CAN/CSA-C22.2 No. 61058-1, Switches for Appliances – Part 1: General Requirements

CSA E60730-1, Automatic Electrical Controls – Part 1: General Requirements

NFPA 70, National Electrical Code



SAE J1128, Low Voltage Primary Cable

UL 62, *Flexible Cords and Cables*

UL 66, *Fixture Wire*

UL 83, *Thermoplastic-Insulated Wires and Cables*

UL 94, *Tests for Flammability of Plastic Materials for Parts in Devices and Appliances*

UL 508, *Industrial Control Equipment*

UL 558, *Industrial Trucks, Internal Combustion Engine-Powered*

UL 674, *Electric Motors and Generators for Use in Hazardous (Classified) Locations*

UL 746C, *Polymeric Materials – Use in Electrical Equipment Evaluations*

UL 758, *Appliance Wiring Material*

UL 810A, *Electrochemical Capacitors*

UL 840, *Insulation Coordination Including Clearances and Creepage Distances for Electrical Equipment*

UL 913, *Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Division 1, Hazardous (Classified) Locations*

UL 1004-1, *Rotating Electrical Machines – General Requirements*

UL 1017, *Vacuum Cleaners, Blower Cleaners, and Household Floor Finishing Machines*

UL 1063, *Machine-Tool Wires and Cables*

UL 1203, *Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations*

UL 1276, *Outline of Investigation for Welding Cable*

UL 1426, *Electrical Cables for Boats*

UL 1449, *Surge Protective Devices*

UL 1564, *Industrial Battery Chargers*

UL 2267, *Fuel Cell Power Systems for Installation in Industrial Electric Trucks*

ULUL/ULC 2271, *Batteries for Use In Light Electric Vehicle (LEV) Applications*

ULUL/ULC 2580, *Batteries for Use in Electric Vehicles*

UL 60730-1, *Automatic Electrical Controls - Part 1: General Requirements*

UL 61058-1, *Switches for Appliances – Part 1: General Requirements*

7.11 UL 94, and UL 746C, and CSA C22.2 No. 0.17 do not apply to materials used in small parts such as control knobs, buttons, insulating bushings, resilient mounts, clamps, hydraulic hoses, water hoses, and pulley belts.

8.1 Motors shall comply with the spacing requirements in UL 1004-1 and CSA C22.2 No. 100.

8.2 Motors shall comply with the performance requirements in Section 9, Motors.

*Exception No. 1: A motor located in an **LVLE** circuit is not required to comply with this requirement.*

*Exception No. 2: A motor that complies with the requirements in UL 1004-1 and CSA C22.2 No. 100 is acceptable when used within its acceptable insulation systems ratings.*

8.4 Electromechanical brakes shall comply with Part XVI, Miscellaneous Devices, of UL 508 and CSA C22.2 No. 14.

*Exception: An electromechanical brake located in an **LVLE** circuit is not required to comply with this requirement.*

11.1 The internal wiring of the truck shall comply with one of the following: SAE J1128, UL 62 and CSA CAN/CSA-C22.2 No. 49, UL 66, UL 83, UL 758, UL 1063, UL 1276, or UL 1426. The wiring shall be considered with respect to the temperature and conditions of service to which the wiring is to be subjected in the intended use.

*Exception: This requirement does not apply to wiring located in a **LVLE** circuit.*

12.8 A positive temperature coefficient device shall comply with Manufacturing Deviation and Drift, Clause 15; Endurance, Clause 17; and Requirements for Controls Using Thermistors, Annex J in UL 60730-1 and CSA E60730-1.

13.7 A nonmetallic cover of a power source enclosure shall comply with the following requirements for Path II in UL 746C and the requirements in CSA C22.2 No. 0.17:

a) 12 mm (1/2 inch) or 20 mm (3/4 inch) flame test;

*Exception: This test is not required for material having a minimum flammability rating of V-1 or better.*

b) Impact Test consisting of three, 136 J (100 foot-pounds) impacts. The test is to be conducted by dropping a steel sphere 101.6 mm (4 inches) in diameter and weighing 4.5 kg (10 pound) from a height of 3.0 m (10 feet) onto at least 2 corners and onto the center of the enclosure. When the power source is located under an overhead guard, the impact on the power source cover is reduced to 68 J (50 foot-pounds) produced by dropping a steel sphere weighing 4.5 kg (10 pounds) from a height of 1.5 m (5 feet). To reduce the likelihood of unintentional contact that may involve a risk of electric shock from an uninsulated live part, an opening in an enclosure shall comply with either of the following:

1) For an opening that has a minor dimension less than 25.4 mm (1 inch), such that an uninsulated live part shall not be contacted by the probe illustrated in Figure 13.1; or

2) For an opening that has a minor dimension of 25.4 mm (1 inch) or more, such that an uninsulated live part shall be spaced from the opening as specified in Table 13.1.

14.2.1 Lithium batteries shall comply with the requirements in ~~UL~~UL/ULC 2580 or ~~UL~~UL/ULC 2271. The **battery** compartment and enclosure shall comply with the requirements in Section 13, Power Source Compartment or Enclosure.

14.5.1 Onboard **battery** chargers shall comply with the requirements in UL 1564 and CSA CAN/CSA-C22.2 No. 107.2.

17.1.5 Solid state circuitry (e.g. motor controllers, dc-dc converters, machine controls, etc.) as used in industrial trucks and evaluated by this standard may employ, as an alternative to the spacing requirements of Table 17.1, the spacing requirements in UL 840 and CSA C22.2 No. 0.2. When UL 840 and CSA C22.2 No. 0.2 are used, the following considerations shall apply:

- a) The spacing requirements of UL 840 and CSA C22.2 No. 0.2 shall not be used for spacings to an ultimate dead metal enclosure;
- b) When a truck component employs a voltage limiting device for application of the requirements in UL 840 and CSA C22.2 No. 0.2, the device shall comply with UL 1449 and CSA C22.2 No. 269 series; and

*Exception: This requirement does not apply to circuits supplied only by batteries.*

- c) Components supplied by **battery** circuits shall be considered over-voltage category II. An over-voltage category is the grouping of products based on a typical installed location with respect to over-voltage protection and available energy as defined in UL 840 and CSA C22.2 No. 0.2.

24.2.1 A switch or relay shall comply with UL 508 or UL 61058-1 and with CSA C22.2 No. 14 or CSA CAN/CSA-C22.2 No. 61058-1.

*Exception No. 1: A switch or relay located in an **LVLE** circuit is not required to comply with this requirement.*

*Exception No. 2: A switch or relay that complies with Section 24.3, Overload Test, is not required to comply with this requirement.*

31.2 Openings in a motor or electromechanical brake enclosure shall be closed by one of the following:

- a) Metal bands or covers with a thickness of no less than 0.66 mm (0.026 inch) thick shall be provided with means for retaining the band in a closed position (e.g. thumbscrew, latch, or the equivalent).
- b) Nonmetallic bands or covers shall comply with the performance requirements specified in UL 1004-1 and CSA C22.2 No. 100 and shall be retained by the same means specified in (a).

39.1 Sections 39 – 49 of this standard cover trucks intended for use in Class I Hazardous (classified) Locations as defined in Article 500 of the National Electrical Code, ANSI/NFPA 70 and Section 18 and J18 of the Canadian Electrical Code, CSA C22.1.

39.3 Electrical components and wiring shall comply with UL 1203 or UL 913 and with CSA C22.2 No. 3025, CSA CAN/CSA-C22.2 No. 157, or CSA CAN/CSA-C22.2 No. 60079-11.

42.1 A motor shall comply with the requirements in UL 674 and CSA C22.2 No. 145. No belt drive shall be provided with the motor unless the belts are of electrically conductive material or are enclosed in accordance with 39.3. There shall be no slippage of the belt that may cause temperature rises that could ignite a flammable gas or vapor Class I atmosphere.

48.3 Intrinsically safe electrical components shall comply with the test requirements in UL 913 and either CSA CAN/CSA-C22.2 No. 157 or CSA CAN/CSA-C22.2 No. 60079-11.

51.1 Sections 52 – 57 cover trucks intended for use in Class II, Group G Hazardous (Classified) Locations as defined in Article 500 of the National Electrical Code and Section J18 of the Canadian Electrical Code.

52.1 A motor shall comply with the requirements in UL 674 and CSA C22.2 No. 145. No belt drive shall be provided with the motor unless the belts are of electrically conductive material or are enclosed in

accordance with 51.3. There shall be no slippage of the belt that may cause temperature rises that could ignite combustible dusts.

55.2 Dust-ignition-proof electrical components shall comply with the test requirements in UL 1203 and CSA C22.2 No. ~~3025~~.

55.3 Intrinsically safe electrical components shall comply with the test requirements in UL 913 and either CSA CAN/CSA-C22.2 No. 157 or CSA CAN/CSA-C22.2 No. 60079-11.

55.4 Maximum operating temperatures on all electrical components shall be determined in accordance with 55.2 and 55.3 as appropriate. Maximum operating temperature on other parts, such as brakes shall be determined under both normal and abnormal operating conditions with a dust blanket under the test conditions specified the Temperature Test With Dust Blanket section of UL 1203 and CSA C22.2 No. 25. The maximum allowable temperature is 165°C. The temperature shall be marked as required by 57.1(i).

A1.3 These requirements do not cover battery-powered cleaning machines for household use. These products are covered by UL 1017 and CSA C22.2 No. 243.

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## BSR/UL 711, Rating and Fire Testing of Fire Extinguishers

### 1. Revision to 8.1.4

#### PROPOSAL

~~8.1.4 Hand fire extinguishers tested for a Rating Class greater than 20-B, established on the basis of outdoor fires, shall have been found eligible for a Rating Class of 20-B established on the basis of an indoor [4.65 m<sup>2</sup> (50 ft<sup>2</sup>)] test fire.~~

~~*Exception: The indoor [4.65 m<sup>2</sup> (50 ft<sup>2</sup>)] test fire shall not be required for dry chemical hand fire extinguishers tested for a Rating Class greater than 20-B, established on the basis of outdoor fires.*~~

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## BSR/UL 970, Standard for Retail Fixtures and Merchandising Displays

### 1. Revision To The Scope To Clarify The Products Covered By The Standard

#### PROPOSAL

1.1 These requirements cover non-refrigerated, or non-heated commercial displays and other case goods used in retail establishments, including bakeries and restaurants. The term display(s) will be used to refer to all of the types of products covered by this standard. The products are used in accordance with the National Electrical Code, ANSI/NFPA 70. They are intended for dry, damp, or wet locations. These displays include both electrified and non-electrified products and may include, but are not limited to:

##### a) Displays

- 1) Shelving units (Gondolas);
- 2) Merchandise kiosks (such as the mini-stores in the middle of a mall);
- 3) Point of Sale (POS);
- 4) Motorized displays;
- 5) Hanging displays;
- 6) Wall systems;
- 7) Showcases;
- 8) Display Cases;
- 9) Product platforms;
- 10) Temporary Displays

##### b) Cash stations

- 1) Cash Wraps;
- 2) check-out stands (motorized and non-motorized); and

##### c) Other types of retail fixtures or case goods

- 1) Retail use disinfecting equipment;

110.2.1 These requirements cover temporary non-refrigerated or non-heated displays used in retail establishments, including bakeries and restaurants. The products are used in accordance with the National Electrical Code, ANSI/NFPA 70. They are intended for dry locations. These temporary displays include both electrified and non-electrified and may include, but not limited to:

- a) Coupon dispensers;
- b) Holiday displays; and
- c) Point of Purchase (POP) displays.

### 2. Revisions And Additions To Section 2, Glossary, To Clarify And Align The Defined Terms With The Requirements In The Standard

**PROPOSAL**

2.69.1 RETAIL FIXTURES – Are other types of case goods used in retail outlets that are not intended to display merchandise, such as cash wraps, check-out stands, and disinfecting products.

**3. Revisions To Add References To UL 62368-1 To Provide Manufacturers An Alternative To Compliance With Requirements In UL 60950-1, with related Revisions To Replace References LPS Circuits With Low Voltage, Low Energy (LVLE) Circuits In Applicable Requirements**

**PROPOSAL**

3.2.2.1 A battery charging circuit integral to the display, a battery charger supplied with the display, or available as an accessory to the display operating at a Class 2 or LVLE power output level shall comply with the appropriate requirements. See 2.21 and ~~2.54~~ 2.62, respectively.

98.1 Direct plug-in power supplies may be the mains power supply for the cabinet product if they comply with either LVLE power sources as noted in 2.62, or Class 2 power sources as noted in 2.21. ~~when it complies with the following secondary power limits LVLE power sources as noted in 2.62.:~~

- a) ~~Class 2 power sources as noted in 2.21 or~~
- b) ~~LPS power sources as noted in 2.54.~~

**23. Revisions To Paragraph 101.2 To Clarify Construction Of Power Supplies/Drivers With Respect To Luminaires**

**PROPOSAL**

101.2 Power supplies/drivers that are provided with the luminaires specified in 101.1, but not integral with the luminaire, shall comply with ~~Section 104, Power Supplies~~ Section 97, Power Supplies/Drivers/Ballasts.

**29. Revision To Table 95.1 To Specify That Flammability Requirements Apply To Showcases**

**PROPOSAL**

*Note from Standards Project Manager: Only revised portions of Table 95.1 shown.*

**Table 95.1  
Part 1 Requirements**

Reference (Section)	Title	Applies <sup>a</sup> Not Allowed <sup>b</sup> Not Applicable (NA) <sup>c</sup> Superseded (S) <sup>d</sup>
26	Flammability	NA Applies
<del>75.32</del>	Markings – General	Applies
83.14	Instructions – General	NA

## BSR/UL 1277, Standard for Safety for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members

### 1. Jacket Thickness Comparison, Revised Table 12.3 and New 12.3.2

#### PROPOSAL

**Table 12.3**  
**Thicknesses<sup>a</sup> of overall jacket**

Calculated diameter of round assembly under jacket or calculated length of major axis of flat assembly under jacket		Minimum average thickness		Minimum thickness at any point	
inch	mm	mils	mm	mils	mm
0 – 0.425	0 – 10.80	45	1.14	36	0.91
Over 0.425 but not over 0.700	Over 10.80 but not over 17.78	60	1.52	48	1.22
Over 0.700 but not over 1.500	Over 17.78 but not over 38.10	80	2.03	64	1.63
Over 1.500 but not over 2.500	Over 38.10 but not over 63.50	110	2.79	88	2.24
Over 2.500	Over 63.50	140	3.56	112	2.84

<sup>a</sup> Thicknesses other than those covered in this table are acceptable if the finished cable employing a jacket with the other thicknesses performs acceptably in the tests described in this standard. ~~Crushing, impact, abrasion, and other tests may be part of the evaluation.~~

12.3.2 In addition, the mechanical characteristics of the cable using a thinner jacket shall be comparable in performance to a cable using the jacket thickness indicated in Table 12.3. An investigation shall include crush, impact, and abrasion tests.

### 2. Editorial Change to Table 11.1 and New Item (c) to Clause 11.1.5

#### PROPOSAL

11.1.5 The insulated conductors in a round cable shall be cabled with a length of lay that is uniform throughout the length of the cable and is not greater than indicated in Table 11.1. Grouping of the circuit conductors into pairs, triads, quads, and other precabled subassemblies is not required but is acceptable if the length of lay of the conductors in each group and of the groups in the overall assembly comply with this paragraph and with Table 11.1. The direction of lay may be changed at intervals throughout the length of the cable. The intervals need not be uniform. In a cable in which the lay is reversed:

- a) Each area in which the lay is right- or left-hand for not less than five complete twists (full 360° cycles) shall have the insulated conductors or precabled groups of insulated conductors cabled with a length of lay that is not greater than indicated in Table 11.1, and
- b) The length of each lay-transition zone (oscillated section) between these areas of right- and left hand lay shall not exceed 1.8 times the maximum length of lay indicated in Table 11.1. If the direction of lay is not reversed in a cable containing layers of conductors or groups, the direction of lay of successive layers is not specified but the outer layer shall have a left-hand



lay as defined in 11.1.8. If the direction of lay is not reversed in a single-layer cable, the conductors or groups shall have a left-hand lay. See 11.2.1 for fillers and 11.3.1 for binders.

- c) The length of lay of each conductor in a group shall comply with the tabulated value as if the group were a cable. Likewise, the length of lay of each group in a cable shall comply with the tabulated value as if each group was a conductor.

**Table 11.1**  
**Length of lay of insulated conductors and precabled groups<sup>a</sup>**

Number of insulated conductors in cable	Maximum acceptable length of lay
2	30 times conductor diameter <sup>b</sup>
3	35 times conductor diameter <sup>b</sup>
4	40 times conductor diameter <sup>b</sup>
5 or more	15 times the calculated diameter of the overall assembly but, in a multiple-layer cable, the length of lay of the conductors in each of the inner layers of the cable is not specified (governed by the construction of the cabling machine).
<p><sup>a</sup> <del>The length of lay of each conductor in a group shall comply with the tabulated value as if the group were a cable. Likewise, the length of lay of each group in a cable shall comply with the tabulated value as if each group was a conductor.</del></p> <p><sup>b</sup> "Conductor diameter" is the calculated diameter of the largest individual finished insulated conductor in the cable.</p>	

### 3. Add Laser Marking on Cable Surface, New 30.3(c)

#### PROPOSAL

30.3 One of the following means shall be used to identify the organization that is responsible for the cable [30.1(g)]:

- a) Ink printing on the outer surface of the overall cable jacket, with the ink printing complying with the test in 25.1. See 30.4 in the case of ink printing that is not tested or does not comply with the test.
- b) Indented or embossed printing on the outer surface of the overall cable jacket. See 30.6.
- c) Laser printing shall be acceptable if it does not reduce the tensile strength and ultimate elongation (unaged and after conditioning) below the minimum allowed for the material. The laser-imprinted area shall not be buffed or skived during the test.