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Project Initiation Notification System (PINS)

Section 2.5.1 of the *ANSI Essential Requirements* (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.

ANS (American Nuclear Society)

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Revision

BSR/ANS 56.8-2020 (R202x), Containment System Leakage Testing Requirements (revision of ANSI/ANS 56.8-2020)
Stakeholders: Reactor vendors, plant architect-engineers/constructors, nuclear regulatory authorities, national/international nuclear energy agencies/laboratories, nuclear facility owners/operators, national/local Governments and the public.

Project Need: A revision of the current standard is needed to address new guidelines for containment pressurization and requirements for testing containments for new small modular reactors.

Interest Categories: Owner, Vendor, Individual, University, Architect-Engineer-Constructor, Government Agency, National Laboratories/Government Facilities

This standard specifies acceptable primary containment leakage rate test requirements to assure valid testing for light water reactors and new small modular reactors. The scope includes 1) leakage test requirements; 2) test instrumentation; 3) test procedures; 4) test methods; 5) acceptance criteria; 6) data analysis; 7) inspection and recording of test results; 8) guidance on which components and pathways require testing; and 9) test frequency.

API (American Petroleum Institute)

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Revision

BSR/API Recommended Practice 754-Third Edition-202x, Process Safety Performance Indicators for the Refining and Petrochemical Industries (revision of ANSI/API Recommended Practice 754, Third Edition-2021)

Stakeholders: Safety professionals, oil industry reporting personnel, regulatory, refining professionals, petrochemical processors, any unnamed industry personnel with operating systems and processes where loss of containment has the potential to cause harm.

Project Need: The document is on a 5-year revision cycle, last published in August of 2021.

Interest Categories: Operator-owner, manufacturer-service supplier, and general interest.

This recommended practice (RP) identifies leading- and lagging-process safety indicators useful for driving performance improvement. As a framework for measuring activity, status, or performance, this document classifies process safety indicators into four tiers of leading and lagging indicators. Tiers 1 and 2 are suitable for nationwide public reporting and Tiers 3 and 4 are intended for internal use at individual facilities. Guidance on methods for development and use of performance indicators is also provided. This RP was developed for the refining and petrochemical industries, but may also be applicable to other industries with operating systems and processes where loss of containment has the potential to cause harm.

BIFMA (Business and Institutional Furniture Manufacturers Association)

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Revision

BSR/BIFMA M7.1-202x, Standard Test Method for Determining VOC Emissions from Office Furniture Systems, Components, and Seating (revision of ANSI/BIFMA M7.1-2011 (R2021))

Stakeholders: Manufacturers, specifiers, users, designers, and suppliers of furniture.

Project Need: The revision of the standard is needed to update several requirements to harmonize with global standards and expand the scope of work environments.

Interest Categories: General interest, suppliers, test labs/certification bodies, and manufacturers.

This standard Test Method is intended for determining volatile organic compound (VOCs including aldehydes) emissions from office furniture and seating under environmental and product usage conditions that are typical of those found in buildings.

BIFMA (Business and Institutional Furniture Manufacturers Association)

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Revision

BSR/BIFMA X7.1-202x, Standard for Formaldehyde & TVOC Emissions of Low-Emitting Office Furniture and Seating (revision of ANSI/BIFMA X7.1-2011 (R2021))

Stakeholders: Manufacturers, specifiers, users, designers, and suppliers of furniture.

Project Need: The revision of the standard is needed to update several requirement to harmonize with global standards and expand the scope of work environments.

Interest Categories: General interest, suppliers, test labs/certification bodies, and manufacturers.

This standard defines the acceptance criteria for VOC emissions from furniture used in offices to be classified as low-emitting product and should be used in conjunction with the ANSI/BIFMA M7.1-2011 (R2021), Standard Test Method for Determining VOC Emissions from Office Furniture Systems, Components and Seating. The acceptance criteria set forth in this Standard were not independently developed or validated by BIFMA and this is not intended to be a health- or safety-based standard. The maximum emission factor criteria were derived by BIFMA, using the ANSI consensus process, from the concentration criteria established outside of BIFMA and are consistent with Section 11.5.1 (General Calculation of Emission Factor Limits) in ANSI/BIFMA M7.1-2011 (R2021).

CSA (CSA America Standards Inc.)

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New Standard

BSR/CSA B100-202x, Hydrogen Compressors – Safety (new standard)

Stakeholders: Users, regulators, certification bodies, and manufacturers

Project Need: The development of this standard will support the safe deployment and the use of hydrogen compressors. This new standard will be a conformity assessment including the minimum safety design requirements hydrogen compressors.

Interest Categories: Users, regulators, certification bodies, and manufacturers

This Standard defines the minimum construction and safety requirements for hydrogen compressors. This Standard applies to newly manufactured equipment designed primarily to provide compressed hydrogen gas. Hydrogen compressor types covered by this Standard include, but are not limited to, reciprocating compressors, integrated combustion engines and compressor packages, and hydraulic intensifier compressors. This standard does not apply to: (a) Vehicle Fueling Appliances for vehicular fuel applications (CSA HGV 5.1); or (b) Compressor packages hydrogen dispensing stations (CSA HGV 4.8).

CSA (CSA America Standards Inc.)

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New Standard

BSR/CSA B101-202x, Hydrogen Gas Dryer – Safety (new standard)

Stakeholders: Users, regulators, certification bodies, and manufacturers

Project Need: The development of this standard will support the safe deployment and the use of hydrogen gas driers. This new standard will be a conformity assessment including the minimum safety design requirements for hydrogen gas dryers.

Interest Categories: Users, regulators, certification bodies, and manufacturers

This standard defines the minimum construction and safety requirements for a hydrogen gas dryer. This Standard applies to newly manufactured equipment designed primarily to remove water, oil, and particulate matter from a hydrogen gas stream. Hydrogen gas dryer types covered by this Standard include, but are not limited to, pressure swing absorption, heat regeneration adsorption, molecular sieve, catalysts (such as palladium), refrigerated type, or desiccant type.

CSA (CSA America Standards Inc.)

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New Standard

BSR/CSA HPIT 2-202x, Dispensing systems and components for fueling hydrogen powered industrial trucks (new standard)

Stakeholders: Users, regulators, certification bodies, and manufacturers

Project Need: The development of this standard will support the safe deployment and the use of dispensing systems and components for fueling hydrogen-powered industrial trucks. This new standard will be a conformity assessment including the minimum safety design requirements for these components and systems.

Interest Categories: Users, regulators, certification bodies, and manufacturers

This Standard applies to: (a) the mechanical and electrical features of dispensers, which includes the control system and any ancillary equipment, used to dispense compressed hydrogen gas for hydrogen-powered industrial trucks (HPITs) used for mobility/propulsion in a non-public application; (b) systems that refuel hydrogen-powered industrial vehicles to a service pressure of 25 and 35 MPa at a refueling rate of no more than 33 g/second. The requirements of this Standard are not intended to constrain innovation. When considering fuels, materials, designs, or constructions not specifically dealt with in this Standard, these alternatives are to be evaluated as to their ability to yield levels of safety and performance equivalent to or better than those prescribed by this Standard. A hydrogen powered industrial truck (HPIT) is an electric industrial truck that is powered by a fuel cell system. These vehicles include the following: electric fork lift trucks; airport tuggers; yard trucks; refrigerated trucks (reefer units); and auxiliary power units (APUs). This Standard does not apply to dispensers intended for the refueling of automotive vehicles or heavy-duty surface vehicles. This Standard does not apply to residential fueling appliances.

CSA (CSA America Standards Inc.)

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National Adoption

BSR/CSA V602-202x, Railway applications – Rolling stock – Onboard lithium-ion traction batteries (national adoption with modifications of IEC 62928) (national adoption with modifications of IEC 62928)

Stakeholders: Manufacturers, regulators, operators, and users.

Project Need: In advance of developing the standard, a technical specification will be published and used as the basis for the national standard. The development of this standard will support the safe deployment and the use of lithium-ion traction batteries for rolling stock applications as a standard does not exist for this application of this technology. Industry stakeholders have confirmed that development of a national standard for the lithium-ion traction batteries rolling stock applications would support technological advancement and deployment.

Interest Categories: Manufacturers, regulators, operators, and users.

This document applies to onboard lithium-ion traction batteries for railway applications. This document specifies the design, operation parameters, safety recommendations, data exchange, routine and type tests, as well as marking and designation. Battery systems described in this document are used for the energy storage system (ESS) for the traction power of railway vehicles such as hybrid vehicles as defined in IEC 62864-1:2016. Auxiliary batteries to supply power only to the auxiliary equipment are excluded. Subcomponents within the battery systems, e.g., battery management system (BMS) and battery thermal management system (BTMS), are also covered in this document. Power conversion equipment (e.g., chopper, converter, etc.), inductors, capacitors and switchgear are excluded from the scope of this document. General requirements for onboard ESS are described in IEC 62864-1:2016. This document specifies the lithium-ion battery technology but does not prevent the use of battery technologies other than lithium-ion technology for application as traction batteries. A hybrid energy storage system, which uses two or more energy storage technologies combined, e.g., a traction battery and double-layer capacitors, is not covered in this document.

ECIA (Electronic Components Industry Association)

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New Standard

BSR/EIA 364-124-202x, De-Icer Compatibility Test Procedure for Electrical Connectors (new standard)

Stakeholders: Electronics, electrical and telecommunications industries

Project Need: Create a new American National Standard.

Interest Categories: User, Producer, General Interest

This standard establishes a test method to determine how connector finish performs in fluid immersion.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 650-202x, Standard for Qualification of Class 1E Static Battery Chargers, Inverters, and Uninterruptible Power Supply Systems for Nuclear Facilities (new standard)

Stakeholders: Nuclear Facility Owners, Manufacturers, Specifying Engineers, Test Laboratories.

Project Need: The need for the project is to provide current, updated information, new technology, regulatory guidance, and to incorporate user feedback.

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

This standard describes methods for qualifying static battery chargers, inverters, and uninterruptible power supply (UPS) systems for Class 1E installations outside containment in nuclear facilities and does not address qualification under harsh environment (e.g., inside containment) design basis conditions.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 1267-202x, Guide for Development of Specifications for Turnkey Substation Projects (new standard)

Stakeholders: Any entity that may purchase or use a turnkey substation project or scope, or any entity that may create and write specifications for turnkey substation projects. This may include electric utilities; generation or industrial facility owners; engineer, procure, and construct (EPC) contractors; or engineering firms.

Project Need: Based on comments and feedback received during the balloting process of the 2019 guide revision, inclusion of a sample specification would be viewed as a helpful addition to the guide. Enhancements and clarifications to other sections of the guide would make the guide more helpful to users, as well.

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

This guide provides methodologies and practices for a systematic and coordinated approach for the development of requirements and specifications for turnkey substation projects.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 1936.19-202x, Recommended Practice for Image Encoding and Decoding in Unmanned Aerial Vehicle Inspection of Overhead Transmission Lines (new standard)

Stakeholders: Utilities, operation technicians and operation managers of overhead transmission line, manufacturers and suppliers of UAVs, UAVs research institutes, and power grid solution providers.

Project Need: In recent years, with the rapid expansion of power grids and many transmission lines located in high-altitude, mountainous areas, UAVs have become the main tool for inspecting overhead transmission lines. For example, State Grid Corporation of China has 1.31 million kilometers of transmission lines rated 110 kV and above, has nearly 40,000 UAVs of various types, and conducts annual intelligent inspection of 10 million transmission towers. During inspection, each UAV captures photos of each fixed-point towers and lines, with about 50 photos per tower, which amounts to about 1 GB of data. These images are sent back to the company's backend server for further processing. Thus, under weak communication network conditions, with high-security requirements, and with low-power devices, large-scale image transmission has become an urgent problem to solve. Current UAV inspection procedures have not adopted image encoding and decoding technology, and existing technology fails to meet special scenario demands, which reduces image transmission efficiency and limits the broader adoption of UAV inspections. Therefore, there is an urgent need for a unified technical specification for large-scale image data transmission in UAV inspection to support operations across diverse environments.

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

This recommended practice describes the transmission of image data at the GB level for each tower collected during unmanned aerial vehicle (UAV) inspection of overhead transmission lines. It includes system workflows, image encoding on the UAV terminal-side and corresponding decoding on the server-side, hardware and software specifications, system deployment, data interface specifications, performance and quality recommendations, and application principles. This document applies to standard-format images captured during UAV inspection using visible light. It can also serve as a valuable reference for other industries that require efficient transmission of large-scale image data in their UAV operations.

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New Standard

BSR/IEEE 1936.20-202x, Standard for Identification of Electrical Fault Risk in Power Lines using Unmanned Aircraft System (UAS) Light Detection And Ranging (LiDAR) (new standard)

Stakeholders: Power grid operation and maintenance enterprises, UAS manufacturers, and researchers in the UAS field.

Project Need: The identification risks of electrical faults in power lines is crucial for the maintenance of the power grid. There are significant advantages of using UAS LiDAR technology in this application, but the lack of standardized specifications may cause low maintenance efficiency due to unstandardized data and poor data compatibility. This standard provides data specifications to help improve compatibility. It will also help electric power system operators accurately and rapidly identify risks of electrical faults due to low crossing clearance, contact with foreign objects, and fallen power lines from tower displacement.

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

This standard specifies technical requirements, data processing methods, and risk assessment criteria using Unmanned Aircraft System (UAS) Light Detection And Ranging (LiDAR) to identify risks of electrical system faults due to low crossing clearance, contact with foreign objects, and fallen power lines due to tower displacement.

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New Standard

BSR/IEEE 1958.5-202x, Standard for Technical Requirements and Testing Methods for Hydrogen Cylinder Valves of Unmanned Aircraft Systems in Low-Temperature (-50 to -10) Environments (new standard)

Stakeholders: They are companies such as valves manufacturers, UAS users and manufacturers, hydrogen cylinder manufacturers.

Project Need: In low-temperature environments (ranging from -50°C to -10°C), the sealing performance and low-temperature resistance of hydrogen cylinder valves are highly susceptible to damage, which can affect the normal operation of hydrogen-powered UASs. By specifying valves' technical requirements and testing methods, this standard helps enhance the stable operation of hydrogen cylinders in low-temperature environments, helps improve the overall safety, performance and operational reliability of UASs.

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

This standard specifies the technical requirements, testing methods, and evaluation criteria for testing hydrogen cylinder valves of unmanned aircraft systems (UASs) in low-temperature environments (ranging from -50°C to -10°C).

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New Standard

BSR/IEEE 2413.2.1-202x, Standard for Testing Products, Systems, and Implementations (Based on IEEE 2413.2) (new standard)

Stakeholders: Developers, implementors, and users of the products and services based on IEEE P2413.2 Standard in the field of power distribution.

Project Need: This standard specifies test procedures for compliance and interoperability testing of devices, systems, and end-to-end solutions implementing IEEE 2413.2 standard.

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

This standard specifies test procedures for compliance and interoperability testing of devices, systems, and end-to-end solutions implementing IEEE Std 2413.2. The standard also defines Quality of Experience (QoE) tests to improve the quality of implementations. The standard describes application scenarios and use cases for IEEE Std 2413.2-based implementations and performance expectations. The standard provides recommended practices for implementation of devices, systems, and end-to-end solutions implementing IEEE Std 2413.2. The standard provides a collection of examples of real-life implementations allowing to enhance test procedures with the input from the field. This standard includes a spectrum of test procedures from module level to the end-to-end test cases.

IEEE (Institute of Electrical and Electronics Engineers)

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Revision

BSR/IEEE 2621.1-202x, Standard for Connected Medical Device Security Assurance Evaluation—Connected Electronic Product Security Evaluation Programs (revision of ANSI/IEEE Std 2621.1-2022/UL 2621-1:2022)

Stakeholders: Device manufacturers, clinicians, regulators, certification bodies, independent cybersecurity/privacy experts, healthcare facilitators, test labs, software developers, and patients/consumers.

Project Need: Medical devices used for monitoring, diagnosing, and treating patients provide life-saving benefits and enable effective clinical workflows. Because these devices also transmit and store sensitive patient information to other devices and users, integration of medical devices into networks introduces cybersecurity issues that have the potential to adversely impact patient safety, data integrity, and privacy. This cybersecurity framework is essential to help manufacturers develop and field more secure, and therefore safer, products. Industry adoption of this cybersecurity standard is intended to streamline compliance with cybersecurity requirements that have been established by national and regional regulatory bodies. Independent evaluation and security testing of the device by a competent and accredited testing laboratory will build trust with health care professionals and patients by providing some assurance that the medical device is secure when configured and used as intended by the manufacturer. This standard, therefore, is needed to aid medical manufacturers in the development of more secure, and therefore safer, products as well as to provide the framework for enhancing assurance across the relevant stakeholder community, as described in section 5.6

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

This standard defines the framework of a program that evaluates the security of connected medical products. The standard describes: (1) How this standard applies the ISO/IEC 15408 security evaluation framework; (2) A framework for authorizing independent testing labs to be used in the connected medical device evaluation program; (3) A framework for certifying products; (4) A framework for approving protection profiles and security targets to be used in the security evaluation program; (5) A framework for maintenance of device security assurance post-certification.

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Revision

BSR/IEEE 2621.2-202x, Standard for Connected Medical Device Security—Information Security Requirements for Connected Medical Devices (revision of ANSI/IEEE Std 2621.2-2022/UL 2621-2:2022)

Stakeholders: Device manufacturers, clinicians, regulators, certification bodies, independent cybersecurity/privacy experts, healthcare facilitators, test labs, software developers, and patients/consumers

Project Need: This standard specifies information security requirements for Connected Medical Devices (CMDs). The standard describes essential security services provided by the CMD and serves as a foundation for a secure CMD architecture. This standard is needed to aid medical device manufacturers in the development of more secure, and therefore safer, products as well as to provide the framework for enhancing assurance across the relevant stakeholder community, as described in section 5.6.

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

This standard describes security functional requirements for connected medical devices. It also defines three security assurance packages that frame the extent to which independent evaluation and testing of the Target of Evaluation (TOE) is conducted. The standard uses the development and evaluation process defined in ISO/IEC 15408 and ISO/IEC 18045. This standard defines the IT security requirements for a generic type of TOE and specifies the security measures to be offered by that TOE to meet stated requirements.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 3476.1-202x, Standard for Unique IDs and Smart Tags for Supply Chain and Asset Traceability for the Electric Grid - Structures and Support (new standard)

Stakeholders: Manufacturers of electric grid equipment and materials, utilities and other end users

Project Need: This project is needed to enable the creation of industry standard unique IDs and smart tags to enable supply chain and asset traceability. Use cases for SCATE include asset management, mitigating the risk of systemic performance issues and recalls, and mutual assistance with other utilities.

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

This standard provides the Supply Chain and Asset Traceability for Energy (SCATE) Data Model for Structures and Supports using the methodology defined in P3476. This standard defines the attributes, domain values, and linked data types for wood poles.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 3476.5-202x, Standard for Supply Chain and Asset Traceability for Energy - Energy Transformation Devices (new standard)

Stakeholders: Manufacturers of electric grid equipment and materials, utilities and other end users

Project Need: This project is needed to enable the creation of industry standard unique IDs and smart tags to enable supply chain and asset traceability. Use cases for SCATE include asset management, mitigating the risk of systemic performance issues and recalls, and mutual assistance with other utilities.

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

This standard provides the Supply Chain and Asset Traceability for Energy (SCATE) Data Model for Energy Transformation Devices using the methodology defined in P3476. The scope of this version of the standard includes Liquid Filled, Dry Type, and Power Transformers defined in IEEE C57.12.00.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 3476.7-202x, Standard for Unique IDs and Smart Tags for Supply Chain and Asset Traceability for the Electric Grid - Surge Protection Devices (new standard)

Stakeholders: Manufacturers of electric grid equipment and materials, utilities and other end users

Project Need: This project is needed to enable the creation of industry standard unique IDs and smart tags to enable supply chain and asset traceability. Use cases for SCATE include asset management, mitigating the risk of systemic performance issues and recalls, and mutual assistance with other utilities.

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

This standard provides the Supply Chain and Asset Traceability for Energy (SCATE) Data Model including attributes, domain values, and linked data types for surge protection devices using the methodology defined in P3476. The standard addresses surge arresters and sheath voltage limiters defined in IEEE C62.11 and IEEE C62.62.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 3705-202x, Recommended Practice for the Selection of Power Converters for a Distribution Grid in Photovoltaic-Energy Storage-DC-Flexibility Integrated Buildings (new standard)

Stakeholders: They are owners and operators of industrial, commercial, and residential buildings, as well as management departments of electricity suppliers.

Project Need: This document provides recommendations for implementing PEDF buildings systems to optimize energy efficiency, reduce carbon emissions, and enhance power reliability. It addresses key challenges like energy waste and grid instability by standardizing converter selection for PV, storage, and grid interfaces. The framework enables cost-effective, sustainable building operations while improving power quality and supporting climate goals through renewable integration and smart DC power management.

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

This document contains the parameter selection, functional requirements, configuration principles, and control protection of various inverters in photovoltaic-energy storage-DC-flexibility (PEDF) integrated buildings. This recommended practice applies to the design or renovation of industrial and commercial PEDF integrated buildings.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 3710-202x, Guide for Design of Modular Data Centers (new standard)

Stakeholders: Data Center owners, operators, design engineers, construction companies, equipment manufacturers

Project Need: The rapid expansion of data center construction has highlighted the need for modular data center solutions, which offer flexibility, scalability, and cost-effectiveness. However, the lack of consistent design standards for these modular solutions has led to variability in quality and safety. This project addresses the critical need for standardized guidelines to ensure that modular data centers are designed and installed in a manner that meets the stringent requirements of modern data center operations. Standardization will help in reducing design and installation errors, improving safety, and ensuring that modular data centers can be seamlessly integrated with traditional data center infrastructure. The differences between NA installation and product designs and those outside of NA are such that a combined standard is impractical, but concepts outlined in this standard can be applied globally.

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

This document provides guidance for North American (NA) standards-based designs of Modular Data Centers (MDCs) of, three types: power distribution only, Information Technology (IT) installation infrastructure only, and power/IT combined consistent with applicable electrical installation codes and product safety standards. It does not include the IT components but includes the electrical considerations for proper installation.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE 4333-202x, Standard for General Requirement of Anode-free Lithium Metal Battery and Battery Pack (new standard)

Stakeholders: Battery manufacturers, battery users, third-party testing organizations, universities, and research institutions.

Project Need: Anode-free lithium metal batteries, as a new generation of high-energy-density energy storage technology, have experienced rapid development in recent years in fields such as drones and specialized applications. However, the global market lacks unified standards, leading to significant disparities in product performance, safety, and testing methods. The industry urgently needs international standards to regulate technical approaches, manufacturing processes, and evaluation systems. This will mitigate market fragmentation risks, secure supply chains, drive technological innovation and large-scale adoption, while also boosting consumer confidence and promoting fair competition in global trade.

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

This standard specifies the terms and definitions, test conditions, electrical performance requirements, electrical safety requirements, environmental safety requirements, test methods, quality assessment and labeling, packaging, transportation and storage of anode-free lithium metal batteries and battery packs.

IEEE (Institute of Electrical and Electronics Engineers)

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New Standard

BSR/IEEE BSR/IEE 3591-202X, Standard for Fair Decision Making through Causal Analysis (new standard)

Stakeholders: Policymakers who create AI policy, regulatory entities who audit AI models for bias and discrimination, businesses that develop and deploy AI models, academics who conduct research on AI and decision making, as well as consumers and their advocates who will be impacted by the decisions made by AI models.

Project Need: AI companies have struggled with building AI systems that are fair and in compliance with antidiscrimination laws and regulations. Currently, AI companies have resorted to hiring expensive lawyers and utilizing auditing tools because they cannot mathematically prove that their AI models are unlikely to illegally discriminate. The problem is that fairness is fundamentally causal, while supervised machine learning is fundamentally correlational. This project provides a means for making supervised machine learning causal, providing robust mathematical guardrails against illegal discrimination so that companies will be more likely to comply with the law. This standard may enable companies to build AI models that are more accurate, transparent, and fair than what exists in the marketplace today.

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

This standard describes how to perform causal fairness analysis to make fairer decisions in various high-stakes applications (e.g., credit, employment, education) that are more likely to be compliant with a country's antidiscrimination laws and regulations. It provides a standardized fairness model that encodes knowledge and assumptions about how to map the causal relationships between different variables such as a protected class (e.g., race, gender) and an outcome. The document provides the reader with a standardized language for directly translating concepts among the law, causal inference, and supervised machine learning. The standard provides criteria for selecting which variables to include in a machine learning model, how to train and deploy the model to make fairer predictions and decisions, as well as how to evaluate the model to determine the likelihood for illegal discrimination. However, specific algorithms for debiasing the data in a machine learning model to help ensure fairness are not covered in this standard. Finally, this standard is designed to be focused solely on legal compliance.

IEEE (Institute of Electrical and Electronics Engineers)

Teresa Belmont <t.belmont@ieee.org> | 445 Hoes Lane, 3rd Floor | Piscataway, NJ 08854 www.ieee.org

Revision

BSR/IEEE C57.120-202x, Guide for Loss Evaluation of Distribution and Power Transformers and Reactors (revision of ANSI/IEEE C57.120-2017)

Stakeholders: Transformer purchasers, users, and manufacturers

Project Need: The guide provides a common methodology for transformer users to evaluate the economic benefit of alternate transformer designs and a common method to communicate those requirements to transformer manufacturers.

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

This guide offers a methodology to determine, and thereby specify, the economic value of liquid immersed and dry-type distribution transformers, power transformers, and reactors. The guide provides formulas by which the costs of energy, power, financing, and the loading pattern of equipment can be converted to monetary values per kilowatt of the losses.

ISA (Organization) (International Society of Automation)

Eliana Brazda <ebrazda@isa.org> | 3252 S. Miami Blvd, Suite 102 | Durham, NC 27703 www.isa.org

New Standard

BSR/ISA 62443-6-1-202x, Security for industrial automation and control systems - Part 6-1: Security evaluation methodology for IEC 62443-2-4 (new standard)

Stakeholders: Those responsible for specifying, designing, developing, implementing, or managing IACS, with applicability in other sectors.

Project Need: To support service providers and evaluators to do a conformity assessment by evaluating the security program against the requirements of IEC 62443-2-4.

Interest Categories: Producers; users; general; architect-engineer, engineer-constructors, integrators; testing/certification/approval; and regulatory/government

This part of ISA 62443 specifies the evaluation methodology to support interested parties (e.g., during conformity assessment activities) to achieve repeatable and reproducible evaluation results against IEC 62443-2-4 requirements. This document is intended for first-party, second-party, or third-party conformity assessment activity, for example, by product suppliers, service providers, asset owners, and conformity assessment bodies.

ITSDF (Industrial Truck Standards Development Foundation, Inc.)

Christopher Merther <chris.merther@itsdf.org> | 1750 K Street NW, Suite 460 | Washington, DC 20006 www.indtrk.org

Revision

BSR/ITSDF B56.5-202x, Safety Standard for Driverless, Automatic Guided Industrial Vehicles and Automated Functions of Manned Industrial Vehicles (revision of ANSI/ITSDF B56.5-2024)

Stakeholders: Users and manufacturers of driverless, automatic guided industrial vehicles and users and manufacturers of automated functions on manned industrial vehicles.

Project Need: Update requirements to current state of art.

Interest Categories: Users, manufacturers, general interest, distributors

This Standard defines the safety requirements relating to the elements of design, operation, and maintenance of powered, not mechanically restrained, unmanned automatic guided industrial vehicles and the system of which the vehicles are a part. It also applies to vehicles originally designed to operate exclusively in a manned mode but which are subsequently modified to operate in an unmanned, automatic mode, or in a semiautomatic, manual, or maintenance mode.

ITSDF (Industrial Truck Standards Development Foundation, Inc.)

Christopher Merther <chris.merther@itsdf.org> | 1750 K Street NW, Suite 460 | Washington, DC 20006 www.indtrk.org

Revision

BSR/ITSDF B56.10-202x, Manually Propelled Low Lift, High Lift, and Scissors Lift Pallet Industrial Trucks (revision of ANSI/ITSDF B56.10-2012 (R2019))

Stakeholders: Users and manufacturers of manually propelled low-lift, high-lift, and scissor-lift pallet industrial trucks.

Project Need: Current requirements need updating to maintain state-of-the-art and additional industrial truck type requirements need to be added.

Interest Categories: Distributor, Employee/Union, General Interest, Manufacturer, Owner, User

This Standard defines the safety requirements relating to the elements of design, operation, and maintenance of manually propelled low-lift, scissor-lift pallet, and high-lift industrial trucks controlled by a walking operator, and intended for use on level, improved surfaces.

NEMA (ASC C29) (National Electrical Manufacturers Association)

Connor Grubbs <Connor.Grubbs@nema.org> | 1812 N. Moore Street | Rosslyn, Virginia 22209 www.nema.org

Revision

BSR C29.2B-202x, Standard for Wet Process Porcelain and Toughened Glass - Transmission Suspension Type (revision of ANSI C29.2B-2013 (R2023))

Stakeholders: Manufacturers, Electric Power Utilities, HV Transmission systems

Project Need: Need to revise existing standard

Interest Categories: Producer, User, and General Interest

This standard covers transmission suspension-type insulators, 9 inches (228.6 millimeters) in diameter and larger, made of wet-process porcelain or of toughened glass and used in the transmission of electrical energy.

NENA (National Emergency Number Association)

Nena Staff <crm@nena.org> | 1700 Diagonal Road, Suite 500 | Alexandria, VA 22314 www.nena.org

Reaffirmation

BSR/NENA STA-041.1-2022 (R202x), NENA Telecommunicator Cardiopulmonary Resuscitation (T-CPR) Standard (reaffirmation of ANSI/NENA STA-041.1-2022)

Stakeholders: Public Safety Answering Point (PSAP) and dispatch operations personnel, emergency medical responders, Emergency Medical Dispatch (EMD) protocol developers and SMEs, 9-1-1 industry partners, and others with a vested interest in Telephone CPR standards.

Project Need: Reaffirmation

Interest Categories: Users, Producers, General Interests

Reaffirmation of the NENA Telecommunicator Cardiopulmonary Resuscitation (T-CPR) Standard.

PEARL (Professional Electrical Apparatus Reconditioning League)

Jenn Brake <brakej@pearl1.org> | 2551 Lake Road | Ontario, NY 14519 www.pearl1.org

New Standard

BSR/PEARL 001.1-202x, Standard for Certification of Electrical Equipment Reconditioning Technicians (EERT) (new standard)

Stakeholders: Technicians, Employers, Government, Facility Owners

Project Need: The reconditioning of electrical equipment plays a vital role in extending the life of critical infrastructure while promoting cost savings, sustainability, and resource conservation. However, improperly reconditioned equipment can introduce serious risks, including: electrical failures, fire hazards, operational downtime, injury, or loss of life. As demand grows for reconditioned and reused electrical apparatus, so does the need for trained professionals who can perform these services to the highest safety and performance standards. The PEARL Standard for Certification of Electrical Equipment Reconditioning Technicians (EERT) addresses this need by providing an industry-wide framework.

Interest Categories: Users, General Interest, Producers, Government

This standard establishes the minimum requirements for the qualification and certification of electrical technicians working in the inspection, testing, evaluation, and reconditioning of electrical apparatus and equipment in accordance with the technical and ethical standards promoted by the Professional Electrical Apparatus Reconditioning League (PEARL).

TPI (Truss Plate Institute)

Jay Jones <jpjones@tpinst.org> | 2670 Crain Highway, Suite 203 | Waldorf, MD 20601 www.tpinst.org

New Standard

BSR/TPI 2-202x, National Standard for Structural Testing of Metal Plate Connected Wood Trusses (new standard)

Stakeholders: Contractors, Building Owners and Developers, Architects, Truss Manufacturers, Truss Designers, Structural Engineers, Building Code Officials, Quality Assurance Inspectors

Project Need: There is currently no active ANSI-approved standard that provides procedures for structural testing of MPC wood trusses. Although a previous standard, ANSI/TPI 2-1995, addressed this need, it was not reaffirmed or revised within the required 10-year period and is no longer in effect. This project will build upon the original TPI 2 standard, updating and expanding its content to reflect current industry practices. In addition to updating the existing objectives, the new standard will introduce a procedure specifically for developing design values from testing.

Interest Categories: USERS: Truss Manufacturers, Truss Engineers, Testing facilities, Software Developers, Forensic Engineers;

PRODUCERS: Truss Manufacturers, Connector Plate Suppliers, Lumber Suppliers;

GENERAL INTEREST: Code Officials, Academia, Quality Assurance Companies

This standard establishes procedures for testing and evaluating Metal-Plate Connected (MPC) wood trusses for four distinct objectives: (1) determining truss stiffness, (2) testing for design confirmation, (3) establishing design capacities, and (4) assessing deflection recovery performance. The standard outlines methods for conducting each type of test and provides guidance on interpreting and applying the results to support design validation, product evaluation, and quality assurance.

TPI (Truss Plate Institute)

Jay Jones <jpjones@tpinst.org> | 2670 Crain Highway, Suite 203 | Waldorf, MD 20601 www.tpinst.org

New Standard

BSR/TPI 3-202x, National Design Standard for Bracing Metal Plate Connected Wood Trusses (new standard)

Stakeholders: Framers that use MPC wood trusses, Contractors, Building Owners and Developers, Truss Manufacturers, Truss Designers, Engineers, Building Code Officials, Consumers of structures that use MPC wood trusses

Project Need: The new TPI 3 standard addresses critical gaps in bracing design for metal plate connected wood trusses. Unlike the prescriptive guidance commonly available in the industry, the TPI 3 standard provides an engineered approach. It enables designers to handle conditions that fall outside the scope of prescriptive methods, ensuring greater flexibility and precision. By offering a unified methodology that can be incorporated into model codes, the standard will allow for enforcement and promote consistency.

Interest Categories: USERS: Truss Designers, Building Designers, Engineers;
PRODUCERS: MPC Wood Truss Manufacturers, Suppliers to MPC Wood Truss Industry;
GENERAL INTEREST: Code Officials, Academia, Consumers of MPC Wood Trusses

The TPI 3 is a structural design standard developed specifically for engineers, focusing on the design of both temporary and permanent bracing for metal plate connected wood trusses. The standard includes general bracing concepts, critical loads to consider during the design process, and effective methods to resolve bracing forces. It also includes guidance on ground bracing for temporary applications, a method to determine bracing forces, and provisions for designing bracing members and their connections.

ULSE (UL Standards and Engagement)

Madison Lee <madison.lee@ul.org> | 1603 Orrington Ave, Suite 2000 | Evanston, IL 60201 <https://ulse.org/>

New Standard

BSR/UL 2850-202x, Standard for Safety for Vehicle Systems of Electric Scooters and Motorcycles (new standard)

Stakeholders: This standard will apply to a large cross-section of groups and individuals. These specific individuals would include producers, supply chain, government, and AHJs.

Project Need: ULSE is seeking ANSI approval on a new joint standard for the US and Canada, UL 2850. This standard will address a gap in system level standards for electric scooters and electric motorcycles which are growing in popularity. By having a comprehensive safety standard addressing the electrical system safety of electric scooters and electric motorcycles, it will serve to accelerate technology through a demonstrated track record of electrical system safety. This activity leads to improved designs and innovative implementation opportunities that support sustainable development objectives to create safe communities. Use of the Standard will alleviate uncertainty amongst consumers, retailers, distributors, facility owners, AHJs, and electric vehicle system dealerships as to the relative safety of these products.

Interest Categories: Producer, Supply Chain, General, Authorities Having Jurisdiction, Government, and Testing & Standards Organizations

This first issue of the Standard for Safety for Vehicle Systems of Electric Scooters and Motorcycles, UL 2850, is intended to be a joint standard for the US and Canada covering the electrical systems of two- or three-wheeled electric scooters and electric motorcycles with respect to a risk of fire, electric shock, and explosion hazards associated with the battery powered electrical system during charging and discharging (use). This standard does not cover any other electrically powered vehicle other than electric scooters and electric motorcycles, including minibikes, as defined within the standard.

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

* Standard for consumer products

Comment Deadline: August 24, 2025

ACCA (Air Conditioning Contractors of America)

1520 Belle View Boulevard, #5220, Alexandria, VA 22307 | david.bixby@acca.org, www.acca.org

Revision

BSR/ACCA 11 Manual Zr-202x, Residential Zoning (revision of ANSI/ACCA 11 Manual Zr-2018)

Manual Zr provides procedures and requirements for designing zoned comfort systems for residential buildings, including single-family detached homes, duplex and triplex homes, row and townhouses, and large, multi-family structures that are in accordance and compatible with Manual J procedures. The proposal is to correct an error in the formula in Figure 2-2 related to Air - Air Cooling, referenced under N2-9, Bypass Duct Relief.

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

Send comments (copy psa@ansi.org) to: David Bixby; david.bixby@acca.org

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

180 Technology Pkwy, Peachtree Corners, GA 30092 | mgraham@ashrae.org, www.ashrae.org

Addenda

ASHRAE Addendum k to ANSI/ASHRAE Standard 34-2024, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2022)

This proposed addendum adds the zeotropic refrigerant blend R-4103A to Tables 4-2 and D-2.

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

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

Comment Deadline: August 24, 2025

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

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

Addenda

BSR/ASHRAE/IES Addendum b to ANSI/ASHRAE/IES Standard 90.2-2024, High-Performance Energy Design of Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.2-2024)

This addendum updates Table 5-1 to include the latest standards for efficient residential space heating, cooling, and water heating equipment. It also introduces demand response requirements. Finally, this addendum modifies the alterations section to provide additional flexibility for trade-offs and the option of using a new, no-additional-energy path.

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

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

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

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

Addenda

BSR/ASHRAE/IES Addendum df to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This addendum updates envelope modeling rules for Section 12 budget design to reflect the current prescriptive requirements in Section 5.

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

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

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

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

Addenda

BSR/ASHRAE/IES Addendum dg to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

Addendum dg clarifies the text of 8.4.2 regarding automatic receptacle control and adds a subsection to explain how the controls should function based on time-of-day or occupancy.

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

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

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

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

Addenda

BSR/ASHRAE/IES Addendum dj to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This addendum adds pool heater efficiency requirements and specifies the options for a compliant system, which allows a choice between several different technologies that have proven cost-effective in Climate Zones 0-8.

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

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

Comment Deadline: August 24, 2025

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

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

Addenda

BSR/ASHRAE/IES Addendum dq to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This addendum updates lighting modeling rules in Section 12 and Appendix G to align with the current prescriptive requirements in Section 9.

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

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

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105 | mmilla@nsf.org, www.nsf.org

Revision

BSR/NSF 53-202x (i165r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2024)

The POU and POE systems addressed by this standard are designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality. Systems covered under this standard are intended to reduce substances that are considered established or potential health hazards.

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

Send comments (copy psa@ansi.org) to: Monica Milla <mmilla@nsf.org>

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105 | mmilla@nsf.org, www.nsf.org

Revision

BSR/NSF 58-202x (i115r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2024)

The point-of-use (POU) RO drinking water treatment systems addressed by this standard are designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality. Systems covered by this standard are intended for reduction of total dissolved solids (TDS) and other contaminants specified herein.

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

Send comments (copy psa@ansi.org) to: Monica Milla <mmilla@nsf.org>

ULSE (UL Standards and Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | sabrina.khrebto@ul.org, <https://ulse.org/>

New Standard

BSR/UL 1400-2-202X, Standard for Safety for Cables in Fault-Managed Power Systems (new standard)

Proposed First Edition of the Standard for Safety for Cables in Fault-Managed Power Systems.

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

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

Comment Deadline: August 24, 2025

ULSE (UL Standards and Engagement)

1603 Orrington Ave, Evanston, IL 60201 | olivia.lawson@ul.org, <https://ulse.org/>

New Standard

BSR/UL 2200A-202x, Fire Containment Testing of Stationary Engine Generator Enclosures (new standard)

This revision of ANSI/UL 2200A covers: The First Edition of the Standard for Fire Containment Testing of Stationary Engine Generator Enclosures, UL 2200A, as an American National Standard.

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

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

ULSE (UL Standards and Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | sabrina.khrebto@ul.org, <https://ulse.org/>

New Standard

BSR/UL 2996-202X, Standard for Safety for In-Ground Boxes (new standard)

Topic 1. Proposed First Edition of the Standard for Safety for In-Ground Outlet Boxes.

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

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

ULSE (UL Standards and Engagement)

12 Laboratory Drive, RTP, NC 27709 | sean.mcalister@ul.org, <https://ulse.org/>

Revision

BSR/UL 588-202x, Standard for Safety for Seasonal and Holiday Decorative Products (revision of ANSI/UL 588 -2024)

The following changes in requirements are being proposed for your review: (1) Optional Lamp Replacement Instructions for LED series-connected Lighting Strings; (2) Series-Connected LED Lamps employing Dumet Wire; (3) LED Lamps - Glass Envelopes; (4) Battery Circuit Clarification; (5) Clarification of the Requirements for Series-connected Lampholders; (6) Wiring Device - Non-Standardized Connector Clarification.

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

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

ULSE (UL Standards and Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | celine.eid@ul.org, <https://ulse.org/>

Revision

BSR/UL 651A-202x, Standard for Safety for Schedule 40 and 80 High Density polyethylene (HDPE) Conduit (revision of ANSI/UL 651A-2024)

Clarification to Resistance to impact test Clause 7.2.2.

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

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

Comment Deadline: August 24, 2025

ULSE (UL Standards and Engagement)

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

Revision

BSR/UL 746S-202x, Standard for Safety for Evaluation of Sustainable Polymeric Materials for Use in Electrical Equipment (revision of ANSI/UL 746S-2025)

This proposal for UL 746S covers the following topic: Clarification of requirements for the evaluation of mechanically recycled plastics with consistent identification and without consistent identification provided in Subsection 6.2 and Subsection 6.3, respectively. An earlier version of the proposal topic was published by ULSE in CSDS for ballot on May 9, 2025.

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

Send comments (copy psa@ansi.org) to: <https://csds.ul.com/ProposalAvailable>

ULSE (UL Standards and Engagement)

12 Laboratory Drive, RTP, NC 27709 | sean.mcalister@ul.org, <https://ulse.org/>

Revision

BSR/UL 2388-202x, Standard for Safety for Flexible Lighting Products (revision of ANSI/UL 2388-2023)

The following changes in requirements are being proposed for your review: (1) Introduction of New Requirements for Button or Coin Cell Batteries in Accordance with UL 4200A; (2) Removal of Appendix A.

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

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

Comment Deadline: September 8, 2025

AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 | tambrosius@aafs.org, www.aafs.org

New Standard

BSR/ASB Std 032-202x, Standard for a Training Program in Bloodstain Pattern Analysis (new standard)

This document provides minimum pre-training educational requirements for an individual currently in, or entering into, a bloodstain pattern analyst training program, and the minimum training requirements that a trainee must successfully complete prior to practicing as a bloodstain pattern analyst. This document also includes the required components of a mentorship program, including mentoring and evaluation of casework, mock casework, as well as courtroom preparation and testimony.

Single copy price: Free

Obtain an electronic copy from: Document and comments template can be viewed on the AAFS Standards Board website at: <https://www.aafs.org/academy-standards-board>

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

Comment Deadline: September 8, 2025

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST MW-RN-202x, Protocol for the Collection, Transfer, and Measurement of Radon in Water (revision of ANSI/AARST MW-RN-2020)

This standard of practice contains minimum requirements and guidance for measuring radon in water that enters a building through groundwater supplies for determining if mitigation is necessary to protect current and future occupants of dwellings and other buildings. This standard includes procedures for the collection and transport of water samples, as well as protocols for the quantitative transfer of the sample to a measurement device to determine radon concentrations in water.

Single copy price: \$TBD

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

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

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST SGM-MFLB-202x, Soil Gas Mitigation Standards for Existing Multifamily, School, Commercial and Mixed-Use Buildings (revision of ANSI/AARST SGM-MFLB-2022)

This standard of practice specifies minimum requirements for methods that mitigate risks to occupants posed by the presence of radon gas and chemical vapors or gas in existing multifamily, school, commercial, and mixed-use buildings.

Single copy price: \$TBD

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

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

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

Revision

BSR/AARST SGM-SF-202x, Soil Gas Mitigation Standards for Existing Homes (revision of ANSI/AARST SGM-SF-2023)

This standard of practice specifies minimum requirements for methods that mitigate risks to occupants posed by the presence of radon gas and chemical vapors or gas in existing homes. This standard of practice is applicable to existing low-rise residential structures often classified as single-family structures and individual dwellings within a shared structure that contain no more than four attached dwelling units on a contiguous foundation.

Single copy price: \$TBD

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

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

Comment Deadline: September 8, 2025

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

351 N Williamson Blvd, Daytona Beach, FL 32114-1112 | smithr@apcointl.org, www.apcointl.org

New Standard

BSR/APCO 1.125.1-202X, Non 9-1-1 Call Processing and Dispatch (new standard)

As technology evolves, and new services become available to the public, it is likely that ECCs will be tasked with receiving and processing calls from sources other than 9-1-1. Unlike legacy administrative line calls, these calls may be received from 2-1-1 and 9-8-8 centers and may require new policies and procedures for the use of alternative resources and potentially even new technology. This document is intended to provide guidance on how to incorporate these types of outside referral services into the traditional 9-1-1 landscape.

Single copy price: Free

Obtain an electronic copy from: standards@apcointl.org

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

ASABE (American Society of Agricultural and Biological Engineers)

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

Revision

BSR/ASABE S642.1 MONYEAR-202x, Recommended Methods for Measurement and Testing of Electromagnetic Radiation Sources for Plant Growth and Development (revision and redesignation of ANSI/ASABE S642-SEPT2018 (R2024))

This document describes methods for measurement and testing of electromagnetic radiation sources, both passively cooled and actively cooled, with a spectral range between 280 nm and 800 nm, used for plant growth and development. These methods are necessary to obtain information about device characteristics and long-term change behaviors. This document is intended to cover LED as well as non-LED sources such as Incandescent, Fluorescent, High Intensity Discharge (HID) including High Pressure Sodium (HPS), Metal Halide (MH), or other sources used for plant growth and development.

Single copy price: Free

Obtain an electronic copy from: wall@asabe.org

Send comments (copy psa@ansi.org) to: Britni Wall <wall@asabe.org>

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

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

Addenda

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 169-2021, Climatic Data for Building Design Standards (addenda to ANSI/ASHRAE Standard 169-2021)

This addendum adds new abbreviations and acronyms and revises and updates the data and tables.

Single copy price: Free

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

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

Comment Deadline: September 8, 2025

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

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

Addenda

BSR/ASHRAE/IES Addendum ca to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)

This is a second public review of proposed changes to the Additional Efficiency Requirements located in Section 11. This proposal contains independent substantive changes to address commenter feedback during the first public review. The required number of energy credits in Table 11.5.1 has been adjusted. Other modifications address lighting credits L02, L03, L05, and L06; load management credits G01-G10; renewable credit R01; electric vehicle charging and power export, G08 and G09; commercial dishwashers W11; and have been made to clarify language and/or provide greater flexibility.

Single copy price: Free

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

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

AWWA (American Water Works Association)

6666 W. Quincy Avenue, Denver, CO 80235 | mrohr@awwa.org, www.awwa.org

Revision

BSR/AWWA C203-202x, Coal-Tar Protective Coatings and Linings for Steel Water Pipe and Fittings (revision of ANSI/AWWA C203-2020)

This standard provides the minimum requirements for coal-tar protective coating and lining systems used in the water supply industry for buried steel water pipe and fittings.

Single copy price: Free

Obtain an electronic copy from: ETSupport@awwa.org

Send comments (copy psa@ansi.org) to: AWWA, Paul J. Olson (polson@awwa.org)

Comment Deadline: September 8, 2025

CSA (CSA America Standards Inc.)

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

Reaffirmation

BSR Z21.75/CSA 6.27 (R202x), Connectors for Outdoor Gas Appliances and Manufactured Homes (same as CSA 6.27) (reaffirmation of ANSI Z21.75-2016 (R2020))

This Standard applies to newly produced assembled connectors constructed entirely of new, unused parts and materials. Such connectors are intended for exterior use above ground for making the following non-rigid connections:

- (a) between the gas supply and the gas inlet of an appliance for outdoor installation that is not frequently moved after installation. These connectors are not intended for use with wheeled, caster mounted, or portable appliances;
- (b) between the permanent gas outlet of a manufactured home community (mobile home park) or individual site and the piping inlet on a park trailer or a manufactured (mobile) home; or (c) between sections of a multiple section manufactured (mobile) home. Connectors covered by this standard are considered suitable for use with natural, manufactured, mixed and propane gases and LP gas-air mixtures, are for use on piping systems operating at fuel gas pressures not in excess of 1/2 lb/in² (3.5 kPa) and shall have a nominal length of not less than 1 ft (0.31 m) nor more than 6 ft (1.83 m).

Single copy price: Free

Obtain an electronic copy from: ansi.contact@csagroup.org

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

CTA (Consumer Technology Association)

1919 South Eads Street, Arlington, VA 22202 | KHaresign@cta.tech, www.cta.tech

New Standard

BSR/CTA 2124-202x, Characteristics and Requirements for Integrated Continuous Glucose Monitoring Solutions for Consumer Use Cases (new standard)

This standard provides guidelines and identifies design considerations for consumer general wellness software products that use data from Integrated Continuous Glucose Monitors (iCGMs), generally focused on overarching health and wellness and the electronic display of medical device data, which may include certain remote or secondary displays that solely display iCGM data and do not enable immediate awareness for potential clinical intervention.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

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

IES (Illuminating Engineering Society)

85 Broad Street, 17th Floor, New York, NY 10004 | pmcgillicuddy@ies.org, www.ies.org

Revision

BSR/IES LS-1-202x, Lighting Science: Nomenclature and Definitions for Illuminating Engineering (revision of ANSI/IES LS-1-22)

This document clarifies and standardizes the nomenclature used in the lighting industry. Revisions include definitions for Longitudinal and Transverse light distribution and roadway lines, changing "lamp" to "light source", and terms and definitions related to temporal light modulation.

Single copy price: Free

Obtain an electronic copy from: pmcgillicuddy@ies.org

Send comments (copy psa@ansi.org) to: Patricia McGillicuddy <pmcgillicuddy@ies.org>

Comment Deadline: September 8, 2025

IES (Illuminating Engineering Society)

85 Broad Street, 17th Floor, New York, NY 10004 | pmcgillicuddy@ies.org, www.ies.org

Revision

BSR/IES RP-11-202x, Lighting for Interior and Exterior Residential Environments (revision of ANSI/IES/ALA RP-11-20)

Lighting design objectives, criteria for quantity and quality of illuminance, lighting methods, types and uses of equipment, energy use, and electrical code considerations for residential lighting. Various solutions that address residential lighting problems are also presented. This revision removes content about legacy light sources, additional content regarding exterior lighting environmental concerns, updated luminaire images, new content about visual glare, UV from LEDs and fading, technical guidance for LEDs and dimmers, new design strategies for integrated lighting, use of Power Over Ethernet (POE), sustainability goals, color tuning, halls, home offices, bedrooms, closets, home gyms, home pools, artworks, light & health, UV germicidal uses, addition of Lighting Zones.

Single copy price: \$25.00

Obtain an electronic copy from: pmcgillicuddy@ies.org

Send comments (copy psa@ansi.org) to: Patricia McGillicuddy <pmcgillicuddy@ies.org>

MSS (Manufacturers Standardization Society)

441 N. Lee Street, Alexandria, VA 22314 | standards@msshq.org, www.mss-hq.org

Revision

BSR/MSS SP-134-202x, Valves for Cryogenic Service, including Requirements for Body/Bonnet Extensions (revision of ANSI/MSS SP-134-2012)

This Standard Practice covers additional requirements for material, design, dimensions, fabrication, non-destructive examination, and pressure testing of metallic valves intended for service at cryogenic temperatures. Unplanned non-cryogenic events, such as auto-refrigeration during gas blow-down events where low temperatures may result, are outside the scope of this document.

Single copy price: Free of charge for MSS Members; \$173.00 for non-MSS Members

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

NEMA (ASC C80) (National Electrical Manufacturers Association)

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

Revision

BSR C80.3-202X, Electrical Metallic Tubing - Steel (EMT-S) (revision of ANSI C80.3-2020)

This Standard covers the requirements for steel electrical metallic tubing for use as a raceway for wires or cables of an electrical system. Finished tubing is typically furnished in nominal lengths of 10-ft (3.05-m). The production of lengths shorter or longer than the Standard length shall be allowed. EMT is protected on the exterior surface with a metallic zinc coating or alternate corrosion protection coating (see UL 797 for alternate corrosion protection coating requirements) and on the interior surface with zinc or organic coating.

Single copy price: \$98.00

Obtain an electronic copy from: david.richmond@nema.org

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

Comment Deadline: September 8, 2025

NSAA (ASC B77) (National Ski Areas Association)

133 S Van Gordon Street, Suite 300, Lakewood, CO 80228 | mlane@nsaa.org

Revision

BSR B77.2-202x, Standard for Funiculars - Safety Standard (revision of ANSI B77.2-2020)

This document establishes a standard for the design, manufacturer, construction, operation, and maintenance of funiculars.

Single copy price: \$75.00

Obtain an electronic copy from: mlane@nsaa.org

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

ULSE (UL Standards and Engagement)

1603 Orrington Avenue, Suite 2000, Evanston, IL 60201 | mitchell.gold@ul.org, <https://ulse.org/>

National Adoption

BSR/UL 60947-4-1-202x, Standard for Low-Voltage Switchgear and Controlgear - Part 4-1: Contactors and Motor-Starters - Electromechanical Contactors and Motor-Starters (national adoption of IEC 60947-4-1 with modifications and revision of ANSI/UL 60947-4-1-2022)

The following changes in requirements are being proposed: (1) Addition of Class CF; (2) Revision to Short Circuit Marking Requirement; (3) Correction to Annex DVC Reference to AC3 Ratings; (4) Revision to Table 9.3.3.6DV.1; (5) Allowance to Provide User or Installation Manual Information Via the Internet; (6) Correction to Annex DVC References to Undervoltage / Overvoltage Test and Calibration Test.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

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

ULSE (UL Standards and Engagement)

1603 Orrington Avenue, Suite 2000, Evanston, IL 60201 | mitchell.gold@ul.org, <https://ulse.org/>

National Adoption

BSR/UL 60947-4-2-202x, Standard for Low-Voltage Switchgear and Controlgear - Part 4-2: Contactors and Motor-Starters - AC Semiconductor Motor Controllers and Starters (national adoption of IEC 60947-4-2 with modifications and revision of ANSI/UL 60947-4-2-2022)

The following changes in requirements are being proposed: (1) Revision to Standard Fault Short Circuit Test Currents; (2) Revision to Short Circuit Rating Marking; (3) Allowance to Provide User or Installation Manual Information Via the Internet; (4) Correction to Annex DVC References to Calibration Test; (5) Overload, Endurance and Breakdown of Components Tests.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

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

Comment Deadline: September 8, 2025

ULSE (UL Standards and Engagement)

1603 Orrington Avenue, Suite 2000, Evanston, IL 60201 | lauren.valentino@ul.org, <https://ulse.org/>

Reaffirmation

BSR/UL 213C-2015 (R202x), Standard for Grooved and Plain End Fittings (reaffirmation of ANSI/UL 213C-2015 (R2020))

These requirements cover the construction and performance of Grooved and Plain End fittings intended to be joined to pipe or another fitting by couplings complying with the requirements of the Standard for Rubber Gasketed Fittings for Fire-Protection Service, UL 213. For the purpose of this standard, Grooved and Plain End fittings include constructions having one piece cast devices and fittings fabricated from steel pipe that could be segmented and welded to form the fitting.

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

Send comments (copy psa@ansi.org) to: Lauren Valentino, lauren.valentino@ul.org, <https://csds.ul.com/ProposalAvailable>

ULSE (UL Standards and Engagement)

100 Queen St. Suite 1040, Ottawa, ON K1P 1J9 | bahar.sammak@ul.org, <https://ulse.org/>

Reaffirmation

BSR/UL 771-2006 (R202x), Standard for Safety for Night Depositories (reaffirmation of ANSI/UL 771-2006 (R2020))

ULSE proposes a reaffirmation for ANSI approval of UL 771-2006 (R2020).

Single copy price: Free

Obtain an electronic copy from: <https://csds.ul.com/ProposalAvailable>

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

ULSE (UL Standards and Engagement)

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

Revision

BSR/UL 987-202x, Standard for Safety for Stationary and Fixed Electric Tools (revision of ANSI/UL 987-2020 (R2025))

Proposed revisions to add requirements specific to stationary and fixed table saws.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: <https://csds.ul.org/>

Comment Deadline: September 23, 2025

ASME (American Society of Mechanical Engineers)

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

New Standard

BSR/ASME PSD-1-202x, Plant Systems Design (new standard)

This is a technology-neutral standard for design of plant systems for nuclear facilities, including power generation; fossil power generation facilities (e.g., coal, natural gas); oil refining; oil and natural gas production; petrochemical; chemical; and hazardous waste plants and facilities. This standard provides processes and procedures for organizations to: (a) conduct process hazard evaluations and analysis in the early stages of design that (1) advance as the design matures and (2) provide structure to the development of a quantitative risk assessment; (b) incorporate and integrate existing systems engineering design processes, practices and tools with traditional architect engineering design processes, practices and tools; and (c) incorporate and integrate risk-informed probabilistic design processes, practices, and tools with traditional deterministic design processes using reliability and availability targets. The focus of this standard is to provide requirements and guidance for design processes, practices and tools that will provide a means for organizations to develop safer and more efficient system, structure, and product designs with quantified safety levels.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Daniel Miro-Quesada <miroquesada@asme.org>

ASME (American Society of Mechanical Engineers)

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

Reaffirmation

BSR/ASME B94.51M-2010 (S2016) (R202x), Specifications for Band Saw Blades (Metal Cutting) (reaffirmation of ANSI/ASME B94.51M-2010 (S2016))

This Standard provides a useful criterion of practice in production, distribution, and use of metal-cutting band-saw blades. It was developed to provide blades that will meet all normal requirements of consumers.

Single copy price: \$36.00

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

Send comments (copy psa@ansi.org) to: Daniel Papert <papertd@asme.org>

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME B1.2-202x, Gages and Gaging for Unified Inch Screw Threads UN, UNR, and UNJ (revision of ANSI/ASME B1.2-1983 (R2017))

This Standard provides essential specifications and dimensions for the gages used on Unified inch screw thread profiles (UN, UNR, and UNJ thread form), and covers the specifications and dimensions for the thread gages and measuring equipment listed in ASME B1.3.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Daniel Papert <papertd@asme.org>

Comment Deadline: September 23, 2025

ASME (American Society of Mechanical Engineers)

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

Stabilized Maintenance

BSR/ASME B94.6-1984 (S202x), Knurling (stabilized maintenance of ANSI/ASME B94.6-1984 (S2016))

This Standard covers knurling tools with standardized diametral pitches and includes dimensional relations with stock in the production of straight, diagonal, and diamond knurling on cylindrical surfaces having teeth of uniform pitch parallel to the axis of the cylinder or at a helix angle not exceeding 45 deg. with axis of work.

Single copy price: \$36.00

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

Send comments (copy psa@ansi.org) to: Daniel Papert <papertd@asme.org>

ASME (American Society of Mechanical Engineers)

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

Stabilized Maintenance

BSR/ASME B94.7-1980 (S202x), Hobs (stabilized maintenance of ANSI/ASME B94.7-1980 (S2016))

Covers types, sizes, tolerances, marking, and nomenclature for hobs of one-piece construction used for generating involute gears, involute splines, parallel side splines, involute serrations, and roller chain sprockets.

Single copy price: \$36.00

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

Send comments (copy psa@ansi.org) to: Daniel Papert <papertd@asme.org>

ASME (American Society of Mechanical Engineers)

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

Stabilized Maintenance

BSR/ASME B94.33-1996 (S202x), Jig Bushings (stabilized maintenance of ANSI/ASME B94.33-1996 (S2016))

This Standard covers the nomenclature, definitions, types, sizes, tolerances, and identification of jig bushings and locking devices used for securing the bushings in the jig or bushing plate.

Single copy price: \$54.00

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

Send comments (copy psa@ansi.org) to: Daniel Papert <papertd@asme.org>

ASME (American Society of Mechanical Engineers)

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

Stabilized Maintenance

BSR/ASME B94.52M-1999 (S202x) , Specifications for Hack Saw Blades (stabilized maintenance of ANSI/ASME B94.52M-1999 (S2016))

This Standard provides a useful criterion of practice in production, distribution and use of hacksaw products. It was developed to provide blades that will meet all normal requirements of consumers.

Single copy price: \$36.00

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

Send comments (copy psa@ansi.org) to: Daniel Papert <papertd@asme.org>

Comment Deadline: September 23, 2025

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEC/IEEE 63184-202x, International Standard - Assessment methods of the human exposure to electric and magnetic fields from wireless power transfer systems - Models, instrumentation, measurement and computational methods and procedures (frequency range of 3 kHz to 30 MHz) (new standard)

The objective of this document is to specify the assessment methods to evaluate compliance of stationary and dynamic wireless power transfer (WPT) systems with electromagnetic human exposure guidelines (specific absorption rate (SAR), internal electric fields, or current density including contact currents). The frequency range covered by this document is from 1 kHz to 30 MHz. This version of the standard focuses on exposures from inductive WPT systems. Future versions will consider extended guidance for assessments of exposure from capacitive WPT systems.

Single copy price: \$201.00

Obtain an electronic copy from: [https://store accuristech.com/standards/ieee-iec-63184-2025?](https://store accuristech.com/standards/ieee-iec-63184-2025?product_id=2502326&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGtKHPArzgPBhd3oDtLIA)

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Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE 1205-202x, Draft Guide for Assessing, Monitoring, and Mitigating Aging Effects on Electrical Equipment Used in Nuclear Facilities (new standard)

Guidelines for assessing, monitoring, and mitigating aging degradation effects on electrical equipment used in nuclear facilities are provided. This guide also includes informative annexes on aging mechanisms, environmental monitoring, condition monitoring, aging program essential attributes, and examples demonstrating the application of the basic principles described in this guideline.

Single copy price: \$103.00

Obtain an electronic copy from: [https://store accuristech.com/standards/ieee-p1205?](https://store accuristech.com/standards/ieee-p1205?product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGtKHPArzgPBhd3oDtLIA)

[product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGtKHPArzgPBhd3oDtLIA](https://store accuristech.com/standards/ieee-p1205?product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGtKHPArzgPBhd3oDtLIA)
[R3qyZeE5krirxYYJoH6xzshUOq7gg3hoCOVwQAvD_BwE](https://store accuristech.com/standards/ieee-p1205?product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGtKHPArzgPBhd3oDtLIA)

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Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Comment Deadline: September 23, 2025

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE 1936.3-202x, Draft Standard for Unmanned Aircraft Systems (UAS) using Light Detection and Ranging (LiDAR) for above 110 kV Overhead Transmission Line Survey and Design (new standard)

Unmanned Aircraft Systems (UAS) LiDAR (Light Detection and Ranging) survey technology, has been widely used in the survey and design of overhead transmission line projects benefiting from its high precision and efficiency, especially for high-voltage overhead transmission lines in complex terrain areas. To standardize the operation process of UAS LiDAR survey and meet the requirements of survey and design for overhead transmission line projects with a voltage level above 110 kV, this standard specifies the technical requirements for various production stages, including the composition of UAS LiDAR systems, flight design and implementation, data processing, 3D (three-dimensional) digital surveying and mapping, field investigation and survey, and 3D digital design. It is applicable to guide the survey of the light and small civilian UAS LiDAR in the survey and design of new and reconstructed overhead transmission line projects and as the reference of the construction, operation, and maintenance, etc.

Single copy price: \$69.00

Obtain an electronic copy from: https://store accuristech.com/standards/ieee-p1936-3?product_id=2923167&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA R3qyZeE5krirxYYJoH6xzshUOq7gg3hoCOVwQAvD_BwE

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IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE 2819-202x, Draft Recommended Practice for Measuring Electromagnetic Fields from Overhead Power Transmission Lines in Shared AC and DC Corridors (new standard)

Uniform procedures for the measurement of the power frequency electric field and dc electric field when ac/dc power transmission lines are installed in parallel or on shared towers are established in this recommended practice. The measurement ranges and layout of measurement points, data recording and processing, and result evaluation methods of parallel power transmission lines of different voltage levels are recommended.

Single copy price: \$68.00

Obtain an electronic copy from: https://store accuristech.com/searches/53061917?sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIAR3qyZeE5krirxYYJoH6xzshUOq7gg3hoCOVwQAvD_BwE

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Comment Deadline: September 23, 2025

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE C37.1.3-202x, Draft Recommended Practice for Human Machine Interfaces (HMI) used with Electric Utility Automation Systems (new standard)

This recommended practice applies to, and provides the basis for, the philosophy, design, implementation (including building displays, testing, training, commissioning, and verification), operation (including maintenance and decommissioning) of Human Machine Interface (HMI) used with electric utility automation systems.

Single copy price: \$89.00

Obtain an electronic copy from: [https://store accuristech.com/standards/ieee-pc37-1-3?](https://store accuristech.com/standards/ieee-pc37-1-3?product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)

[product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA](https://store accuristech.com/standards/ieee-pc37-1-3?product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)
[R3qyZeE5krirxYYJoH6xzshUOq7gg3hoCOVwQAvD_BwE](https://store accuristech.com/standards/ieee-pc37-1-3?product_id=2899023&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)

Order from: <https://store accuristech.com/>

Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

New Standard

BSR/IEEE C57.12.38-202x, Draft Standard for Pad-Mounted-Type, Self-Cooled, Single-Phase Distribution Transformers 250 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 V and Below; Low Voltage, 480/240 V and Below (new standard)

Certain electrical, dimensional, and mechanical characteristics are covered in this standard, and certain safety features of single-phase, 60-Hz, mineral-oil-immersed liquid-filled, self-cooled, pad-mounted, compartmental-type distribution transformers are taken into consideration. These transformers are rated 250 kVA and smaller, with high voltages of 34 500 GrdY/19 920 V and below, and with low voltages of 480/240 V and below. These transformers are generally used for step-down purposes from an underground primary cable supply. The connector, bushing, and terminal arrangements for radial or loop feed systems are covered in this standard. The electrical and mechanical requirements of any accessory devices that may be supplied with the transformer are not covered in this standard.

Single copy price: \$78.00

Obtain an electronic copy from: [https://store accuristech.com/standards/ieee-pc57-12-38?](https://store accuristech.com/standards/ieee-pc57-12-38?product_id=2523479&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)

[product_id=2523479&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA](https://store accuristech.com/standards/ieee-pc57-12-38?product_id=2523479&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)
[R3qyZeE5krirxYYJoH6xzshUOq7gg3hoCOVwQAvD_BwE](https://store accuristech.com/standards/ieee-pc57-12-38?product_id=2523479&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)

Order from: <https://store accuristech.com/>

Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

Comment Deadline: September 23, 2025

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

Revision

BSR/IEEE 1844-202x, Draft Standard Test Procedure for Determining Circuit Integrity Performance of Fire Resistive Cables in Nuclear Facilities (revision of ANSI/IEEE 1844-2015)

Standardization of circuit integrity cable testing is beneficial to cable manufacturers, distributors, and users. Uniform procedures, consistent, repeatable results, and measurable test acceptance criteria are required to allow comparisons among competing products and to allow selection of the correct product for the application. In nuclear power facilities, electrical cables are relied upon to safely control the plant systems. Circuit integrity cables serve as fire-resistive protection for electrical circuits. Circuit integrity cables with a 1-h or 3-h ratings are expected to protect the electrical circuit from the effects of severe fire conditions to allow for achieving and maintaining safe shutdown conditions and suppression activities.

Single copy price: \$58.00

Obtain an electronic copy from: [https://store accuristech.com/standards/ieee-p1844?](https://store accuristech.com/standards/ieee-p1844?product_id=2927433&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)

[product_id=2927433&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA](https://store accuristech.com/standards/ieee-p1844?product_id=2927433&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)
[R3qyZeE5krirxYYJoH6xzshUOq7gg3hoCOVwQAvD_BwE](https://store accuristech.com/standards/ieee-p1844?product_id=2927433&sid=goog&gad_source=1&gclid=CjwKCAjwyo60BhBiEiwAHmVLJYrGTkHPArzgPBhd3oDtLIA)

Order from: <https://store accuristech.com/>

Send comments (copy psa@ansi.org) to: Suzanne Merten <s.merten@ieee.org>

TNI (The NELAC Institute)

PO Box 2439, Weatherford, TX 76086 | robert.wyeth@nelac-institute.org, www.NELAC-Institute.org

Revision

BSR/TNI EL V4 2025 Rev.3.0-202x, General Requirements for an Accreditation Body of Environmental Proficiency Testing Providers (revision and partition of ANSI/TNI EL-V4)

This Volume of the TNI Standard provides requirements for the accreditors on PT providers. It has been completely rewritten from its original form as an ANS. The changes were instituted to generally update the processes involved, provide clarity and understanding for the accreditors and to ensure consistency with the current ISO/IEC 17011.

Single copy price: Free

Order from: robert.wyeth@nelac-institutue.org

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

ULSE (UL Standards and Engagement)

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

Revision

BSR/UL 521-202X, Standard for Heat Detectors for Fire Protective Signaling Systems (revision of ANSI/UL 521-2024)

ULSE proposes revisions to the Standard for Heat Detectors for Fire Protective Signaling Systems, UL 521.

Single copy price: Free

Order from: <https://csds.ul.com/ProposalAvailable>

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

Project Withdrawn

NEMA (ASC C8) (National Electrical Manufacturers Association)

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

BSR ICEA S-81-570-202x, Standard for 600 Volt Rated Cables of Ruggedized Design for Direct Burial Installation as Single Conductors or Assemblies of Single Conductors (revision of ANSI/ICEA S-81-570-2006)

Send comments (copy psa@ansi.org) to: Khaled Masri <Khaled.Masri@nema.org>

NEMA (ASC C8) (National Electrical Manufacturers Association)

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

BSR/ICEA S-103-200x, Riser Cable (new standard)

Send comments (copy psa@ansi.org) to: Khaled Masri <Khaled.Masri@nema.org>

NEMA (ASC C8) (National Electrical Manufacturers Association)

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

BSR/ICEA S-84-604-200x, Telecommunications Cable Filled, Polyolefin Insulated, Copper Conductor - Technical Requirements (new standard)

Send comments (copy psa@ansi.org) to: Khaled Masri <Khaled.Masri@nema.org>

In accordance with clause 4.2.1.3.3 Discontinuance of a standards project of the ANSI Essential Requirements, an accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

NEMA (National Electrical Manufacturers Association)

1812 N. Moore Street, Suite 2200, Arlington, VA 22209 | connor.grubbs@nema.org , www.nema.org

BSR/NEMA MW 1000-2008 Rev. 2-202x, Magnet Wire (revision of ANSI/NEMA MW 1000-2008)

Send comments (copy psa@ansi.org) to: Michael Leibowitz <mike.leibowitz@nema.org>

Withdrawal of an ANS by ANSI-Accredited Standards Developer

In accordance with clause 4.2.1.3.2 Withdrawal by ANSI-Accredited Standards Developer of the ANSI Essential Requirements, the following American National Standards have been withdrawn as an ANS.

ASTM (ASTM International)

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

ANSI/ASTM F697-2016, Standard Practice for Care and Use of Athletic Mouth Protectors (new standard)

Send comments (copy psa@ansi.org) to: Questions may be directed to: Lauren Daly <accreditation@astm.org>

Final Actions on American National Standards

The standards actions listed below have been approved by the ANSI Board of Standards Review (BSR) or by an ANSI-Audited Designator, as applicable.

AAFS (American Academy of Forensic Sciences)

410 North 21st Street, Colorado Springs, CO 80904 | tambrosius@aafs.org, www.aafs.org

ANSI/ASB Std 013-2025, Standard for Friction Ridge Examination Conclusions (new standard) Final Action Date: 7/18/2025 | *New Standard*

AHAM (Association of Home Appliance Manufacturers)

1111 19th Street NW, Suite 1150, Washington, DC 20036 | GWoyczynski@aham.org, www.aham.org

ANSI/AHAM DH-2-2025, Sizing guidelines for portable dehumidifiers (new standard) Final Action Date: 7/17/2025 | *New Standard*

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 | jyeh2@ahrinet.org, www.ahrinet.org

ANSI/AHRI Standard 1400-2025 (I-P), Performance Rating of Indirect Water Heaters (new standard) Final Action Date: 7/16/2025 | *New Standard*

API (American Petroleum Institute)

200 Massachusetts Avenue NW, Washington, DC 20001 | buflodj@api.org, www.api.org

ANSI/API RP 3000-2025, Classifying and Loading of Crude Oil into Rail Tank Cars (revision of ANSI/API RP 3000-2014) Final Action Date: 7/15/2025 | *Revision*

ASABE (American Society of Agricultural and Biological Engineers)

2590 Niles Road, Saint Joseph, MI 49085 | stell@asabe.org, <https://www.asabe.org/>

ANSI/ASABE AD11001-1-2016 NOV2016 (R2025), Agricultural wheeled tractors - Three-point hitch couplers - Part 1: U-frame coupler (reaffirm a national adoption ANSI/ASABE AD11001-1:2016 (R2020)) Final Action Date: 7/15/2025 | *Reaffirmation*

ANSI/ASABE AD8759-2-1998 OCT2016 (R2025), Agricultural wheeled tractors - Front-mounted equipment - Part 2: Stationary equipment connection (reaffirm a national adoption ANSI/ASABE AD8759-2-OCT2016 (R2020)) Final Action Date: 7/15/2025 | *Reaffirmation*

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

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

ANSI/ASHRAE/ASHE Addendum 170s-2021, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 7/18/2025 | *Addenda*

ANSI/ASHRAE/ASHE Addendum 170w-2021, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Standard 170-2021) Final Action Date: 7/18/2025 | *Addenda*

ANSI/ASHRAE/IES Addendum ak to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022) Final Action Date: 7/18/2025 | *Addenda*

ANSI/ASHRAE/IES Addendum bf to ANSI/ASHRAE/IES Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022) Final Action Date: 7/18/2025 | *Addenda*

ASME (American Society of Mechanical Engineers)

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

ANSI/ASME B1.9-1973 (R2025), 7 deg./45 deg. Form with 0.6 Pitch Basic Height of Thread Engagement (reaffirmation of ANSI/ASME B1.9-1973 (R2017)) Final Action Date: 7/14/2025 | *Reaffirmation*

ANSI/ASME B30.9-2025, Slings (revision of ANSI/ASME B30.9-2021) Final Action Date: 7/18/2025 | *Revision*

ASME A112.19.14 (R2018), Six-Liter Water Closets Equipped with a Dual Flushing Device (withdrawal of ANSI/ASME A112.19.14-2013 (R2018)) Final Action Date: 7/14/2025 | *Withdrawal*

AWS (American Welding Society)

8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | mgills@aws.org, www.aws.org

ANSI/AWS D18.3/D18.3M-2015 (R2025), Specification for Welding of Tanks, Vessels, and Other Equipment in Sanitary (Hygienic) Applications (reaffirmation of ANSI/AWS D18.3/D18.3M-2015) Final Action Date: 7/17/2025 | *Reaffirmation*

CGA (Compressed Gas Association)

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

ANSI/CGA M-1-2025, Standard for Medical Gas Supply Systems at Health Care Facilities (revision of ANSI/CGA M-1-2018) Final Action Date: 7/15/2025 | *Revision*

CTA (Consumer Technology Association)

1919 South Eads Street, Arlington, VA 22202 | KHaresign@cta.tech, www.cta.tech

ANSI/CTA 2126-2025, Guidelines for the National Cybersecurity Label Conformity and Trust Programs (new standard) Final Action Date: 7/16/2025 | *New Standard*

HL7 (Health Level Seven)

455 E. Eisenhower Parkway, Suite 300 #025, Ann Arbor, MI 48108 | lynn@hl7.org, www.hl7.org

ANSI/HL7 V2 Conformance, R1-2020 (R2025), HL7 Version 2 Specification: Conformance, Release 1 (reaffirmation and redesignation of ANSI/HL7 V2 Conformance, R1-2020) Final Action Date: 7/17/2025 | *Reaffirmation*

IEEE (Institute of Electrical and Electronics Engineers)

445 Hoes Lane, Piscataway, NJ 08854-4141 | s.merten@ieee.org, www.ieee.org

ANSI/IEEE C37.118.2-2025, Standard for Synchrophasor Data Transfer for Power Systems (new standard) Final Action Date: 7/17/2025 | *New Standard*

ANSI/IEEE C37.20.6-2025, Standard for 4.76 kV to 48.3 kV Rated Ground and Test Devices Used in Enclosures (revision of ANSI/IEEE C37.20.6-2015) Final Action Date: 7/18/2025 | *Revision*

NEMA (ASC C80) (National Electrical Manufacturers Association)

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

ANSI NEMA 61800-3-2025, Adjustable speed electrical power drive systems - Part 3: EMC requirements and specific test methods for PDS and machine tools (identical national adoption of IEC 61800-3 2022) Final Action Date: 7/17/2025 | *National Adoption*

NEMA (ASC C81) (National Electrical Manufacturers Association)

1812 N Moore Street, Arlington, VA 22209 | Connor.Grubbs@nema.org, www.nema.org

ANSI C81.61-2025, Electric Lamp Bases - Specifications for Bases (Caps) for Electric Lamps (revision of ANSI C81.61-2023) Final Action Date: 7/15/2025 | *Revision*

ANSI C81.62-2025, Electric Lampholders (revision of ANSI C81.62-2019) Final Action Date: 7/15/2025 | *Revision*

ANSI C81.63-2025, Gauges for Electric Lamp Bases and Lampholders (revision of ANSI C81.63-2019) Final Action Date: 7/15/2025 | *Revision*

NSF (NSF International)

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

ANSI/NSF 527-2025 (i1r2), Personal Care Products (new standard) Final Action Date: 7/15/2025 | *New Standard*

ANSI/NSF 342-2019 (i12r1) (R2025), Sustainability Assessment for Wallcovering Products (reaffirmation of ANSI/NSF 342-2019 (i11r1)) Final Action Date: 7/15/2025 | *Reaffirmation*

ANSI/NSF/CAN 50-2025 (i209r1), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2024) Final Action Date: 7/17/2025 | *Revision*

ANSI/NSF/CAN 61-2025 (i196r1), Drinking Water System Components - Health Effects (revision of ANSI/NSF/CAN 61-2024) Final Action Date: 7/3/2025 | *Revision*

ULSE (UL Standards and Engagement)

100 Queen Street, Suite 1040, Ottawa, ON K1P 1J9 Canada | hilal.elmisilmani@ul.org, <https://ulse.org/>

ANSI/UL 60335-2-53-2025, Standard for Safety for Household and Similar Electrical Appliances - Safety - Part 2-53: Particular Requirements for Sauna Heating Appliances and Infrared Cabins (national adoption with modifications of IEC 60335-2-53) Final Action Date: 6/27/2025 | *National Adoption*

ANSI/UL 3601-2025, Standard for Measuring and Reporting Circularity of Li-ion and Other Secondary Batteries (new standard) Final Action Date: 7/14/2025 | *New Standard*

ANSI/UL 2808-2020 (R2025), Standard for Safety for Energy Monitoring Equipment (reaffirmation of ANSI/UL 2808-2020) Final Action Date: 7/17/2025 | *Reaffirmation*

ANSI/UL 2846-2016 (R2025), Fire Test of Plastic Water Distribution Plumbing Pipe for Visible Flame and Smoke Characteristics (reaffirmation of ANSI/UL 2846-2016 (R2021)) Final Action Date: 7/14/2025 | *Reaffirmation*

ANSI/UL 9595-2025, Standard for Factory Follow-Up on Personal Flotation Devices (PFDs) (revision of ANSI/UL 9595-2025) Final Action Date: 7/17/2025 | *Revision*

Call for Members (ANS Consensus Bodies)

Directly and materially interested parties who wish to participate as a member of an ANSI consensus body for the standards listed are requested to contact the sponsoring developer directly in a timely manner.

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 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 ANSI 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 or by e-mail from standards@scte.org.

ANSI Accredited Standards Developer

AWS - American Welding Society

The American Welding Society (AWS) A1 Committee on Metric Practice is actively seeking participation from the interest categories of user and educator. To apply or obtain additional information please contact Jennifer Rosario at jrosario@aws.org. For more information, see www.aws.org.

The American Welding Society (AWS) D11 Committee on Welding Iron Castings is actively seeking participation from the interest categories of general interest, user, and educator. To apply or obtain additional information please contact Jennifer Rosario at jrosario@aws.org. For more information, see www.aws.org.

AARST (American Association of Radon Scientists and Technologists)

527 N. Justice Street, Hendersonville, NC 28739 | StandardsAssist@gmail.com, www.aarst.org

BSR/AARST SGM-SF-202x, Soil Gas Mitigation Standards for Existing Homes (revision of ANSI/AARST SGM-SF-2023)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE S642.1 MONYEAR-202x, Recommended Methods for Measurement and Testing of Electromagnetic Radiation Sources for Plant Growth and Development (revision and redesignation of ANSI/ASABE S642-SEPT2018 (R2024))

ASSP (ASC A10) (American Society of Safety Professionals)

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

BSR/ASSP A10.4-202X, Safety Requirements for Personnel Hoists, Employee Elevators, Rope-Guided and Non-Guided Workers™ Hoists on Construction and Demolition Sites (revision and redesignation of ANSI/ASSE A10.4 -2016)

CTA (Consumer Technology Association)

1919 South Eads Street, Arlington, VA 22202 | KHaresign@cta.tech, www.cta.tech

BSR/CTA 2124-202x, Characteristics and Requirements for Integrated Continuous Glucose Monitoring Solutions for Consumer Use Cases (new standard)

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 | Idonohoe@ecianow.org, www.ecianow.org

BSR/EIA 364-124-202x, De-Icer Compatibility Test Procedure for Electrical Connectors (new standard)

IES (Illuminating Engineering Society)

85 Broad Street, 17th Floor, New York, NY 10004 | pmcgillicuddy@ies.org, www.ies.org

BSR/IES LS-1-202x, Lighting Science: Nomenclature and Definitions for Illuminating Engineering (revision of ANSI/IES LS-1-22)

IES (Illuminating Engineering Society)

85 Broad Street, 17th Floor, New York, NY 10004 | pmcgillicuddy@ies.org, www.ies.org

BSR/IES RP-11-202x, Lighting for Interior and Exterior Residential Environments (revision of ANSI/IES/ALA RP-11-20)

ISA (International Society of Automation)

3252 S. Miami Blvd, Suite 102, Durham, NC 27703 | ebrazda@isa.org, www.isa.org

BSR/ISA 62443-6-1-202x, Security for industrial automation and control systems - Part 6-1: Security evaluation methodology for IEC 62443-2-4 (new standard)

MSS (Manufacturers Standardization Society)

441 N. Lee Street, Alexandria, VA 22314 | standards@msshq.org, www.mss-hq.org

BSR/MSS SP-134-202x, Valves for Cryogenic Service, including Requirements for Body/Bonnet Extensions (revision of ANSI/MSS SP-134-2012)

NEMA (ASC C29) (National Electrical Manufacturers Association)

1812 N. Moore Street, Rosslyn, Virginia 22209 | Connor.Grubbs@nema.org, www.nema.org

BSR/C29.2B-202x, Standard for Wet Process Porcelain and Toughened Glass - Transmission Suspension Type (revision of ANSI C29.2B-2013 (R2023))

NENA (National Emergency Number Association)

1700 Diagonal Road, Suite 500, Alexandria, VA 22314 | crm@nena.org, www.nena.org

BSR/NENA STA-041.1-2022 (R202x), NENA Telecommunicator Cardiopulmonary Resuscitation (T-CPR) Standard (reaffirmation of ANSI/NENA STA-041.1-2022)

NENA seeks volunteers for the PSAP Operations Committee Telecommunicator CPR Working Group, supporting the NENA Telecommunicator Cardiopulmonary Resuscitation (T-CPR), NENA-STA-041.1-2022. The WG is seeking operational & technical subject matter experts such as PSAP & Dispatch Operations, Emergency Medical Response, Emergency Medical Dispatch Protocol Developers & SMEs, and industry partners with experience in 9-1-1 products and services. Members are needed in the User, Producer, and General Interest categories, as defined in Section 3 Document Development Process of the NENA Procedures, NENA-ADM-001.6-2025, <https://www.nena.org/page/standards> To join the WG: <https://www.nena.org/page/JoinTelecommunicatorCPR>

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105 | mmilla@nsf.org, www.nsf.org

BSR/NSF 53-202x (i165r1), Drinking Water Treatment Units - Health Effects (revision of ANSI/NSF 53-2024)

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105 | mmilla@nsf.org, www.nsf.org

BSR/NSF 58-202x (i115r1), Reverse Osmosis Drinking Water Treatment Systems (revision of ANSI/NSF 58-2024)

PEARL (Professional Electrical Apparatus Reconditioning League)

2551 Lake Road, Ontario, NY 14519 | brakej@pearl1.org, www.pearl1.org

BSR/PEARL 001.1-202x, Standard for Certification of Electrical Equipment Reconditioning Technicians (EERT) (new standard)

TNI (The NELAC Institute)

PO Box 2439, Weatherford, TX 76086 | robert.wyeth@nelac-institute.org, www.NELAC-Institute.org

BSR/TNI EL V4 2025 Rev.3.0-202x, General Requirements for an Accreditation Body of Environmental Proficiency Testing Providers (revision and partition of ANSI/TNI EL-V4)

TPI (Truss Plate Institute)

2670 Crain Highway, Suite 203, Waldorf, MD 20601 | jpjones@tpinst.org, www.tpinst.org

BSR/TPI 2-202x, National Standard for Structural Testing of Metal Plate Connected Wood Trusses (new standard)

TPI (Truss Plate Institute)

2670 Crain Highway, Suite 203, Waldorf, MD 20601 | jpjones@tpinst.org, www.tpinst.org

BSR/TPI 3-202x, National Design Standard for Bracing Metal Plate Connected Wood Trusses (new standard)

ULSE (UL Standards and Engagement)

100 Queen St. Suite 1040, Ottawa, ON K1P 1J9 | bahar.sammak@ul.org, <https://ulse.org/>

BSR/UL 771-2006 (R202x), Standard for Safety for Night Depositories (reaffirmation of ANSI/UL 771-2006 (R2020))

ULSE (UL Standards and Engagement)

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

BSR/UL 987-202x, Standard for Safety for Stationary and Fixed Electric Tools (revision of ANSI/UL 987-2020 (R2025))

ULSE (UL Standards and Engagement)

1603 Orrington Ave, Suite 2000, Evanston, IL 60201 | madison.lee@ul.org, <https://ulse.org/>

BSR/UL 2850-202x, Standard for Safety for Vehicle Systems of Electric Scooters and Motorcycles (new standard)

American National Standards (ANS) Process

Please visit ANSI's website (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 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)

- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition):
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
- Accreditation information – for potential developers of American National Standards (ANS):
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
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS:
www.ansi.org/asd
- American National Standards Key Steps:
www.ansi.org/anskeysteps
- American National Standards Value:
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

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)
 PHTA (Pool and Hot Tub Alliance)
 RESNET (Residential Energy Services Network, Inc.)
 SAE (SAE International)
 TCNA (Tile Council of North America)
 TIA (Telecommunications Industry Association)
 TMA (The Monitoring 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, select "American National Standards Maintained Under Continuous Maintenance." Questions? 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.

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ISO & IEC Draft International Standards

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

COMMENTS

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

Those regarding IEC documents should be sent to the USNC/IEC team at ANSI's New York offices (usnc@ansi.org). The final date for offering comments is listed after each draft.

ORDERING INSTRUCTIONS

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

ISO Standards

Additive manufacturing (TC 261)

ISO/ASTM DIS 52922, Additive manufacturing - Design - Directed energy deposition of metals - 10/6/2025, \$107.00

Agricultural food products (TC 34)

ISO/DIS 20001, Food loss and waste management system - Requirements for the minimization of food loss and waste across the food supply chain - 10/2/2025, \$119.00

ISO/DIS 23822, Eggs and egg products - Determination of nitroimidazole residues - Liquid chromatography-tandem mass spectrometry method - 10/4/2025, \$62.00

ISO/DIS 16634-1, Food products - Determination of the total nitrogen content by combustion according to the Dumas principle and calculation of the crude protein content - Part 1: Oilseeds and animal feeding stuffs - 10/5/2025, \$82.00

Anaesthetic and respiratory equipment (TC 121)

ISO 4135:2022/DAmD 1, - Amendment 1: Anaesthetic and respiratory equipment - Vocabulary - Amendment 1 - 10/6/2025, \$29.00

Applications of statistical methods (TC 69)

ISO/DIS 24481, Statistical methods for implementation of Six Sigma- Exploratory data analysis - Part 1: General methodology - 10/3/2025, \$67.00

Biotechnology (TC 276)

ISO/DIS 24952, Biotechnology - Biobanking - General requirements for (semi-)automated storage and retrieval equipment - 10/2/2025, \$77.00

Building construction machinery and equipment (TC 195)

ISO/DIS 25256, Road sweepers - Performance requirements and test methods - 10/4/2025, \$67.00

ISO/DIS 25333, Road sweepers - Environmental efficiency - Requirements on the test procedure for energy consumption - 10/4/2025, \$53.00

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

ISO/DIS 22238, Design, construction and testing of high-pressure natural gas marine transfer arms - 10/5/2025, \$134.00

Metallic and other inorganic coatings (TC 107)

ISO/DIS 1456, Metallic and other inorganic coatings - Electrodeposited coatings of nickel, nickel plus chromium, copper plus nickel and of copper plus nickel plus chromium - 10/6/2025, \$93.00

Packaging (TC 122)

ISO/DIS 28219, Packaging - Labelling and direct product marking with linear bar code and two-dimensional symbols - 10/5/2025, \$102.00

Paints and varnishes (TC 35)

ISO/DIS 11998, Paints and varnishes - Determination of wet-scrub resistance of coatings - 10/4/2025, \$77.00

ISO/DIS 22785-1, Coatings on plastics and composites - Part 1: General introduction - 10/3/2025, \$58.00

ISO/DIS 22785-2, Coatings on plastics and composites - Part 2: Weathering - 10/4/2025, \$62.00

ISO/DIS 22785-3, Coatings on plastics and composites - Part 3: Constant climate and alternating climate tests - 10/3/2025, \$46.00

ISO/DIS 22785-4, Coatings on plastics and composites - Part 4: Abrasion - 10/3/2025, \$62.00

ISO/DIS 22785-5, Coatings on plastics and composites - Part 5: Chemical resistance - 10/4/2025, \$46.00

ISO/DIS 22785-6, Coatings on plastics and composites - Part 6: Stone-chip resistance - 10/4/2025, \$46.00

Photography (TC 42)

ISO/DIS 18937-3.2, Imaging materials - Methods for measuring indoor light stability of photographic prints - Part 3: LED lamp exposure - 3/28/2025, \$67.00

Pigments, dyestuffs and extenders (TC 256)

ISO/DIS 787-5, General methods of test for pigments and extenders - Part 5: Determination of oil absorption value - 10/4/2025, \$40.00

ISO/DIS 787-24, General methods of test for pigments and extenders - Part 24: Determination of relative tinting strength of coloured pigments and relative scattering power of white pigments - Photometric methods - 10/4/2025, \$98.00

Quality management and quality assurance (TC 176)

ISO/DIS 9001, Quality management systems - Requirements - 9/20/2025, \$112.00

Road vehicles (TC 22)

ISO/DIS 6549.2, Road vehicles - Procedure for H- and R-point determination - 7/28/2025, \$53.00

Ships and marine technology (TC 8)

ISO/DIS 24037, Training, qualification and competency standards for manned submersible system crew and other key personnel - 10/3/2025, FREE

Small tools (TC 29)

ISO/DIS 6789-3, Assembly tools for screws and nuts - Hand torque tools - Part 3: Requirements for performance verification - 10/6/2025, \$71.00

ISO/DIS 13399-61, Cutting tool data representation and exchange - Part 61: Company codes - 10/4/2025, \$53.00

Tourism and related services (TC 228)

ISO/DIS 18980, Tourism and related services - Camping tourism - Requirements and recommendations for campsite facilities and services - 10/2/2025, \$53.00

Valves (TC 153)

ISO/DIS 23097, Industrial valves - Pneumatic part-turn actuators - General requirements - 10/5/2025, \$82.00

ISO/IEC JTC 1, Information Technology

ISO/IEC/IEEE DIS 21840, Systems and software engineering - Guidelines for the utilization of ISO/IEC/IEEE 15288 in the context of system of systems (SoS) - 10/5/2025, \$125.00

ISO/IEC/IEEE DIS 21839, Systems and software engineering - System of systems (SoS) considerations in life cycle stages of a system - 10/4/2025, \$98.00

ISO/IEC/IEEE DIS 21841, Systems and software engineering - Taxonomy of systems of systems - 10/4/2025, \$53.00

IEC Standards

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

100/4345/CDV, IEC 63478-3 ED1: User's Quality of Experience (QoE) on Multimedia Conferencing Services - Part 3: Measurement methods, 10/10/2025

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

46F/715(F)/FDIS, IEC 61169-23 ED1: Radio-frequency connectors - Part 23: Pin and socket connector for use with 3,5 mm rigid precision coaxial lines with inner diameter of outer conductor of 3,5 mm (0,1378 in), 08/08/2025

46F/711/CDV, IEC 61169-54/AMD1 ED2: Amendment 1 - Radio frequency connectors - Part 54: Sectional specification for coaxial connectors with 10 mm inner diameter of outer conductor, nominal characteristic impedance 50 Ω , Series 4,3 -10, 10/10/2025

46C/1317/CDV, IEC 62807-2 ED1: Hybrid telecommunication cables - Part 2: Indoor hybrid cables - Sectional specification, 10/10/2025

Electric traction equipment (TC 9)

9/3232/CDV, IEC 63452 ED1: Railway applications - Cybersecurity, 10/10/2025

Electrical accessories (TC 23)

23B/1579/CDV, IEC 60884-3-2 ED1: Plugs and socket-outlets for household and similar purposes - Particular requirements for accessories incorporating electronic components to perform additional functions, 09/12/2025

23H/579/FDIS, IEC 62196-1 ED5: Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements, 08/29/2025

23H/580/FDIS, IEC 62196-2 ED4: Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility requirements for AC pin and contact-tube accessories, 08/29/2025

23H/581/NP, PNW 23H-581 ED1: Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part X: Dimensional compatibility and interchangeability requirements for AC, DC and AC/DC pin and contact-tube vehicle couplers intended to be used for AC/DC EV supply equipment where protection relies on electrical separation, 10/10/2025

Electrical apparatus for explosive atmospheres (TC 31)

31/1887(F)/FDIS, IEC 60079-28 ED3: Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation, 08/15/2025

Electrical installations of buildings (TC 64)

64/2774/CD, IEC 60364-7-722 ED3: Low-voltage electrical installations - Part 7-722: Requirements for special installations or locations - Supplies for electric vehicles, 09/12/2025

64/2772/DTS, IEC TS 60364-7-725 ED1: Low-voltage electrical installations - Part 7-725: Requirements for special installations or locations - Resilient power supply system, 09/12/2025

Electrical installations of ships and of mobile and fixed offshore units (TC 18)

18/1994/FDIS, IEC 60092-302-2 ED2: Electrical installations in ships - Part 302-2: Low voltage switchgear and controlgear assemblies - Marine power, 08/29/2025

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

48B/3168/FDIS, IEC 61076-2 ED3: Connectors for electronic equipment - Product requirements - Part 2: Sectional specification for circular connectors, 08/29/2025

48D/792/NP, PNW TS 48D-792 ED1: MECHANICAL STRUCTURES FOR ELECTRICAL AND ELECTRONIC EQUIPMENT - LIQUID COOLING - Part 2: Liquid cooling components in electronic enclosures in the IEC60297 series of standards, 10/10/2025

Equipment for electrical energy measurement and load control (TC 13)

13/1974/CD, IEC TS 62053-25 ED1: Electricity digital revenue metering, 09/12/2025

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

112/690/NP, PNW TS 112-690 ED1: Calibration of space charge measuring equipment based on the pulsed electro-acoustic (PEA) measurement principle - Part 2: High temperature measurement, 09/12/2025

Fibre optics (TC 86)

86B/5088(F)/FDIS, IEC 61754-37 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces- Part 37: Type MDC connector family, 08/08/2025

86A/2610/NP, PNW 86A-2610 ED1: OPTICAL FIBRE CABLES - Part 1-34: Generic specification - Optical cable elements - Micro-module, 10/10/2025

Flat Panel Display Devices (TC 110)

110/1785/CD, IEC TR 63145-23-1 ED1: Eyewear display - Part 23-1: Contact lens type - Generic introduction, 09/12/2025

High-voltage testing techniques (TC 42)

42/461/CD, IEC 63405 ED1: High-voltage test techniques - Dielectric loss measurements "PROPOSED HORIZONTAL STANDARD", 09/12/2025

Hydraulic turbines (TC 4)

4/533/NP, PNW TS 4-533 ED1: TECHNICAL GUIDE FOR THE DEFINITION AND OPERATION OF WATERWAYS SAFETY DEVICES, 10/10/2025

Laser equipment (TC 76)

76/779/CD, IEC 60825-18 ED1: Safety of laser products - Part 18: Guided beam delivery systems, 09/26/2025

Maritime navigation and radiocommunication equipment and systems (TC 80)

80/1164/CD, IEC 61174 ED5: Maritime navigation and radiocommunication equipment and systems - Electronic chart display and information system (ECDIS) - Operational and performance requirements, methods of testing and required test results, 09/12/2025

80/1163/FDIS, IEC 62065 ED3: Maritime navigation and radiocommunication equipment and systems - Track control systems - Operational and performance requirements, methods of testing and required test results, 08/29/2025

Power electronics (TC 22)

22E/294/CD, IEC 62909-3 ED1: Bi-directional grid connected power converters - Part 3: EMC requirements and test methods, 09/26/2025

Power system control and associated communications (TC 57)

57/2798(F)/FDIS, IEC 62351-7 ED2: Power systems management and associated information exchange - Data and communications security - Part 7: Network and System Management (NSM) data object models, 08/01/2025

57/2818/NP, PNW TS 57-2818 ED1: Communication networks and systems for power utility automation - Part 7-500: Basic information and communication structure - Use of logical nodes for modelling application functions and related concepts and guidelines for substations, 10/10/2025

Process Management for Avionics (TC 107)

107/429/CD, IEC TR 62240-2 ED2: Process management for avionics - Electronic components capability in operation - Part 2: Semiconductor microcircuit lifetime, 09/12/2025

Rotating machinery (TC 2)

2/2253/NP, PNW 2-2253 ED1: Specific test methods for determining losses and efficiency of water submersible motors, 09/12/2025

Safety of household and similar electrical appliances (TC 61)

61/7458(F)/FDIS, IEC 60335-2-13/AMD1 ED7: Amendment 1 - Household and similar electrical appliances - Safety - Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances, 08/08/2025

61/7459(F)/FDIS, IEC 60335-2-48/AMD1 ED5: Amendment 1 - Household and similar electrical appliances - Safety - Part 2-48: Particular requirements for commercial electric grillers and toasters, 08/08/2025

61/7460(F)/FDIS, IEC 60335-2-49/AMD1 ED5: Amendment 1 - Household and similar electrical appliances - Safety - Part 2-49: Particular requirements for commercial electric appliances for keeping food and crockery warm, 08/08/2025

61/7461(F)/FDIS, IEC 60335-2-50/AMD1 ED5: Amendment 1 - Household and similar electrical appliances - Safety - Part 2-50: Particular requirements for commercial electric bains-marie, 08/08/2025

61/7462(F)/FDIS, IEC 60335-2-54/AMD1 ED5: Amendment 1 - Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam, 08/08/2025

Semiconductor devices (TC 47)

47F/516/CD, IEC 62047-56 ED1: Semiconductor devices - Micro-electromechanical devices - Part 56: Test method for characteristics of MEMS metal oxide semiconductor (MOS) type gas sensor, 09/12/2025

47A/1194/CD, IEC 63664 ED1: Integrated Circuits - Electronic fuses for low voltage automotive power distribution networks, 09/12/2025

Standard voltages, current ratings and frequencies (TC 8)

8/1758/CD, IEC TR 62786-101 ED1: Distributed energy resources connection with the grid - Part 101 Gravity storage connection to the grid, 09/12/2025

8/1759/NP, PNW TS 8-1759 ED1: Distributed energy resources connection with the grid - Part 10: Tests, 09/12/2025

Surface mounting technology (TC 91)

91/2053/CD, IEC 61249-2-55 ED1: Materials for printed boards and other interconnecting structures - Part 2-55: Reinforced base materials clad and unclad - Non-halogenated modified or unmodified resin system, woven E-glass laminate sheets of defined dissipation factor (less than 0,005 at 10 GHz) and flammability (vertical burning test), copper-clad for high speed applications, 09/12/2025

91/2048/CDV, IEC 61760-1 ED4: Surface mounting technology - Part 1: Standard method for the specification of surface mounting components (SMDs), 10/10/2025

(TC)

JTC3/122/NP, PNW JTC3-122 ED1: Quantum technologies - Performance evaluation and test methods for absolute quantum gravimeters based on free-falling cold atoms, 10/10/2025

SyCSM/120/NP, PNW SRD SyCSM-120 ED1: Data Spaces for Smart Manufacturing - State of the Art and Application Guideline, 10/10/2025

(TC 125)

125/121/NP, PNW 125-121 ED1: Interface requirements of autonomous cargo e-Transporters and cloud platform scheduling system, 10/10/2025

(TC 127)

127/77/DTS, IEC TS 63346-2-1 ED1: Low-voltage auxiliary power systems - Part 2-1: Design criteria - General requirements, 09/12/2025

ISO/IEC JTC 1, Information Technology

(TC)

JTC1-SC43/157/CDV, ISO/IEC 27572 ED1: Information Technology - Brain-computer Interfaces - Reference Architecture, 10/10/2025



Newly Published ISO & IEC Standards

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

ISO Standards

Acoustics (TC 43)

[ISO 17201-4:2025](#), Acoustics - Noise from shooting ranges - Part 4: Calculation of projectile sound, \$230.00

Agricultural food products (TC 34)

[ISO 8700:2025](#), Plant-based foods and food ingredients - Definitions and technical criteria for labelling and claims, \$56.00

Aircraft and space vehicles (TC 20)

[ISO 21740:2025](#), Space systems - Launch window estimation and collision avoidance, \$172.00

Governance of organizations (TC 309)

[ISO 37302:2025](#), Compliance management systems - Guidance for the evaluation of effectiveness, \$230.00

[ISO 37303:2025](#), Compliance management systems - Guidance for competence management, \$172.00

Implants for surgery (TC 150)

[ISO 18193:2021/Amd 1:2025](#), - Amendment 1: Cardiovascular implants and artificial organs - Cannulae for extracorporeal circulation - Amendment 1, \$23.00

Industrial fans (TC 117)

[ISO 13347-4:2025](#), Fans - Determination of fan sound power levels under standardized laboratory conditions - Part 4: Sound intensity method, \$201.00

Other

[ISO 7979:2025](#), Leather - Tests for colour fastness - Colour fastness to hydroalcoholic mixtures, \$84.00

[ISO 25089:2025](#), Leather - Tests for colour fastness - Colour fastness to sea water, \$56.00

Paints and varnishes (TC 35)

[ISO 11125-5:2025](#), Preparation of steel substrates before application of paints and related products - Test methods for metallic blast-cleaning abrasives - Part 5: Determination of percentage defective particles and of microstructure, \$56.00

[ISO 11126-1:2025](#), Preparation of steel substrates before application of paints and related products - Specifications for non-metallic blast-cleaning abrasives - Part 1: General introduction and classification, \$56.00

Rubber and rubber products (TC 45)

[ISO 1382:2025](#), Rubber - Vocabulary, \$259.00

[ISO 6502-1:2025](#), Rubber - Measurement of vulcanization characteristics using curemeters - Part 1: Introduction, \$127.00

[ISO 6502-2:2025](#), Rubber - Measurement of vulcanization characteristics using curemeters - Part 2: Oscillating disc curemeter, \$127.00

Solid mineral fuels (TC 27)

[ISO 1014-1:2025](#), Coke - Part 1: Determination of apparent relative density, \$56.00

[ISO 1014-3:2025](#), Coke - Part 3: Determination of porosity, \$56.00

Water quality (TC 147)

[ISO 7899-3:2025](#), Water quality - Enumeration of intestinal enterococci - Part 3: Most probable number method, \$84.00

Welding and allied processes (TC 44)

[ISO 19828:2025](#), Welding for aerospace applications - Visual inspection of welds, \$127.00

ISO Technical Reports

Earth-moving machinery (TC 127)

[ISO/TR 6750-2:2025](#), Earth-moving machinery - Operators manual - Part 2: List of references, \$56.00

Ergonomics (TC 159)

[ISO/TR 9241-313:2025](#), Ergonomics of human-system interaction - Part 313: Optical measurement methods for reflective displays, \$287.00

ISO Technical Specifications

Health Informatics (TC 215)

[ISO/TS 5615:2025](#), Health informatics - Accelerating safe, effective and secure remote connected care and mobile health through standards-based interoperability solutions addressing gaps revealed by pandemics, \$287.00

Nanotechnologies (TC 229)

[ISO/TS 9651:2025](#), Nanotechnologies - Classification framework for graphene-related 2D materials, \$172.00

Traditional Chinese medicine (TC 249)

[ISO/TS 25006:2025](#), Traditional Chinese medicine - Sporoderm-broken Ganoderma lucidum spore powder, \$127.00

Transport information and control systems (TC 204)

[ISO/TS 26048-1:2025](#), Intelligent transport systems - Field device Simple Network Management Protocol (SNMP) data interface - Part 1: Global objects, \$287.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 30129:2015/Amd 2:2025](#), - Amendment 2: Information technology - Telecommunications bonding networks for buildings and other structures - Amendment 2, \$23.00

[ISO/IEC 18012-3:2025](#), Information technology - Home electronic system (HES) - Guidelines for product interoperability - Part 3: Lexicon, \$287.00

[ISO/IEC 18012-4:2025](#), Information technology - Home electronic system (HES) - Guidelines for product interoperability - Part 4: x, \$230.00

[ISO/IEC 23001-17:2024/Amd 1:2025](#), - Amendment 1: Information technology - MPEG systems technologies - Part 17: Carriage of uncompressed video and images in ISO base media file format - Amendment 1: High precision timing tagging, \$23.00

IEC Standards

Environmental conditions, classification and methods of test (TC 104)

[IEC 60068-3-14 Ed. 1.0 b:2025](#), Environmental testing - Part 3 -14: Supporting documentation and guidance - Developing a climatic sequential test, \$200.00

[IEC 60068-3-14 Ed. 1.0 en:2025](#), Environmental testing - Part 3 -14: Supporting documentation and guidance - Developing a climatic sequential test, \$200.00

Other

[CISPR 12 Ed. 7.0 en:2025](#), Vehicles, boats and devices with internal combustion engines or traction batteries - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers, \$496.00

[CISPR 12 Ed. 7.0 b:2025](#), Vehicles, boats and devices with internal combustion engines or traction batteries - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers, \$496.00

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

[IEC 62841-4-3 Amd.1 Ed. 1.0 en:2025](#), Amendment 1 - 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, \$361.00

[IEC 62841-4-3 Amd.1 Ed. 1.0 b:2025](#), Amendment 1 - 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, \$361.00

[IEC 62841-4-3 Ed. 1.1 en:2025](#), 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, \$1430.00

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 249 – Traditional medicine ISO/TC 249, ISO/TC 249/SC 1 – Traditional Chinese medicine, and ISO/TC 249/SC 2 Ayurveda and yoga

Comment Deadline: August 1, 2025

ISO/TC 249 was recently restructured and is now titled Traditional medicine, with two subcommittees: ISO/TC 249/SC 1 – Traditional Chinese medicine, and ISO/TC 249/SC 2 – Ayurveda and yoga.

There is currently no ANSI-accredited U.S. TAG Administrator for ISO/TC 249 was recently restructured and is now titled Traditional medicine, with two subcommittees: ISO/TC 249/SC 1 – Traditional Chinese medicine, and ISO/TC 249/SC 2 – Ayurveda and yoga; therefore, ANSI is not a member of these committees. The Secretariats for these committees are held by China (SAC) for ISO/TC 249 and ISO/TC 249/SC 1, and India (BIS) for ISO/TC 249/SC 2.

ISO/TC 249 and ISO/TC 249/SC 1 operates under the following scope:

Standardization in the field of medical systems derived from ancient Chinese medicine which shall be able to share one common set of standards. Both traditional and modern aspects of these systems are covered. The committee focuses on quality and safety of raw materials, manufactured products and medical devices and of informatics, including service standards limited to involving the safe use and delivery of devices & medicine, but not into the clinical practice or application of those products.

ISO/TC 249/SC 2 operates under the following scope:

Standardization in the field of Ayurveda and Yoga. Both traditional and modern aspects of products and services of these systems are covered. The committee will focus on following fields including but not limited to Terminology; Quality and Safety of ingredients, extracts, finished products, Ayurveda based dietary supplements and nutraceuticals, Ayurveda Pharmaceutical equipments and procedures; Health and Wellness service requirements; Health Assessment tools/equipment; Rejuvenative procedures and tools/equipment /devices; Yoga accessories, Yoga props and common yoga protocol practices.

Excluded: Standardization covered by

ISO/TC 54 - Essential oils

ISO/TC 215 - Health Informatics

ISO/TC 249 - Traditional Chinese Medicine

Organizations interested in serving as the U.S. TAG Administrator or participating on a U.S. TAG for any of these committees should contact ANSI's ISO Team (isot@ansi.org).

International Organization for Standardization (ISO)

New Secretariats

ISO/TC 8/SC 25 – Maritime GHG reduction

Comment Deadline: August 8, 2025

Trident Maritime Systems, Inc. (TMS) has requested ANSI to delegate the responsibilities of the administration of the ISO/TC 8/SC 25 secretariat to Trident Maritime Systems, Inc. The secretariat was previously held by the U.S. Coast Guard (USCG) and the secretariat transfer is supported by the U.S. TAG.

ISO/TC 8/SC 25 operates under the following scope:

Standardization of ship GHG assessment and documentation procedures; bunkering and/or charging operations associated, and on-dock power generation.

Organizations wishing to comment on the delegation of the responsibilities should contact ANSI's ISO Team (isot@ansi.org).

Registration of Organization Names in the United States

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

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

Call for Comment

U.S. manufacturers, exporters, trade associations, U.S. domiciled standards development organizations and conformity assessment bodies, consumers, or U.S. government agencies 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 to the WTO Secretariat in Geneva, Switzerland proposed technical regulations that may significantly affect trade. In turn, the Secretariat circulates the notifications along with the full texts. 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 Enquiry Point for the WTO TBT Agreement is located at the National Institute of Standards and Technology (NIST) in the Standards Coordination Office (SCO). The Enquiry Point relies on the WTO's ePing SPS&TBT platform to distribute the notified proposed foreign technical regulations (notifications) and their full texts available to U.S. stakeholders. Interested U.S. parties can register with ePing to receive e-mail alerts when notifications are added from countries and industry sectors of interest to them. The USA WTO TBT Enquiry 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 prior to submitting comments. For non-notified foreign technical barriers to trade for non-agricultural products, stakeholders are encouraged to reach out as early as possible to the Office of Trade Agreements Negotiations and Compliance (TANC) in the International Trade Administration (ITA) at the Department of Commerce (DOC), which specializes in working with U.S. stakeholders to remove unfair foreign government-imposed trade barriers. The U.S. Department of Agriculture's Foreign Agricultural Service actively represents the interests of U.S. agriculture in the WTO committees on Agriculture, Sanitary and Phytosanitary (SPS) measures and Technical Barriers to Trade (TBT). FAS alerts exporters to expected changes in foreign regulations concerning food and beverage and nutrition labeling requirements, food packaging requirements, and various other agriculture and food related trade matters. Working with other Federal agencies and the private sector, FAS coordinates the development and finalization of comments on measures proposed by foreign governments to influence their development and minimize the impact on U.S. agriculture exports. FAS also contributes to the negotiation and enforcement of free trade agreements and provides information about tracking regulatory changes by WTO Members. The Office of the United States Trade Representative (USTR) WTO & Multilateral Affairs (WAMA) office has responsibility for trade discussions and negotiations, as well as policy coordination, on issues related technical barriers to trade and standards-related activities.

Online Resources:

WTO's ePing SPS&TBT platform: <https://epingalert.org/>

Register for ePing: <https://epingalert.org/en/Account/Registration>

WTO committee on Agriculture, Sanitary and Phytosanitary (SPS) measures:

https://www.wto.org/english/tratop_e/sps_e/sps_e.htm

WTO Committee on Technical Barriers to Trade (TBT): https://www.wto.org/english/tratop_e/tbt_e/tbt_e.htm

USA TBT Enquiry Point: <https://www.nist.gov/standardsgov/usa-wto-tbt-enquiry-point>

Comment guidance:

<https://www.nist.gov/standardsgov/guidance-us-stakeholders-commenting-notifications-made-wto-members-tbt-committee>

NIST: <https://www.nist.gov/>

TANC: <https://www.trade.gov/office-trade-agreements-negotiation-and-compliance-tanc>

Examples of TBTs: https://tcc.export.gov/report_a_barrier/trade_barrier_examples/index.asp.

Report Trade Barriers: https://tcc.export.gov/Report_a_Barrier/index.asp.

USDA FAS: <https://www.fas.usda.gov/about-fas>

FAS contribution to free trade agreements: <https://www.fas.usda.gov/topics/trade-policy/trade-agreements>

Tracking regulatory changes: <https://www.fas.usda.gov/tracking-regulatory-changes-wto-members>

USTR WAMA: <https://ustr.gov/trade-agreements/wto-multilateral-affairs/wto-issues/technical-barriers-trade>

Contact the USA TBT Enquiry Point at (301) 975-2918; E usatbtep@nist.gov or notifyus@nist.gov.

Proposed Revisions to

ANSI/ACCA 11 Manual Zr - 2018

Residential Zoning

Version 1.10

Note: Additions are shown as underline text
and deletions are shown as ~~strike through~~.

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N2-2**General Requirements for Zone Damper Systems****N2-9 Bypass Duct Relief**

The Figure N2-2 equations (next two pages) determine the maximum bypass air Cfm value for cooling, and the maximum bypass air Cfm value for heating.

Maximum Bypass Cfm (Smallest BPF) for Various Types of Equipment	
Air - Air Cooling	$BPF = (-10.5 + (106.25 - 68 \times A)^{0.5}) / 34$ <p>Where: $A = LDB - (52.3 + 0.19 \times (OAT - 95) + 0.6 \times (EDBo - 75) + 0.57 \times (28.5 \times B/C))$</p> $Bypass\ Cfm = BPF \times C$
<p>Nomenclature and Instructions</p> <p>B/C Btuh output (B), per the related blower Cfm value (C).</p> <ul style="list-style-type: none"> For air-air cooling, B/C is based on AHRI rating data (total Btuh for a specified blower Cfm, at 95°F OAT, 80°F EDB, and 67°F EWB). For water-air cooling, B/C is based on total cooling Btuh for 95°F water, 80°F / 67°F entering air, and the OEM's blower Cfm value for this cooling capacity value. <p>BPF Bypass factor under investigation.</p> <ul style="list-style-type: none"> For air-air cooling and water-air cooling, the BPF value that causes the LDB value to be equal to the OEM's low limit temperature for discharge air. For heating, the BPF value that causes the LDB value to be equal to the OEM's high limit temperature for discharge air. <p>C For cooling, the blower Cfm value for a given B/C ratio.</p> <p>EDBo The dry-bulb air temperature (°F) at the entrance to a indoor refrigerant coil (for cooling, or heating), an electric heating coil, a furnace, or a hot water coil, just before the bypass damper opens.</p> <ul style="list-style-type: none"> The Manual Zr default value for a cooling coil is 75°F, or use a value per Manual S, Appendix 2 procedures. The Manual Zr default value for refrigerant coil heating, an independent electric heating coil, a furnace, or a hot water coil is 70°F, or use a value per Manual S, Appendix 2 procedures. For a heat pump electric coil that is downstream from an indoor refrigerant coil, EDBo is the dry-bulb temperature of the air leaving the refrigerant coil, per this equation: <p>Electric coil EDBo = Refrigerant coil EDBo + Refrigerant coil TR</p> <p>LDB The OEM's low limit value for the dry-bulb temperature (°F) of the air leaving a cooling coil.</p> <ul style="list-style-type: none"> OEM engineering data provides the low limit for LDB. This value can be in the 38°F to 50°F range <p>OAT Outdoor air dry-bulb temperature (°F) for Air-Air Cooling.</p> <ul style="list-style-type: none"> The Manual Zr default value for calculating the smallest bypass factor value for cooling is 70°F. However, 75°F is used when zone damper controls can anticipate a low limit shut down per OEM controls, and stop the equipment in a normal manner. 	

(Remainder of Figure N2-2 not shown, is unchanged.)

Rationale: Part of the formula for Air-Air Cooling ($28.5 \times B/C$) is incorrect. The correct operator is a “minus” not a “times.”



**BSR/ASHRAE Addendum k
to ANSI/ASHRAE Standard 34-2024**

Public Review Draft

**Proposed Addendum k to
Standard 34-2024, Designation and
Safety Classification of
Refrigerants**

**First Public Review (July 2025)
(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 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, follow the instructions on the ASHRAE website at <https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-and-guidelines-under-continuous-maintenance>.

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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

This proposed addendum adds the zeotropic refrigerant blend R-4103A to Tables 4-2 and D-2.

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

Addendum k to Standard 34-2024

Modify Tables 4-2 and D-2 as shown.

Table 4-2 Data and Safety Classifications for Refrigerant Blends

Refrigerant Number = 4103A

Composition (Mass %) = R-32/152a/131I/1234ze(E) (10.0/22.0/17.0/51.0)

Composition tolerances = (±2.0/+1.0,-2.0/+2.0,-1.0/±2.0)

OEL = 840 ppm_v

Safety Group = A2L

RCL = 20,000 ppm /4.7 lb/1000 ft³ /75 g/m³

LFL = 87,000 ppm /20.7 lb/1000 ft³ /327 g/m³

BV = ≤4 cm/sec

Highly Toxic or Toxic Under Code Classification = Neither

Table D-2 Data Classifications for Refrigerant Blends

Refrigerant Number = 4103A

Composition (Mass %) = R-32/152a/131I/1234ze(E) (10.0/22.0/17.0/51.0)

Average Relative Molar Mass = 94.40 g/mol

Bubble Point (°F) = -30.8 °F

Dew Point (°F) = -16.2 °F

Bubble Point (°C) = -34.9 °C

Dew Point (°C) = -26.8 °C



**BSR/ASHRAE/IES Addendum b
to ANSI/ASHRAE/IES Standard 90.2-2024**

Public Review Draft

Proposed Addendum b to Standard 90.2-2024, High-Performance Energy Design of Residential Buildings

**First Public Review (August 2025)
(Draft Shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts 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 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.

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FOREWORD

This proposal provides a number of changes to Section 5 Additions and Alterations.

- First, it corrects the prescriptive tables to reflect the currently used metrics for space heating and cooling and water heating equipment. Updated values harmonize with the highest, non-advanced efficiency tier set by the Consortium for Energy Efficiency (CEESM) for residential equipment, so consumers can reap the benefits of energy efficient equipment while also qualifying for utility incentives. In addition, this also introduces Demand Response requirements to the Standard via industry-recognized test procedures, which may be able to aid energy savings and carbon reduction. The SI table was also corrected to show proper SI units that align with the IP table.
- Second, it adds the No-Additional Energy Option currently available to additions, to the alternations section as an alternate compliance path.
- Third, it modifies the prescriptive requirements for a Substantial Energy Alteration to remove HVAC and water heating requirements which enables efficiency tradeoffs in the ERI calculation

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

Addendum b to 90.2-2024

Modify Section 3.2 as follows

<u>COP_H/COP₂</u>	coefficient of performance – heating
<u>COP_C</u>	coefficient of performance – cooling
<u>SCOP</u>	seasonal coefficient of performance
<u>EER/EER₂</u>	energy efficiency ratio
<u>HSPF/HSPF₂</u>	heating seasonal performance factor
<u>SEER/SEER₂</u>	seasonal energy efficiency ratio
<u>UEF</u>	uniform energy factor

Modify Table 5-1 as follows (I-P)

Table 5-1 Central Air Conditioner and Heat Pump Specifications (I-P)

Equipment Type	SEER <u>SEER2</u>	EER <u>EER2</u>	HSPF <u>HSPF2</u>	COP	COP2 <u>COP2 at 5°F^a</u>	Capacity Ratio at 5°F/47°F (%)^b	SCOP	COP_H	<u>Additional Demand Response Requirements</u>	<u>Test Procedure</u>
Central Air Conditioners										
Split	16 <u>17.0</u>	13 <u>12.0</u>							<u>Meets AHRI 1380</u>	<u>AHRI 210/240</u>
Packaged	16	12 <u>11.5</u>							<u>Meets AHRI 1380</u>	<u>AHRI 210/240</u>
Heat Pumps										
Air source: Split rated capacity below 50,000 Btu/h (Path A)	16	13 <u>9.8</u>	9.0 <u>8.5</u>		<u>1.75</u>	<u>65</u>			<u>Meets AHRI 1380</u>	<u>AHRI 210/240</u>
Air source: Split rated capacity at or above 50,000 Btu/h (Path B)	16	13 <u>11.0</u>	8.5 <u>8.0</u>		<u>1.75</u>	<u>50</u>			<u>Meets AHRI 1380</u>	<u>AHRI 210/240</u>
Air source: Packaged	16 <u>15.2</u>	12 <u>10</u>	8.2 <u>7.2</u>		<u>1.75</u>	<u>45</u>			<u>Meets AHRI 1380</u>	<u>AHRI 210/240</u>
Geothermal closed loop: Water-to-air		17.1		3.6						<u>ISO 13256-1</u>
Geothermal open loop: Water-to-air		21.1		4.1						<u>ISO 13256-1</u>
Geothermal closed loop: Water-to-water		16.1		3.1						<u>ISO 13256-2</u>
Geothermal open loop: Water-to-water		20.1		3.5						<u>ISO 13256-2</u>
Direct geexchange to Air (DGX)		16.0		3.6						<u>AHRI 870</u>
<u>Direct geexchange to Water (DGX)</u>		<u>15.0</u>		<u>3.1</u>						<u>AHRI 870</u>

a. Equipment shall perform the U.S. Department of Energy Controls Verification Procedure (CVP) where applicable, to confirm that the above performance metrics measure at the Appendix M1 low ambient test point at 5°F are achieved by the native controls operating as they would in a residential building. The CVP requirement is inapplicable to equipment within single-speed and two-stage compressors.

b. Heating capacity ratio is calculated as the heating capacity at 5°F to the heating capacity at 47°F, which for variable-capacity systems is the $H1_{Nom}$ heating capacity and for all other systems is the $H1_{Full}$ heating capacity.

Modify Table 5-1 as follows (SI)

Table 5-1 Central Air Conditioner and Heat Pump Specifications (SI)

Equipment Type	SEER <u>SEER</u>	EER <u>EER</u>	HSPF <u>SCOP = Colder Climate</u>	COP_H	COP2 at 8.33°C^a	Capacity Ratio at 15°C/8.33°C (%)^b	SCOP	COP_C	<u>Additional Requirements</u>	<u>Test Procedure</u>
Central Air Conditioners										
Split	16 <u>4.98</u>	13 <u>3.52</u>					<u>3.81</u>		<u>Meets AHRI 1380</u>	<u>EN 14825</u>
Packaged	16 <u>4.69</u>	12 <u>3.37</u>					<u>3.52</u>		<u>Meets AHRI 1380</u>	<u>EN 14825</u>
Heat Pumps										
Air Source: Split rated capacity below 1244.7 kW	16 <u>4.69</u>	13 <u>2.87</u>	9.0 <u>2.49</u>		<u>1.75</u>	<u>65</u>	<u>3.81</u>		<u>Meets AHRI 1380</u>	<u>EN 14825</u>
Air Source: Split rated capacity at or above 1244.7	16	13	8.5		<u>1.75</u>	<u>50</u>			<u>Meets AHRI 1380</u>	<u>EN 14825</u>

kW	<u>4.69</u>	<u>3.22</u>	<u>2.34</u>						
Air source: Packaged	4.6 <u>4.45</u>	4.2 <u>2.93</u>	3.2 <u>2.11</u>		<u>1.75</u>	<u>45</u>	3.52	<u>Meets AHRI 1380</u>	<u>EN 14825</u>
Geothermal Closed Loop: Water-to-air		4.7		3.6				5.01	<u>ISO 13256-1</u>
Geothermal Open Loop: Water-to-air		4.1		4.1				6.18	<u>ISO 13256-1</u>
Geothermal Closed Loop: Water-to-water		4.6		3.1				4.72	<u>ISO 13256-2</u>
Geothermal Open Loop: Water-to-water		4.0		3.5				5.89	<u>ISO 13256-2</u>
Direct geoechange <u>to Air</u> (DGX)		4.6		3.6				4.69	<u>AHRI 871</u>
<u>Direct geoechange to</u> <u>Water (DGX)</u>				3.1				<u>4.40</u>	<u>AHRI 871</u>

a. Equipment shall perform the U.S. Department of Energy Controls Verification Procedure (CVP) where applicable, to confirm that the above performance metrics measure at the Appendix M1 low ambient test point at 5°F are achieved by the native controls operating as they would in a residential building. The CVP requirement is inapplicable to equipment within single-speed and two-stage compressors.

b. Heating capacity ratio is calculated as the heating capacity at 15°C to the heating capacity at 8.33°C, which for variable-capacity systems is the H1_{Nom} heating capacity and for all other systems is the H1_{Full} heating capacity.

Modify Table 5-2 and 5-3 as follows

Table 5-2 Gas Fired Heating Equipment Furnace and Gas Boiler Specifications

Equipment Type	AFUE	COP(47)
Gas-fired furnaces	□95% □97%	
Gas-fired boilers	□90% □95%	
<u>Gas-fired Heat Pump^a</u>	<u>□120%</u>	<u>□1.2</u>
<u>Gas-fired Heat Pump Boilers^b</u>	<u>□120%</u>	<u>□1.2</u>

- a. Tested to ANSI Z21.40.4,
- b. Tested to ANSI Z21.40.1, and Tested to ANSI Z21.40.1A

Table 5-3 Water Heater Minimum Efficiency

Equipment Type	EF <u>UEF</u>	<u>COP_H</u>
Gas storage water heaters <u>Medium Draw Pattern</u>	<u>□0.81</u>	
<u>Gas storage water heaters High Draw Pattern</u>	<u>□0.86</u>	
Gas tankless water heaters	□0.95 with electronic ignitions	
Electric storage water heaters <u>(Integrated)</u> (□55 gal [210 L])	<u>□3.3 and meets AHRI 1430^a</u>	
Electric Storage Water Heaters (>55 gal [210 L])	□2.2 and meets AHRI 1430	
<u>Electric Storage water heaters (Split Systems)</u>	<u>□2.2 and meets AHRI 1430^a</u>	
<u>Commercial Heat Pump water heaters</u>		<u>□3.0</u>

- a. AHRI 1430 is only applicable to water heaters with a nominal storage capacity greater than or equal to forty gallons and less than or equal to 120 gallons

Modify Section 5 as follows

5. ADDITIONS AND ALTERATIONS

5.1 Additions. *Additions* to existing *dwelling units* shall comply with either Section 5.1.1 or Section 5.1.2.

5.1.1 Prescriptive Compliance. *Additions* shall comply with Section 5.1.1(a) through (d):

- a. Envelope assemblies: All new envelope *assemblies* comprising the *addition* shall meet or exceed the envelope *assembly* characteristics of Table 6-3 and Table 7-2.
- b. Heating and cooling systems: New heating, cooling, and duct systems that are part of the *addition* shall comply with Section 7.2 and either Table 5-1 or Table 5-2.
- c. *Service water heating* systems: New *service water heating* systems that are part of the *addition* shall comply with Section 7.4 and Table 5-3.
- d. Lighting: New lighting systems that are part of the *addition* shall comply with Section 7.5.

5.1.2 Performance Alternative. The *building* shall comply with either Section 5.1.2.1 or 5.1.2.2.

5.1.2.1 No-Additional-Energy Option. The *addition* shall comply on a performance basis where the annual equivalent energy use of the *addition* and the existing *dwelling unit*, taken together, is less than or equal to the annual equivalent energy use of the existing *dwelling unit*, where the equivalent energy use for fossil fuels is calculated as follows:

$$kWh_{eq} = (Btu_{fossil} \times 0.40) / 3412 [I-P] \quad (5-1)$$

$$kWh_{eq} = (MJ_{fossil} \times 0.40) / 3.6 [SI] \quad (5-1)$$

Informative Note: This option may be preferable when the *addition* is small as compared to the existing *building*.

5.1.2.2 Combined Energy Rating Index (ERI) Option. The *addition* shall comply if the combined *building—addition* plus existing structure—meets the *ERI* in Table 5-4.

Informative Note: This option may be more appropriate when the *addition* is large as compared to the existing *building*.

5.2 Alterations. Alterations to existing *dwelling units* shall be such that the altered *dwelling unit* uses no more energy than the existing *dwelling unit* prior to its alteration. ~~Alterations to existing dwelling units shall comply with Sections 5.2.1 through 5.2.4.~~

~~Alterations shall comply with Sections 5.2.1 or 5.2.2~~

~~5.2.1 Prescriptive Compliance~~ Alterations to existing *dwelling units* shall comply with Sections 5.2.1.1 through 5.2.1.4.

~~5.2.1~~ **5.2.1.1 Envelope Assemblies.** All new envelope *assemblies* comprising the *alteration* shall meet or exceed the envelope *assembly* characteristics of Table 6-3 and Table 7-2.

~~5.2.2~~ **5.2.1.2 Heating and Cooling Systems.** New heating, cooling, and duct systems that are part of the *alteration* shall comply with Section 7.2 and either Table 5-1 or Table 5-2.

~~5.2.3~~ **5.2.1.3 Service Water Heating Systems.** New *service water heating* systems that are part of the *alteration* shall comply with Section 7.4 and Table 5-3.

~~5.2.4~~ **5.2.1.4 Lighting.** The *alteration* of lighting systems, including the replacement of *light sources* plus *ballast*, power supplies, and *drivers*, in any *building space* or exterior area shall comply with the requirements in Section 7.5 applicable to that *space* or area. Such *alterations* shall include all *luminaires* and *controls* that are added, replaced, or removed. *Alterations* do not include routine maintenance or repair situations.

Exception to ~~5.2.4~~ 5.2.1.4: Alterations that involve less than 10% of the connected lighting load in a *space* or area need not comply with these requirements provided the *alteration* does not increase the installed connected lighting load.

~~5.2.2~~ **No-Additional-Energy Option** Alterations to existing *dwelling units* shall comply with Section 5.2.1.1, 5.2.1.4 and the *alteration* shall comply on a performance basis where the annual equivalent energy use of the alteration and the existing *dwelling unit*, taken together, is less than or equal to the annual equivalent energy use of the existing *dwelling unit*, where the equivalent energy use for fossil fuels is calculated in accordance with Equation 5-1.

5.3 Substantial Energy Alterations. Substantial energy alterations to existing *dwelling units* shall comply with the requirements of Section ~~5.2~~ 5.2.1.1, 5.2.1.4 and shall be planned, designed, and constructed to achieve the *ERI* by climate zone shown in Table 5-4.

Exception to 5.3: Multifamily buildings and townhouses.



**BSR/ASHRAE/IES Addendum df
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

**Proposed Addendum df to
Standard 90.1-2022, Energy Standard
for Sites and Buildings Except Low-
Rise Residential Buildings**

**First Public Review (August 2025)
(Draft Shows Proposed Changes to Current Standard)**

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FOREWORD

This addendum updates envelope modeling rules for Section 12 budget design to reflect the current prescriptive requirements in Section 5.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketthrough~~ (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 df to 90.1-2022

Modify Section 12 as follows:

12.2 Compliance. The proposed *building* design shall comply with all of the following:

- a. Sections 4.2.3, 4.2.4, 5.2.1, 6.2.1, 7.2.1, 8.2.1, 9.2.1, and 10.2.1.

.....

12.7 Submittals

.....

12.7.3 Completion Requirements. Completion requirements shall be in compliance with Sections 5.7~~3~~, 6.7.3, 7.7.3, 8.7.3, 9.7.3, and 10.7.3.

.....

Proposed Design (Column A) Design Energy Cost (DEC)	Budget Building Design (Column B) Energy Cost Budget (ECB)
5. Building Envelope	
	The <i>budget building design</i> shall have identical conditioned floor area and identical exterior dimensions and orientations as the <i>proposed design</i> , except as follows: a. <i>Opaque</i> assemblies, such as roof, floors, doors, and walls, shall be modeled as having the same heat capacity as the <i>proposed design</i> but with the minimum U-factor required in Section 5.5 for new buildings or additions and Section 5.1.4 for alterations. d. No shading projections are to be modeled. <i>Manual fenestration</i> shading devices such as blinds or shades are not required to be modeled. <i>Automatically controlled fenestration</i> shading devices shall not be modeled. <i>Fenestration</i> shall be assumed to be flush

with the *wall* or *roof*. If the *fenestration area* for new *buildings* or additions exceeds the maximum allowed by Section 5.5.4.2, the area shall be reduced proportionally along each exposure until the limit set in Section 5.5.4.2 is met. If the *vertical fenestration area* facing west or east of the *proposed design* exceeds the area limit set in Section 5.5.4.5 then the *energy cost budget* shall be generated by simulating the *budget building design* with its actual *orientation* and again after rotating the entire *budget building design* 90, 180, and 270 degrees and then averaging the results. *Fenestration U-factor, SHGC and VT* shall be equal to the criteria from Tables 5.5-0 through 5.5-8 for the appropriate climate, ~~and the SHGC shall be equal to the criteria from Tables 5.5-0 through 5.5-8 for the appropriate climate.~~ For portions of those tables where there are no *SHGC* requirements, the *SHGC* shall be equal to that determined in accordance with Section C3.6(d). The *VT* shall be equal to that determined in accordance with Section C3.6(d). The *fenestration model* for *building envelope alterations* shall reflect the limitations on area, *U-factor*, and *SHGC* as described in Section 5.1.4.

e. *Skylights* shall be included in each *thermal block* ~~when as~~ required by Section 5.5.4.2.3 and meet the required VT.

~~Exception: When trade-offs are made between an addition and an existing building, as described in the exception to Section 4.2.1.2, the building envelope assumptions for the existing building in the budget building design shall reflect existing conditions prior to any revisions that are part of this permit.~~



**BSR/ASHRAE/IES Addendum dg
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum dg to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

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FOREWORD

This addendum addresses interpretations received. This addendum re-organizes the existing text for clarity. This addendum changes the timeout to match the lighting occupancy sensor time out revisions already published.

A cost effectiveness analysis was not conducted as this does not increase costs.

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

Addendum dg to 90.1-2022

3.3 Abbreviations

...

24/7 24 hours per day, 7 days per week

[...]

8.4.2 Automatic Receptacle Control. ~~The following shall be automatically controlled:~~

- ~~a. At least 50% of all 125 V, 15 and 20 amp receptacles in all~~ In private offices, open offices, conference rooms, rooms used primarily for printing and/or copying functions, break rooms, classrooms, and individual workstations, 50% or more of single-phase alternating current receptacles rated at 20 amps or less shall be automatically controlled in accordance with Section 8.4.2.1.
- ~~b. At least~~ Not less than 25% of ~~branch circuit circuits, feeders~~ branch circuit circuits, feeders installed ~~for receptacle outlets in modular furniture not shown on the construction documents,~~ for receptacle outlets in modular furniture not shown on the construction documents, shall be ~~automatically controlled in accordance with Section 8.4.2.1.~~

~~This control shall function on~~

- ~~a. a scheduled basis using a time of day operated control device that turns receptacles off at specific programmed times — an independent program schedule shall be provided for controlled areas of no more than 5000 ft² and not more than one floor (the occupant shall be able to manually override the control device for up to two hours);~~
- ~~b. an occupancy sensor that shall turn receptacles off within 20 minutes of all occupants leaving a space; or~~
- ~~c. an automated signal from another control or alarm system that shall turn receptacles off within 20 minutes after determining that the area is unoccupied.~~

~~All controlled receptacles shall be permanently marked to visually differentiate them from uncontrolled receptacles and are to be uniformly distributed throughout the space.~~

Plug-in devices shall not be used to comply with Section 8.4.2. All automatically controlled receptacles shall be permanently marked to visually differentiate them from uncontrolled receptacles and shall be uniformly distributed throughout the space. Controlled receptacles shall be one of the following:

- a. Split controlled duplex receptacles with the top or left receptacle controlled.
- b. Installed within six feet of each uncontrolled receptacle.

Exceptions to 8.4.2: Receptacles for the following shall not require an *automatic control device*:

1. Receptacles specifically designated for *equipment* requiring 24/7 continuous operation ~~(24/day, 365 days/year).~~
2. *Spaces* where an *automatic* control would endanger the safety or security of the room or *building* occupants.

8.4.2.1 Automatic Receptacle Control Function: Automatically controlled receptacles shall not be controlled by manual lighting controls, except as permitted by Section 8.4.2.1(a). Automatically controlled receptacles shall be controlled by one or more of the following:

- a. a time-of-day operated control device that turns receptacles off when the space(s) is scheduled to be unoccupied. An independent program schedule shall be provided for controlled areas of no more than 5000

ft² (465 m²) and for not more than one floor. The occupant shall be able to manually override the *control device* for up to two hours;

- b. an *occupancy sensor* that turns receptacles off within 15 minutes of all occupants leaving a *space*;
- c. an automated signal from another *control* or alarm system that turns receptacles off within 15 minutes after determining that the area is unoccupied.



**BSR/ASHRAE/IES Addendum dj
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

**Proposed Addendum dj to
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FOREWORD

This proposal, based on pool heater requirements proposed for California's 2025 energy code, requires that the primary heating system for pools to be efficient. The heating system must either be a heat pump pool heater, a condensing gas pool heater, a solar thermal water heater, a heating system that derives no less than 60 percent of its annual heating energy from on-site renewable energy or a system that derives no less than 40 percent of its heating energy from one of the above or site-recovered energy during the pool's coldest full month of operation. Natural gas or electric back-up heating systems are allowed in all cases. The proposal also includes mandatory minimum efficiency standards for pool heaters established by the U.S. Department of Energy.

Heat pump pool heaters, solar thermal heaters, condensing gas pool heaters and heaters that utilize site-recovered energy or on-site renewable energy are cost effective primary alternatives to conventional non-condensing gas-fired pool heaters which result in reduced energy use and lower monthly utility costs. A cost effectiveness analysis was conducted for heat pump pool heaters, solar pool heaters, and condensing gas pool heaters for indoor and outdoor pools heated seasonally and year-round in all climate zones and found that at least two of these systems are cost-effective in indoor or outdoor pools in Climate Zones 0 through 8.

Note: Portable electric spa was added as a definition in addendum b1

https://www.ashrae.org/file%20library/technical%20resources/standards%20and%20guidelines/standards%20addenda/90_1_2022_b1_20250430.pdf

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Addendum dj to 90.1-2022

Add new definitions as follows:

solar-ready-zone: a section or sections of the roof or building overhang designated and reserved for the future installation of a solar photovoltaic or solar thermal system.

solar thermal pool heater: an assembly of components designed to heat water converting incident solar radiation into thermal energy at the building site.

spa: a structure or product intended for the immersion of persons in temperature-controlled water for the purpose of relaxing, exercise, therapy or treatment; designed and manufactured to be connected to a circulation *system*; and not intended to be drained and filled with each use.

Revise text as follows:

Table 7.4-1 Performance Requirements for Water-Heating Equipment—Minimum Efficiency Requirements (Continued)

Equipment Type	Size Category (Input)	Subcategory or Rating Condition	Performance Required ^a	Test Procedure ^{b,c}
<u>Commercial <i>P</i>pool heaters, gasⁱ</u>	All		82% Et for commercial pool heaters, <u>gas</u> and for applications outside U.S. For U.S. applications, see footnote (g).	10 CFR 430 Appendix P
<u>Consumer <i>pool</i> heaters, gas^j</u>	All		<u>82% Et</u> <u>Before 5/31/2028</u> $\frac{84(Q_{IN} + 491)}{Q_{IN} + 2,536}$ $\left[\frac{84(Q_{IN} + 144)}{Q_{IN} + 690.5} \right]$ <u>On or after 5/31/2028</u> <u>Where Q_{IN} is the input capacity, in Btu/h [W]</u>	<u>10 CFR 430 Appendix P</u>
<u>Commercial <i>H</i>heat pump <i>pool</i> heatersⁱ</u>	All	50°F [10°C] db 44.2°F [6.78°C] wb outdoor air 80.0°F [26.7°C] entering water	4.0 COP ^a	10 CFR 430 Appendix P
<u>Consumer electric <i>pool</i> heaters^j</u>	All	50°F [10°C] db 44.2°F [6.78°C] wb outdoor air 80.0°F [26.7°C] entering water <u>Before 5/31/2028</u> <u>High Air Temperature-Mid Humidity rating condition</u> <u>On or after 5/31/2028</u>	4.0 COP <u>Before 5/31/2028</u> <u>Integrated Thermal Efficiency not less than the following:</u> $\frac{600(PE)}{PE + 1,619}$ <u>Where PE is the active electrical power, in Btu/h</u> <u>On or after 5/31/2028</u>	<u>10 CFR 430 Appendix P</u>

g. *Water heaters* or gas *pool heaters* in this category or subcategory are regulated as consumer products by the U.S. DOE as defined in 10 CFR 430.

h. Where this standard is being applied to a building outside the U.S. and Canada and water heaters in this subcategory are being installed in that building, those water heaters shall meet the local efficiency requirements. If there are no local efficiency standards for residential water heaters, consideration should be given to using the U.S. DOE efficiency requirements shown in Informative Appendix F, Table F

i. Performance requirement is for commercial *pool heaters* and for applications outside of the U.S. Commercial *pool heaters* contain additional design modifications related to safety requirements for installation in commercial buildings and are not regulated as consumer products by the U.S. DOE as defined in 10 CFR 430.

j. *Pool heaters* in this category or subcategory are regulated as consumer products by the U.S. DOE as defined in 10 CFR 430.

Revise text as follows:

7.4.5 Pools

7.4.5.1 Pool Heaters **Electric switches and Ignition pilots.** Electric switches and ignition pilots shall comply with Section 7.4.5.1.1 through Section 7.4.5.1.2.

7.4.5.1.1 Electric switches. *Pool heaters* shall be equipped with a *readily accessible* on/off switch to allow shutting off the heater without adjusting the *thermostat* setting. Operation of such switch shall not change the setting of the heater thermostat.

7.4.5.1.2 Ignition pilots. *Pool heaters* fired by natural gas shall not have continuously burning pilot lights.

Add new section as follows:

7.4.5.3. Primary heating system efficiency. The primary *pool heating systems* shall comply with Section 7.4.5.3.1. Supplementary and back-up heating *systems* shall not be required to comply with Section 7.4.5.3.1. Supplementary and back-up heating *system* controls shall comply with Section 7.4.5.3.4.

7.4.5.3.1 Primary heating system. The primary *pool heating system*, or the primary source of heat for the hydronic *system* that heats the *pool*, shall be one of the following.

1. A heat pump *pool heater*. Where a supplemental heater is installed, the primary heat pump *pool heater* shall be sized in accordance with Section 7.4.5.3.2.
2. A *solar thermal pool heater* with a solar collector surface area equivalent to 65 percent or more of the *pool* surface area.
Exception to 7.4.5.3.1 (2): A *pool* heated only by a *solar thermal pool heater*.
3. A commercial gas *pool heater* with a rating that is not less than 90 percent E_t or a consumer gas *pool heater* with an *equipment* rating that is not less than 90 percent TEI. Where a supplemental heater is installed for an outdoor or partially outdoor *pool*, the primary gas *pool heater* shall be sized in accordance with 7.4.5.3.3.
4. A *system* that derives 60 percent or more of annual water heating *energy* from *on-site renewable energy*. *On-site renewable energy* installed to meet this requirement shall be in addition to the requirements in Section 10.5.1 and Section 11.5.
5. A *system* that derives, during the daily average outdoor temperature and humidity conditions corresponding to the mean day during the *pool*'s coldest full month of operation, not less than 40 percent of its daily heating *energy* from one or a combination of heat pump *pool heaters*, *solar thermal pool heaters*, *on-site renewable energy*, or *site-recovered energy*.

Exception to 7.4.5.3:

1. *Portable electric spas*.
2. Heating *systems* for indoor *pools* in Climate Zone 8.
3. Heating *systems* for fully or partially outdoor *pools* in Climate Zones 4 to 8.
4. Where the surface area of *pools* is greater than 15,000 square feet [1,400 m²]
5. *Pool slides* that do not end in a Class D-3 catch pool.
6. Heating *systems* dedicated to permanent *spa* applications in buildings where *solar-ready zones* meet one of the following requirements:

6.1. The *solar-ready zone* area is a contiguous area less than 65% of the permanent *spa* surface area.

6.2 Where no area for a *solar-ready zone* exists.

6.3 Where more than 50 percent of the solar-ready zone is shaded from direct-beam sunlight by natural objects or by structures for more than 2,500 annual hours between 8:00 a.m and 4:00 p.m.

7. Heating *systems* which are used to prevent freezing and are not set to heat the water above 50°F [10°C].

7.4.5.3.2 Heat pump pool heater sizing. Where a supplemental heater is installed, the design loads for the purpose of sizing *systems* and *equipment* for heat pump *pool* heaters serving as primary heating *systems* for indoor *pools* shall comply with one or both of the following:

1. Heat pump *pool* heaters shall be sized in accordance with the manufacturer's published sizing guidelines.
2. Heat pump *pool* heaters without manufacturer's published sizing guidelines shall be sized in accordance with *generally accepted engineering standards*, or the 2023 ASHRAE Handbook-HVAC Applications, 2021 ASHRAE Handbook-Fundamentals or 2020 ASHRAE Handbook-HVAC Systems and Equipment.

Where a supplemental heater is installed, the design loads for the purpose of sizing *systems* and *equipment* for heat pump *pool* heaters serving as primary heating *systems* for fully or partially outdoor *pools* shall comply with one or more of the following:

1. Heat pump *pool* heaters shall be sized to meet or exceed the manufacturer's published sizing guidelines, specific to the *pool* size and temperature conditions being proposed, without supplemental heating.
2. Heat pump *pool* heaters shall provide, while the outdoor dry bulb air temperature is 50°F [10°C], the wet bulb temperature is 44.2°F [6.78°C], and the entering water temperature is 80.0°F [26.7°C], a heat output not less than 127 Btu/hr per square foot [400 W per square meter] of outdoor *pool* surface area.
3. Heat pump *pool* heaters shall provide, during the daily average outdoor temperature and humidity conditions corresponding to the mean day during the *pool*'s coldest full month of operation, a heat output of 40 percent or more of the heat loss calculated for those weather conditions and operating *pool* water temperature.

7.4.5.3.3 Primary gas pool heater sizing. Where a supplemental heater is installed, gas *pool* heaters serving as primary heating *systems* for outdoor or partially outdoor *pools* shall provide, during the daily average outdoor temperature and humidity conditions corresponding to the mean day during the *pool*'s coldest full month of operation, a heat output no less 40 percent of the heat loss calculated for those weather conditions and operating *pool* water temperature.

7.4.5.3.4 Control of supplementary pool heating systems. *Pool* heating *systems* with an internal or an external supplementary *pool* heating *system* shall have controls that prevent supplemental heat operation where the heating load can be met by the primary *pool* heating *system* alone. Supplementary heat shall be permitted to operate when the water temperature is not less than 0.5°F [0.3K] below the water temperature setpoint.



**BSR/ASHRAE/IES Addendum dq
to ANSI/ASHRAE/IES Standard 90.1-2022**

Public Review Draft

Proposed Addendum dq to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

**First Public Review (August 2025)
(Draft Shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts 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 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.

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(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

This addendum updates lighting modeling rules in Section 12 and Appendix G to align with the current prescriptive requirements in Section 9. The dwelling units LPD is based on PNNL’s [90.1 2022 Final Determination Technical Support Document](#) reflect 90.1 2019 Addendum br. Updates to Section 12.5.2 clarifies that systems and components in the proposed design that do not meet prescriptive requirements in Section 6 must be modeled as minimally compliant with this section unless otherwise prescribed in Figure 12.5.2 and Table 12.5.2-1.

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

Addendum dq to 90.1-2022

12.5.2 HVAC Systems. The HVAC system type and related performance parameters for the *budget build-ing design* shall be determined from Figure 12.5.2, the system descriptions in Table 12.5.2-1 and accompa- nying notes, and the following rules:

- a. ~~Budget Building Systems Parameters Not Listed.~~ Where there are specific requirements in Sections 6.4 and 6.5 applicable to systems and components in the budget building design, the budget building design shall be modeled as meeting these requirements. Budget design C components and parameters not listed in Figure 12.5.2 and Table 12.5.2-1 or otherwise not specifically addressed in this subsection shall be identical to those in the *proposed design*.

~~Exception to 12.5.2(a): Where there are specific requirements in Sections 6.4 and 6.5, the component efficiency in the budget building design shall be adjusted to the lowest efficiency level allowed by the requirement for that component type.~~

.....

Table 12.5.1 Modeling Requirements for Calculating Design Energy Cost and Energy Cost Budget (Continued)

Proposed Design (Column A) Design Energy Cost (DEC)	Budget Building Design (Column B) Energy Cost Budget (ECB)
6. Lighting	
Lighting power in the <i>proposed design</i> shall be determined as follows: d. <i>Lighting system</i> power shall include all <i>lighting system</i> components shown or provided for on plans (including <i>lamps</i> , <i>ballasts</i> , <i>task fixtures</i> , and <i>furniture-mounted fixtures</i>). For <i>dwelling units</i> , hotel/motel guest rooms, and other <i>spaces</i> in which <i>lighting systems</i> consist of plug-in light fixtures that are not shown or provided for on <i>design documents</i> , assume identical	a. Where a complete <i>lighting system</i> exists, lighting power in the <i>budget building design</i> shall be the same as in the <i>proposed design</i> . b. Where a <i>lighting system</i> has been designed, the <i>interior lighting power allowance</i> shall be determined using either the <i>Building Area Method</i> or <i>Space-by-Space Method</i> , and the <i>space use classification</i> shall be the same as the <i>proposed design</i> with lighting power set equal to the maximum allowed for the

<p>lighting power for the <i>proposed design</i> and <i>baseline building design</i> in the simulations.</p> <p>....</p> <p>f. Automatic daylighting controls included in the <i>proposed design</i> may be modeled directly in the <i>building</i> simulation or be modeled in the <i>building</i> simulation through schedule adjustments determined by a separate analysis approved by the <i>authority having jurisdiction</i>. Modeling and schedule adjustments shall separately account for <i>primary sidelighted areas</i>, <i>secondary sidelighted areas</i>, and toplighted areas <u>and shall account for fenestration VT</u>.</p> <p>g. Automatic lighting controls included in the <i>proposed design</i> but not required by Section 9.4.1 shall be modeled using the following methods for each luminaire under control:</p> <p>1. Manual-ON or partial-auto-ON occupancy sensors shall be modeled by reducing the lighting schedule each hour by the <i>occupancy sensor</i> reduction factors in Table G3.7-1 and G3.7-2 for the applicable <i>space</i> type multiplied by 0.25.</p> <p>2. Automatic lighting controls listed in Table 9.5.2.3 shall be modeled using the sum of the applicable control factors (CF). Apply control factors to only the portion of wattage of the fixtures in the space controlled by said lighting control. Divide each hour of the lighting schedule by $(1 + \sum CF)$, where $\sum CF$ indicates the sum of all applicable control factors for that space per Section 9.5.2.3 and Table 9.5.2.3.</p> <p>.....</p>	<p>corresponding method and category in Section <u>9.5.9.2</u>. Additional interior lighting power for nonmandatory controls allowed under Table 9.5.2.3 shall not be included in the budget building design. Lighting power density in dwelling units shall be 0.60 0.29 W/ft² (6.5 <u>3.1</u> W/m²)</p> <p>c. Where lighting neither exists nor is submitted with design documents, the lighting power in the <i>budget building design</i> shall be the same as in the <i>proposed design</i>.</p> <p>d. Power for <i>fixtures</i> not included in the lighting power calculation shall be modeled identically in the <i>proposed design</i> and <i>budget building design</i>.</p> <p>e. Mandatory <i>automatic</i> lighting controls required by Section 9.4.1 shall be modeled the same as the <i>proposed design</i>.</p> <p><u>f. Modelling of daylighting controls shall account for fenestration VT</u></p>
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.....
Table G3.1 Modeling Requirements for Calculating Proposed Building Performance and Baseline Building Performance (Continued)

Proposed Building Performance	Baseline Building Performance
6. Lighting	
<p>Lighting power in the <i>proposed design</i> shall be determined as follows:</p> <p>.....</p> <p>e. For <i>dwelling units</i>, hotel/motel guest rooms, and other <i>spaces</i> in which <i>lighting systems</i> are connected via receptacles and are not shown on <i>design documents</i>, lighting power used in the simulation shall be equal to the lighting power allowance in Tables 9.5.2.1-1 and 9.5.2.1-2 for the appropriate <i>space</i> type or as designed, whichever is greater. For the <i>dwelling units</i>, lighting power used in the simulation shall be equal to 0.60 <u>0.29</u> W/ft² (6.5 <u>3.1</u> W/m²) or as designed, whichever is greater.</p> <p>Exception: Lighting use can be reduced for the portion of the <i>space</i> illuminated by the specified <i>fixtures</i> provided that they maintain the same illuminance level as in the baseline. Such reduction shall be demonstrated by calculations.</p>	

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Revision to NSF/ANSI 53-2024

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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 53: Drinking Water Treatment Units — Health Effects

7 Elective performance claims – Test methods

7.4 Metals reduction testing

7.4.2 General metals reduction

7.4.2.1 General metals reduction testing

Table 7.13
General metals reduction requirements

Substance	Individual influent sample point limits ^a (mg/L)	Average influent challenge ^b (mg/L)	Maximum effluent concentration (mg/L)	U.S. EPA Method(s)	Compound
chromium (hexavalent)	0.3 ± 25% 0.1 ± 25%	0.3 ± 10% 0.1 ± 10% ^c (added as hexavalent)	0.1 0.01 ^d	SM3500-CrD 200.7, 200.8, 200.9, 218.6, or 218.7 ^e	Na ₂ Cr ₂ O ₇ 2 H ₂ O
chromium (trivalent)	0.3 ± 30%	0.3 ± 10% (added as trivalent)	0.1	200.8 ^{ef}	CrCl ₃ 6 H ₂ O
chromium (hexavalent and trivalent)	0.3 ± 25%	0.3 ± 10% (added as 0.15 mg/L hexavalent and 0.15 mg/L trivalent)	0.05 (for each species)	SM3500-CrD and 200.8 ^{ef}	—

Note 1. Contaminants not listed in this table should be added in their molecular form.

Note 2. Metal salts using alternate counter ions may be used if interferences and synergistic effects are avoided.

^a Equals average influent challenge concentration variability plus one of the following, in order of availability:

1. Acceptable CCV limits stated in the appropriate US EPA Method.

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Table 7.13
General metals reduction requirements

Substance	Individual influent sample point limits ^a (mg/L)	Average influent challenge ^b (mg/L)	Maximum effluent concentration (mg/L)	U.S. EPA Method(s)	Compound
<p>2. Acceptable spike recoveries as stated in the appropriate US EPA Method.</p> <p>3. Opinion of laboratory professionals – no guidance available in US EPA Method.</p> <p>^b Reason for influent challenge levels: challenge concentrations should be selected to simulate what a system will be challenged with in the field and to provide an accurate and reproducible indicator of performance. The following sequence of criteria is used to select challenge concentrations:</p> <p>a) The upper percentile concentration of available occurrence data (the concentration for which there is high probability ($P < 0.05$) that 95% of the population will be exposed to waters of lower concentration). Occurrence data shall come from national monitoring programs administered by the US EPA or the USGS. Other occurrence data shall be accepted by the Joint Committee on Drinking Water Treatment Units.</p> <p>b) The concentration obtained by multiplying the US EPAs published MCL by three. This concentration will is not be adequate when US EPA MCL is very low.</p> <p>^c Influent challenge concentration based on results from US EPA's Unregulated Contaminant Monitoring Rule 3 dataset.</p> <p>^d Effluent challenge concentration based on CA MCL for hexavalent chromium.</p> <p>^e Influent challenge concentration may be checked using SSM3500-CrD, but this method shall not be used to validate performance.</p> <p>^{e,f} Measured as total chromium by US EPA Method 200.8 minus hexavalent chromium as measured by <i>Standard Methods</i> 3500-CrD.</p>					

8 Instruction and information

8.4 Performance data sheet

Table 8.1
Performance data sheet reduction claims

Substance	Influent challenge concentration (mg/L)	Maximum permissible product water concentration (mg/L)
chromium (hexavalent)	0.3 ± 10% 0.1 ± 10%	0.1 0.01 ^a
chromium (trivalent)	0.3 ± 10%	0.1
chromium (hexavalent and trivalent)	0.3 ± 10%	0.05 (hexavalent) and 0.05 (trivalent)
^a Effluent standard is based on the CA MCL for hexavalent chromium.		

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NSF/ANSI 58:

Reverse Osmosis Drinking Water Treatment Systems

7 Elective performance claims – Test methods

7.1 Chemical reduction claims

7.1.3 Inorganic chemical reduction claims

Table 7.2
Contaminant reduction requirements

Contaminant	Individual influent sample point limits ^a (mg/L)	Average influent challenge level (mg/L)	Maximum allowable product water level (mg/L)	U.S. EPA Method(s) ^b	Compounds
chromium (hexavalent) ^f	0.3 ± 20%, 0.3 ± 25% ^g 0.1 ± 20%, 0.1 ± 25% ^{g, h}	0.3 ± 10% 0.1 ± 10% (added as hexavalent) ^h	0.1 0.01 ⁱ	200.7, 200.8, 200.9, 218.6, 218.7	Na ₂ Cr ₂ O ₇ 2 H ₂ O
chromium (trivalent) ^f	0.3 ± 30% ^{h, j}	0.3 ± 10% (added as trivalent)	0.1	—	CrCl ₃ · 6 H ₂ O
chromium (hexavalent and trivalent)	0.3 ± 25%	0.3 ± 10% (added as 0.15 mg/L hexavalent and 0.15 mg/L trivalent)	0.05 (for each species)	SM3500-CrD and 200.8	—

^f Chromium shall be added as chromate for hexavalent chromium reduction and measured as total chromium. Trivalent chromium reduction may be claimed only after additional testing.

^g The first limits apply to analysis conducted according to U.S. EPA Method 200.7, and the second limits apply to analysis conducted according to U.S. EPA Method 200.8 or 200.9.

^h Influent challenge concentration based on results from US EPA's Unregulated Contaminant Monitoring Rule 3 dataset.

ⁱ Effluent challenge concentration based on CA MCL for hexavalent chromium.

^{h, j} Trivalent chromium is a calculated parameter. The range is based on the propagated error of two analyses.

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8 Instructions and information

⋮

8.3 Performance data sheet

⋮

Table 8.1
Performance data sheet requirements

Substance	Influent challenge concentration (mg/L)	Maximum permissible product water concentration (mg/L)
⋮		
chromium (hexavalent)	0.3 ± 10% 0.1 ± 10% ^b	0.4 0.01 ^c
chromium (trivalent)	0.3 ± 10%	0.1
chromium (hexavalent and trivalent)	0.3 ± 10%	0.05
⋮		
⋮		
^b Influent challenge concentration based on results from US EPA's Unregulated Contaminant Monitoring Rule 3 dataset.		
^c Effluent challenge concentration based on CA MCL for hexavalent chromium.		
⋮		

⋮

Rationale:

These updates:

- ***Lower the influent and effluent values for hexavalent chromium in NSF/ANSI 53 and 58 as a way to meet the California MCL***
- ***In Table 7.13 of NSF/ANSI 53, change “will not be” to “is not” in footnote b, bullet b as a style convention to reserve future tense only for future occurrences***
- ***Add relevant footnotes to all tables***
- ***Harmonize the hexavalent chromium detection methods for consistency between NSF/ANSI 53 and 58***

NOTE: Footnotes in Tables 7.2 and 8.1 of NSF/ANSI 58 that are not part of this ballot are not shown and will be reordered appropriately.

BSR/UL 1400-2, Standard for Safety for Cables in Fault-Managed Power Systems

1. Proposed First Edition of the Standard for Safety for Cables in Fault-Managed Power Systems

PROPOSAL

Table 6.1
Thicknesses of solid insulation

AWG Size of Conductor	Thermoset or Thermoplastic (Other than PVC with an a minimum unaged tensile strength of less than 1379 N/cm ² (2000 lbf/in ²), or ECTFE, ETFE, FEP, HDPE, MFA, PFA, PTFE (TFE), PVDF, PVDF Copolymer, Semirigid PVC)				PVC with an minimum unaged tensile strength of 1379 N/cm ² (2000 lbf/in ²), or ECTFE, ETFE, FEP, HDPE, MFA, PFA, PTFE (TFE), PVDF, PVDF Copolymer, Semirigid PVC			
	Minimum acceptable average thickness		Minimum acceptable thickness at any point		Minimum acceptable average thickness		Minimum acceptable thickness at any point	
	inch	(mm)	inch	mm)	inch	(mm)	inch	(mm)
24-20	0.020	(0.51)	0.018	(0.46)	0.012	(0.31)	0.011	(0.28)
19-15	0.020	(0.51)	0.018	(0.46)	0.015	(0.38)	0.013	(0.33)
14-12	0.025	(0.64)	0.022	(0.56)	0.015	(0.38)	0.013	(0.33)
11-6	0.030	(0.76)	0.027	(0.69)	0.020	(0.51)	0.018	(0.46)

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BSR/UL 2200A, Standard for Safety for Standard for The First Edition of the Standard for Fire Containment Testing of Stationary Engine Generator Enclosures, UL 2200A as an American National Standard.

1 Scope

1.1 These requirements provide fire test data and performance criteria to evaluate LPG and/or natural gas fueled stationary engine generator assemblies for installation less than the required spacing by the Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines, NFPA 37, Engines – General Requirements.

1.2 The fire conditions represented by these tests simulate a small gas leak and a high flow catastrophic gas leak that results in the ignition of the fuel source (LPG, natural gas) and combustible components within the generator assembly enclosure.

1.3 These requirements do not apply to generator assemblies located in structures or generator assemblies located on roofs.

4 Glossary

4.4 ENCLOSURE – That portion of a unit that houses the ~~engine~~ generator assembly and:

- a) Reduces the accessibility of a part that involves a risk of fire, electric shock, or injury to persons; or
- b) Reduces the risk of propagation of flame, sparks, and molten material.

4.6 LIQUIFIED PETROLEUM GAS or LIQUID PETROLEUM GAS (LPG or LP gas) – Any material having a vapor pressure not exceeding that allowed for commercial propane that is composed predominantly of the following hydrocarbons, either by themselves (excluding propylene) or as mixtures: propane, propylene, butane (normal butane or isobutane) and butylenes.

~~4.64.7~~ STATIONARY – A unit that is intended to be hard wired and/or permanently installed.

~~4.74.8~~ UNIT – The generator assembly under test.

FIRE PERFORMANCE

6.1 A complete generator assembly with the applicable enclosure and all accessories and components that may contribute to the source of fuel shall be provided.

NOTE: A particular generator assembly enclosure may be suitable for several generator assembly models and in such cases, it would be suitable to test only the worst-case situation as agreed upon by the manufacturer and testing agency.

6.5 The minimum clearance for equipment intended for installation under a combustible overhang or canopy shall be described. The minimum clearance specified shall be between the top of the stationary ~~engine~~ generator assembly enclosure and the bottom surface of the ~~overhang~~ overhang or canopy (see 7.6).

6.6 The status of any automatic safety device ~~intended to shut off the inlet fuel supply during a fire~~, if provided, shall be identified, and monitored.

7 Clearance to Combustibles Test Preparation

7.3 The generator assembly shall be placed on a noncombustible surface for the duration of the test unless the manufacturer's instructions provide for installation on a combustible surface ~~or polymeric mounting pad~~ (see 6.3). If the generator assembly can be installed on a combustible surface ~~or polymeric~~

mounting pad, then the unit under test shall be installed as specified in the manufacturer's installation instructions.

7.4 The generator assembly unit shall be positioned within a three-sided alcove using 2 x 4-inch dimensional lumber framing with studs spaced at ~~46-inch~~ 16-inch centers and with 7/16-inch thick Oriented Strand Board (OSB) sheathing and a vinyl siding exterior. Vinyl siding is to be 0.040 inch thick and comply with the requirements of ASTM D3679. One wall may consist of a privacy fence, constructed using 72-inch tall pre-assembled cedar panels that are a nominal thickness of 1-inch and with the vertical panels adjacent and butted against each other. ~~Alternately, the manufacturer's installation instructions shall be used when constructing the privacy fence.~~

~~Exception: Other fencing materials may be used as agreed upon by the manufacturer and testing agency.~~
Exception: Walls shall not be required on sides where the manufacturer's instructions prohibit combustible structures within the NFPA 37 mandated clearance adjacent to that side.

7.6 If ~~provided for~~ permitted in the manufacturer's installation instructions, a combustible structure above the generator assembly shall meet the manufacturer's specifications and shall be positioned at the minimum distance specified in the installation instructions (see Figure 7.2).

7.7 In lieu of specific manufacturer's specifications for a combustible structure above the generator assembly, a mock-up deck shall be built using 2 x 4-inch dimensional lumber with joists spaced at 16-inch centers and overlaid with 5/4-inch cedar decking material with 1/2-inch gaps between the adjacent sections of decking material. The overhanging portion of the mock-up deck and the height above the generator assembly enclosure shall be as per the manufacturer's specifications.

8 Clearance to Combustibles Test Method

8.1 Small Gas Leak

8.1.1 A small gas leak shall be simulated by allowing ~~liquefied petroleum (LPG)~~ to flow at a rate of 0.2 – 0.3 cu feet/min (0.006 m³/min – 0.009 m³/min) through a 1/4-inch nominal sized tube. The tube shall be Type L as specified in ASTM B88 or an equivalent size with regards to the outside diameter (O.D.) and with an equivalent wall thickness. The tube shall penetrate the wall of the enclosure and terminate in the area with the highest fuel load or sources of combustion as determined by visual inspection of the generator assembly.

NOTE 1: Type L tube that is designated as 1/4 inch nominal size has an O.D. of 0.375 inches and a wall thickness of 0.030 inches. Tube that has a nominal size of 3/8 inch, as specified in ASTM B280, has an O.D. of 0.375 inches and a wall thickness of 0.032 inches. Tube that has a nominal size of 3/8 inch, as specified in ASTM B837, has an O.D. of 0.375 inches and a wall thickness of 0.030 inches.

NOTE 2: The liquefied petroleum (LPG) gas shall be the grade known as either HD-5 Propane or HD-10 Propane.

8.1.2 The generator assembly shall be started and preheated using either natural gas or LPG by operating the generator assembly for no less than 15 minutes at no load.

8.1.4 Within 5 min of turning the generator assembly off, an igniter placed in the fuel load area shall be turned on and the gas-LPG supply, as described in 8.1.1, shall be allowed to flow into enclosure.

8.1.5 If ignition of the simulated gas leak is not observed within 1 min after the simulated leak is introduced, the flow of liquefied petroleum (LPG) supply to the leak shall be stopped and the interior of the enclosure shall be purged at not less than 4 complete air changes. The location of the igniter, as described in 8.1.4, shall be adjusted and the procedure described in 8.1.1 to 8.1.4 shall be repeated until sustained ignition occurs.

8.1.7 Once sustained ignition occurs, the LPG supply flow shall be supplied for 1 hour or until the automatic safety device, as identified in 6.6, has activated. ~~The test shall be continued until ignition occurs on at least one of the combustible structure walls or combustible overhand or canopy, for a period of 1 hour has elapsed. The simulated gas leak shall continue to flow for the duration of the test or until the safety device, as identified in 6.6, has activated.~~ If at any time during the 1-hour test ignition occurs on any one of the combustible structure walls or combustible overhang or canopy, then the test ~~will~~ shall be stopped.

8.1.8 After 1 hour, if no ignition has occurred on any one of the combustible structure walls or combustible ~~overhand~~ overhang or canopy, ~~the liquified petroleum LPG supply to the leak and the fuel supply to the unit shall be shut off and the generator allowed to cool.~~

8.1.9 The ignition of one or more combustible structure walls or combustible ~~overhand~~ overhang or canopy shall be considered a failure. Ignition shall be an open flame on the surface of the wall or structure for a duration of 30 seconds or longer. Melting or dripping is acceptable provided that the melting or dripping material does not cause ignition of the combustible structure walls or combustible overhang or canopy.

8.2 High Flow Gas Leak

8.2.1 A high flow gas leak shall be simulated by allowing ~~the~~ LPG equivalent to the generator assembly's full load fuel supply to be introduced into the generator assembly enclosure. ~~The liquified petroleum LPG equivalent of the full load fuel supply shall be supplied through a pipe equal to the generator assembly's inlet pipe size. The liquified petroleum LPG shall be introduced into the generator assembly enclosure in the vicinity of the fuel inlet and gas regulator.~~

NOTE: The liquified petroleum (LPG) gas shall be the grade known as either HD-5 Propane or HD-10 Propane.

8.2.2 The generator assembly shall be started and preheated by operating the generator assembly for no less than 15 minutes at no load.

8.2.4 Within 5 min of turning the generator assembly off, an igniter placed near the fuel inlet and regulator shall be turned on and ~~liquified petroleum~~ the LPG supply shall be allowed to flow into the vicinity of the fuel inlet and regulator at a rate of 0.2 – 0.3 cu feet/min (0.006 m³/min to 0.009 m³/min).

8.2.5 If ignition of the ~~liquified petroleum~~ LPG is not observed within 1 min after the fuel is introduced, the ~~flow of liquified petroleum will~~ LPG supply to the leak shall be stopped and the interior of the enclosure shall be purged at not less than 4 complete air changes. The location of the igniter shall be adjusted, and the procedure described in 8.2.1 to 8.2.4 shall be repeated until sustained ignition occurs. Manual ignition of the leak shall be allowed if necessary.

8.2.6 Once sustained ignition occurs, ~~the fuel~~ LPG supply flow shall be increased to the equivalent of the full load fuel supply. ~~and this fuel~~ The LPG and the fuel supply to the unit shall be supplied for 20 minutes or until the automatic safety device, as identified in 6.6, has activated. If the automatic safety device is activated, the fuel supply to the unit shall remain on for the remainder of the 20 minutes. If at any time during the test ignition occurs on any one of the combustible structure walls or combustible ~~overhand~~ overhang or canopy, then the test will be stopped.

8.2.7 The fuel supply to the unit should be monitored during the fire test. If the fuel supply to the unit is flowing fuel, the LPG supply to the High Flow Gas Leak shall be reduced by the amount that the fuel supply to the unit is flowing. The total flow of the fuel supply to the unit ~~flow~~ and the LPG supply to the High Flow Gas Leak ~~flow~~ shall be equal to the generator assembly's full load fuel flow.

8.2.8 The test shall be continued for an additional 40 minutes after the flow of all fuel to the generator assembly has stopped. The total test time is one hour.

8.2.9 The ignition of one or more combustible structure walls or combustible overhang or canopy shall be considered a failure. Ignition shall be an open flame on the surface of the wall or structure for a duration of 30 seconds or longer. Melting or dripping is acceptable provided that the melting or dripping material does not cause ignition of the combustible structure walls or combustible ~~overhand~~ overhang or canopy.

9.4 A unit shall be plainly and permanently marked where it is readily visible, after installation, with:

- a) The manufacturer's name, trademark, or other descriptive marking by which the organization responsible for the generator assembly is identified;
- b) A distinctive catalog alpha numeric code or the equivalent;
- c) The statement, "~~Compliant with NFPA 37, Section 4.1.3, Engines Located on Roofs~~" or "Compliant with NFPA 37, Section 4.1.4, Engines Located Outdoors";
- d) The serial number, date code, or other equivalent dating period code of manufacture not exceeding any three consecutive months; and
- e) Manufacturing location (only required for products manufactured at multiple locations).

9.5 Unless the unit has been tested to be suitable for installations as described in 7.3, the unit shall be marked with the word "DANGER" and the following or equivalent wording: "RISK OF FIRE, WHICH COULD RESULT IN DEATH OR SERIOUS INJURY. DO NOT MOUNT ON OR OVER A COMBUSTIBLE SURFACE."

Note: This marking need not be permanent.

10 Installation Manual

10.2 If the manufacturer allows for installation on or over combustible surfaces ~~or polymeric mounting pads~~, instructions shall be provided in the installation manual, ~~unless the unit has been tested as suitable for installations as described in 7.3.~~

BSR/UL 2996, Standard for Safety for In-Ground Outlet Boxes

1. Proposed First Edition of the Standard for Safety for In-Ground Outlet Boxes

PROPOSAL

5.3 The wiring enclosures, of an in-ground outlet box, intended to be ~~submerged or installed up to 304.8 mm (12 inches) above below~~ finished grade shall comply with enclosure ratings Type 6 or 6P, with cover closed. Wiring enclosures installed ~~304.8 mm (12 inches) or greater at or~~ above finished grade, shall comply with a minimum enclosure rating type 3R with cover closed. ~~The requirements in clause 8.2 are applicable.~~

~~8.2 Environmental testing~~

~~8.2.1 Where an Enclosure Type is specified and marked it shall be evaluated and rated for the requirements of UL 50E•CSA C22.2 No. 94.2 for Enclosure Type 3R and may be additionally rated for multiple Enclosure Types, such as 3RX, 3, 3X, 3S, 3SX, 4, 4X, 6, or 6P.~~

Table 8.2.1
Tightening torque

Torque		Trade size of conduit
N-m	Pound-inches	
90.4	800	3/4 and smaller
113	1000	1, 1-1/4 and 1-1/2
180.8	1600	2 and larger

BSR/UL 588, Standard for Safety for Seasonal and Holiday Decorative Products

1. Optional Lamp Replacement Instructions for LED series-connected Lighting Strings

PROPOSAL

125.3 Products employing lamps

125.3.6 A decorative outfit which employs less than 8 miniature lamps (see Exception No. 2 to [31.1](#)), a decorative outfit or series connected string with less than 20 push-in or midget-screw lampholders, or a series-connected product employing lamps not provided with lamp shunts, shall be marked as follows: "CAUTION – Replace lamps only with ____ volt, ____ watt spare lamps provided with this product." The blanks shall be filled in with the voltage and wattage of the replacement lamps. For products employing LED lamps, the marking is permitted to be repeated for each additional replacement spare lamp provided with the product.

2. Series-Connected LED Lamps employing Dumet Wire

RATIONALE

Proposal submitted by: Anthony T. Tassone, UL Solutions

Dumet wire has a long history of use as the lead wire in series-connected incandescent glass lamps. With the introduction of LED's encased in glass, the lead wires need to be suitable for use with glass. Therefore, it is being proposed to permit Dumet wire as a lamp lead for LED lamps encased in glass and to clarify that Dumet wires are acceptable for use with incandescent lamps.

PROPOSAL

14 Terminals and Conductive Parts

14.3 Current-carrying parts shall be of silver, copper, copper alloy, or other material acceptable for the particular application and shall be mounted on polymeric, phenolic or urea composition or on another insulating material acceptable for the purpose. LED lamp leads shall not be plated steel. Dumet wires are permitted as lamp leads for incandescent or LED lamps encased in glass.

2.49 WIRE, DUMET - Dumet is a glass-to-metal sealing alloy. It is a bimetal made of a nickel-iron core encased in a copper sheath. Dumet wire is used as a glass-to-metal seal in manufacturing of lamps, diodes, and other electronic components.

3. LED Lamps - Glass Envelopes

PROPOSAL

SA4 LED Lamps

SA4.1 The housing of an LED lamp used in a series-connected lighting string shall comply with the requirements in [22.2.1.2](#).

Exception: LED lamps that are encased in a glass envelope need not comply with [22.2.1.2](#). LED lamps employing a glass envelope greater than 5mm in outer diameter shall comply with the Drop Test, described in SA11A.

4. Battery Circuit Clarification

PROPOSAL

18A.3 Battery circuits

18A.3.1 These requirements apply to battery-operated seasonal products that employ less than the number of Common sizes and types of batteries are shown in [Table 18A.1](#). The measured power output of a battery not included in the table shall be less than 15 50 watts as determined by the Component Power Measurement Test, Section [49](#). Where the number and type of batteries provide more than 15 watts and less than 50 watts as determined by the Component Power Measurement Test, Section 49 are as shown in [Table 18A.1](#), the wiring shall comply with [18A.4.3](#) – [18A.4.5](#). Batteries shall not be connected in parallel.

Table 18A.1
Output capabilities of Common sizes and types of batteries^b

Battery			
Type	Size	Designation ^a	Rated voltage
Carbon-zinc	N	N	1.5
	AAA	AAA	1.5
	AA	AA	1.5
	C	C	1.5
	D	D	1.5
	F	—	1.5
	9-V transistor	1604	9.0
Alkaline-manganese dioxide	N	L20	1.5
	AAA	L30	1.5
	AA	L40	1.5
	C	L70	1.5
	9-V transistor	1604A	9.0
Nickel-cadmium	N	KR115/XXX	1.2
	AAA	—	1.2
	9-V transistor	—	8.4
<p>^a This designation corresponds to that in the Portable Primary Cells and Batteries with Aqueous Electrolyte, General and Specifications, ANSI C18.1M, Part 1.</p> <p>^b The measured power output of a battery not included in the table shall be less than 15 watts as determined by the Power Measurement Test, Section 49.</p>			

5. Clarification of the Requirements for Series-connected Lampholders

PROPOSAL

22.2 Series-connected

22.2.1.2 The body of a lampholder which is less than 0.15 inch³ (2500 mm³) shall be in accordance with Table 22.2.1 and the following meet the requirements in: either [22.2.1.2A](#) or [22.2.1.2B](#) and shall meet the requirements in [22.2.1.2C](#).

- a) For molded push-in lampholders or molded non-replaceable lampholders shall meet the requirements in [22.2.1.2A](#) and 22.2.1.2C or
- b) For nonreplaceable lampholders using tubing as part of the construction and shall meet the requirements in [22.2.1.2B](#) and [22.2.1.2C](#).

22.2.1.2A The body of a molded push-in lampholders or molded non-replaceable lampholders shall be molded of a material that meets the following requirements:

- a) Be rated minimum of 90°C,

b) Hhas a flammability rating of SC-0 or SC-1 in accordance with the Standard for Tests for Flammability of Small Polymeric Component Materials, UL 1694, when testing is performed on standardized flame bars of 55 (±0.5) × 13.0 (±0.5) mm at a thickness of 0.8 (±0.1) mm or less.

22.2.1.2B For Lampholders using non-replaceable lamps and tubing as part of the that are not of a molded construction, the lampholder is are permitted when the construction consists of the following: to consist of a tubing material that has been determined suitable for use in the Standard for Seasonal and Holiday Decorative Products, UL 588, and the tubing shall:

- a) Be rated minimum 90°C. An outer lampholder enclosing the tubing, where the lampholder is secured so that it does not slide out of position.
- b) Comply with the Tensile Strength requirements in the Standard for Extruded Insulated Tubing, UL 224 Tubing that covers a portion of the insulated conductors, uninsulated lamp leads, and a portion of the epoxy housing of the LED, and
- c) If in direct contact with uncoated copper, comply with the Copper Corrosion Test in the Standard for Extruded Insulated Tubing, UL 224, An insulator between uninsulated lamp leads to prevent short circuit. The material shall have a temperature rating suitable for the application.
- d) Be provided with a polymeric material enclosing tubing and the lamp leads. The polymeric material shall be rated minimum 90°C and have a flammability rating of SC-0 or SC-1 in accordance with the Standard for Tests for Flammability of Small Polymeric Component Materials, UL 1694, when testing is performed on standardized flame bars of 55 (±0.5) × 13.0 (±0.5) mm at a thickness of 0.8 (±0.1) mm or less.

22.2.1.2B1 The lampholder shall be of a polymeric material that meets the following requirements:

- a) Be rated minimum 90°C; and

- b) Has a flammability rating of SC-0 or SC-1 in accordance with the Standard for Tests for Flammability of Small Polymeric Component Materials, UL 1694, when testing is performed on standardized flame bars of 55 (±0.5) × 13.0 (±0.5) mm at a thickness of 0.8 (±0.1) mm or less.

22.2.1.2B2 The tubing material shall meet the following requirements:

- a) Been determined suitable for use in the Standard for Seasonal and Holiday Decorative Products, UL 588; and
- b) Be rated minimum 90°C.
- c) Comply with the Tensile Strength requirements in the Standard for Extruded Insulated Tubing, UL 224.
- d) Comply with the Copper Corrosion Test in the Standard for Extruded Insulated Tubing, UL 224, when the tubing is in direct contact with uncoated copper

22.2.1.2C The lampholder must comply with the Flammability Test for Small Components specified in the Standard for Tests for Flammability of Small Polymeric Component Materials, UL 1694, except that the bottom of the lampholder shall be located 11.8 ±0.39 inch (300 ±10 mm) above the cotton indicator and the flame application time shall be 10 seconds. Total consumption of the component or specimen or ignition of the cotton indicator by flaming particles or drops shall not be allowed.

Table 22A
Series-connected Lampholder Requirements Summary

<u>Requirement</u>	<u>Replaceable Lampholders</u>	<u>Non-Replaceable Lampholders</u>			
		<u>Molded Type</u>	<u>Non-Molded Type</u>		
			<u>Polymeric material enclosing tubing</u>	<u>Tubing Enclosing Live Parts</u>	<u>Insulator between uninsulated lamp leads</u>
<u>Flammability Classification</u>	<u>SC-0, SC-1</u>	<u>SC-0, SC-1</u>	<u>SC-0, SC-1</u>	<u>NA</u>	<u>V-0, V-1</u>
<u>UL1694 Needle Flame Test</u>	<u>Applies</u>	<u>Applies</u>	<u>Applies</u>	<u>NA</u>	<u>NA</u>
<u>UV requirements</u>	<u>Applies to indoor/outdoor use lighting strings</u>	<u>Applies to indoor/outdoor use lighting strings</u>	<u>Applies to indoor/outdoor use lighting strings</u>	<u>NA</u>	<u>NA</u>
<u>Temperature Rating (minimum)</u>	<u>90 °C</u>	<u>90 °C</u>	<u>90 °C</u>	<u>90 °C</u>	<u>Suitable for the Application</u>
<u>Tensile Strength (UL224)</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Applies</u>	<u>NA</u>
<u>Copper Corrosion Test (UL224)</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>Applies when tubing is in contact with uncoated copper</u>	<u>NA</u>

6 Wiring Device - Non-Standardized Connector Clarification

PROPOSAL

13.3 Wiring devices

13.3.1 In addition to the applicable requirements in this standard, an attachment plug, cord connector, current tap, power inlet, or other wiring device employed in a seasonal lighting product shall comply with the applicable requirements in the Standard for Attachment Plugs and Receptacles, UL 498, or the Standard for Cord Sets and Power-Supply Cords, UL 817.

Exception No. 1: Series-connected lighting strings or decorative outfits consisting of a series-connected lighting string with decorative covers, with a non-polarized fitting employing an integral controller device such as a controller, in-line rectifier or in-line resistor and a nonstandard multi-pin connector shall comply with the following:

- a) A minimum of 2 pins shall be provided.*
- b) The applicable requirements of the Standard for Attachment Plugs and Receptacles, UL 498, or the Standard for Cord Sets and Power Supply Cords, UL 817, and be suitable for making and breaking under load with respect to the Overload, Temperature, and Resistance to Arcing tests described in the Standard for Attachment Plugs and Receptacles, UL 498.*
- c) The pins shall be recessed such that the male and female connectors are mechanically secured prior to any electrical connection.*
- d) The connectors shall be subjected to the Rain Test, Section [89](#), in any position where the pins initially make an electrical connection.*
- e) The connector shall be keyed so that the wires are connected to the correct circuit.*
- f) The nonstandard multi-pin connector shall not be between the attachment plug and a controller, nor between the attachment plug and the first lampholder.*

Exception No. 2: Deleted

Exception No. 3: Series-connected LED lighting strings provided with a candelabra-base (E12) or intermediate-base (E17) male screw base shall comply the applicable requirements described in Enclosures, Section [10](#), the applicable requirements for male screw bases described in Supplement [SA](#), and with the following:

- a) A hanging means shall be provided and secured near the first lampholder.*
- b) The maximum weight of the lighting string shall not exceed 7.4 lb when provided with an E12 male screw-base and 10.5 lb when provided with an E17 male screw-base.*
- c) The maximum total wattage of the lighting string shall not exceed 7 Watts.*
- d) A cord connector or other female fitting shall not be provided.*
- e) Overcurrent protection shall be provided in the male screw base for the following wire gauges used in the light string:*
 - 1) 3 Amp overcurrent protection for 22 AWG*
 - 2) 5 Amp overcurrent protection for 20 AWG*

BSR/UL 651A, Standard for Safety for Schedule 40 and 80 High Density polyethylene (HDPE) Conduit**1. Clarification to Resistance to impact test Clause 7.2.2****PROPOSAL**

7.2.2 Test three specimens of conduit. Each specimen shall be cut from finished lengths of each trade size of conduit and shall exhibit no cracks, tears, or other imperfections. The specimens shall be equal in length to the nominal outside diameter but not less than 6 in (152 mm) in length. Condition the specimens at a temperature of -4 ± 3.6 °F (-20 ± 2 °C) for a minimum of 5 h. Conduct the test within 30 seconds after removal of the specimens from the cold chamber in a location having ~~at~~ a maximum ambient temperature of 77 °F (25 °C) or less.

Note: To facilitate testing, it has been found that using an insulated box packed with freezer packs and conditioned at the conditioning temperature, can be used to transport specimens to the test equipment.

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BSR/UL 746S, Standard for Safety for Evaluation of Sustainable Polymeric Materials for use in Electrical Equipment

1. Clarification of Requirements for the Evaluation of Mechanically Recycled Plastics with Consistent Identification and Without Consistent Identification Provided in Sub-section 6.2 and Sub-section 6.3 Respectively

PROPOSAL

6.2 Mechanically recycled plastics with consistent identification

6.2.3 Results of tests for the three production batches are expected to meet the following requirements:

- a) The identification tests per UL 746A are to be comparable between production batches.
- b) A minimum flammability rating as defined by the manufacturer is to be maintained for all tested production batches in the mechanically recycled plastic base color or if base color is not part of the evaluation, a commonly produced color that is part of the evaluation can be considered for complete series of UL 94 flammability and UL 746A identification tests, on three production batches.
- c) For additional colors, only one production batch is required for flammability testing in compliance with requirements from test specimens for the:
 - 1) Horizontal Burning Test;
 - 2) 50W (20 mm) Vertical Burning Test; V-0, V-1, or V-2; and
 - 3) 500 W (125 mm) Vertical Burning Test; 5VA or 5VB

of UL 94, as applicable, and the rating of this production batch shall be ~~the same as~~ at least the minimum flammability rating as defined by the manufacturer.

6.3 Mechanically recycled plastics without consistent identification

6.3.3 Results of tests for the five production batches are expected to meet the following requirements:

- a) The same flammability rating shall be maintained for all tested production batches in the mechanically recycled plastic base color or if base color is not part of the evaluation, a commonly produced color that is part of the evaluation can be considered for complete series of UL 94 flammability tests on five production batches.
- b) For additional colors, only one production batch is required for flammability testing in compliance with requirements from test specimens for the:
 - 1) Horizontal Burning Test;
 - 2) 50W (20 mm) Vertical Burning Test; V-0, V-1, or V-2; and
 - 3) 500 W (125 mm) Vertical Burning Test; 5VA or 5VB

of UL 94, as applicable, and the rating of this one batch shall be the same as the rating of the recycled plastic color that was evaluated for five production batches;

- c) A minimum impact strength value, as defined by the manufacturer, is to be met by all tested production batches;
- d) The tensile strength values are to be ± 15 percent from the mean of all the tested production batches;
- e) The heat deflection temperatures or Vicat Temperature (VT) or Ball Pressure Temp (BPT) (thermoplastics only as per Method B – Material performance test method, of IEC 60695-10-2) are

to be ± 10 percent the mean of all the tested production batches;

f) The dielectric strength values are to meet a minimum of 5 kV/mm (127 kV/inch) for all tested production batches; and

g) The manufacturer can choose to test either the hot wire ignition (HWI) or the glow wire ignition temperature (GWIT) to evaluate the recycled plastic's response to ignition as a result of the application of a hot wire. The test results for either test in the five production batches are to meet the minimum values as defined by the manufacturer.

Exception No. 1: For UL 94 flame classifications, if the samples within production batches and/or between production batches shows similar flame behavior but with different ratings, then an inferior flame rating as appropriate based on five production batch testing shall be assigned to the base material provided the following criteria are met:

- a) PLC ratings for the High Current Arc Ignition (HAI) test shall be the same or the test results shall be ± 15 percent between all the tested production batches and
- b) PLC ratings for the Comparative Tracking Index (CTI) test shall be the same or the test results shall be ± 15 percent between all the tested production batches.

Exception No. 2: For additional colors, if the flame rating obtained when tested in accordance with 6.3.3(b) is different than the flammability rating of the base color, then an inferior flame rating as appropriate shall be assigned to the material provided the additional color(s) on one production batch comply with the criteria mentioned in this paragraph 6.3.3(c) – (g) for properties other than flammability. The results obtained shall be comparable to the results of the base color.

Exception No. 3: For elastomeric materials (e.g. TPE),

- a) Heat deflection temperature (HDT);
- b) Vicat Softening Temperature (VST); or
- c) Ball Pressure Test (BPT) IEC 60695-10-2, Method B mentioned in 6.3.3(e)

are not applicable.

Exception No. 4: If the material:

- a) Has a thickness less than 0.25 mm (0.01 inch);
- b) Is a vulcanized rubber; or
- c) Is a thermoplastic elastomer,

impact testing mentioned in 6.3.3(c) is waived and, alternatively, tensile elongation at break shall be performed. A minimum tensile elongation at break value, as defined by the manufacturer is to be met by all tested production batches.

Exception No. 5: For materials that are conductive in nature, the Dielectric Strength (DS) test mentioned in 6.3.3(f) is not applicable. Instead, the DC resistance or conductance test mentioned in D-C Resistance or Conductance of Moderately Conductive Materials, Section 22A of UL 746A, shall be used. A minimum DC resistance or conductance value, as defined by the manufacturer is to be met by all tested production batches.

BSR/UL 2388, Standard for Safety for Flexible Lighting Products**1. Introduction of New Requirements for Button or Coin Cell Batteries in Accordance with UL 4200A****PROPOSAL**24A Button or coin cell batteries

24A.1 Where a product or a product accessory requires the use of one or more button batteries or coin cell batteries, such as a wireless remote control, the Standard for Safety for Products Incorporating Button or Coin Cell Batteries, UL 4200A, shall be consulted to determine its applicability. When UL 4200A is applicable, the product or product accessory shall comply with the applicable requirements of UL 4200A.

24A.2 If a button/coin cell is provided with the product, the button/coin cell must be installed in the battery compartment.

2. Removal of Appendix A**PROPOSAL****2 Components**

2.1 Except as indicated in [2.2](#), a component of a product covered by this standard shall comply with the requirements for that component. ~~See Appendix A for a list of standards covering components used in the products covered by this standard.~~

4 Undated References

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:

UL 498, Standard for Attachment Plugs and Receptacles

UL 817, Standard for Cord Sets and Power-Supply Cords

UL 157, Standard for Gaskets and Seals

UL 508, Standard for Industrial Control Equipment

UL 60950-1, Standard for Information Technology Equipment – Safety – Part 1: General Requirements

UL 1598, Standard for Luminaires

UL 969, Standard for Marking and Labeling Systems

UL 94, Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

UL 746C, Standard for Polymeric Materials – Use in Electrical Equipment Evaluations

UL 1310, Standard for Class 2 Power Units

UL 588, Standard for Seasonal and Holiday Decorative Products

UL 4200A, Standard for Safety for Products Incorporating Button Batteries or Coin Cell Batteries

UL 5085-1, Standard for Low Voltage Transformers – Part 1: General Requirements

UL 5085-3, Standard for Low Voltage Transformers – Part 3: Class 2 and Class 3 Transformers

APPENDIX A**Standards for Components**

Standards under which components of the products covered by this standard are evaluated include the following:

Title of Standard — UL Standard Designation

Attachment Plugs and Receptacles — UL 498
 Controllers, Programmable — Part 2: Equipment Requirements and Tests — UL 61131-2
 Cord Sets and Power Supply Cords — UL 817
 Flexible Cords and Cables — UL 62
 Fuseholders — Part 1: General Requirements — UL 4248-1
 Fuses, Low Voltage — Part 1: General Requirements — UL 248-1
 Fuses, Low Voltage — Part 14: Supplemental Fuses — UL 248-14
 Gaskets and Seals — UL 157
 Industrial Control Equipment — UL 508
 Information Technology Equipment — Safety — Part 1: General Requirements — UL 60950-1
 Luminaires — UL 1598
 Marking and Labeling Systems — UL 969
 Plastic Materials for Parts in Devices and Appliances, Tests for Flammability of — UL 94
 Polymeric Materials — Short Term Property Evaluations — UL 746A
 Polymeric Materials — Use in Electrical Equipment Evaluations — UL 746C
 Power Units, Class 2 — UL 1310
 Printed Wiring Boards — UL 796
 Seasonal and Holiday Decorative Products — UL 588
 Small Polymeric Component Materials, Tests for Flammability of — UL 1694
 Snap Switches, General Use — UL 20
 Switches for Appliances — Part 1: General Requirements — UL 61058-1
 Switchgear and Controlgear, Low Voltage — Part 1: General Rules — UL 60947-1
 Switchgear and Controlgear, Low Voltage — Part 4-1: Contactors and Motor Starters — Electromechanical Contactors and Motor Starters — UL 60947-4-1
 Switchgear and Controlgear, Low Voltage — Part 5-2: Control Circuit Devices and Switching Elements — Proximity Switches — UL 60947-5-2
 Transformers, Low Voltage — Part 1: General Requirements — UL 5085-1
 Transformers, Low Voltage — Part 3: Class 2 and Class 3 Transformers — UL 5085-3
 Transformers, Specialty — UL 506

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