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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.

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## ADA (Organization) (American Dental Association)

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***National Adoption***

BSR/ADA Standard No. 159-202x, Dentistry - Coiled Springs for Use in Orthodontics (national adoption of ISO 17254:2016, with incorporation of ISO 17254:2016/Amd.1:2020 with modifications with modifications and revision of ANSI/ADA Standard No. 159-2018)
Stakeholders: Dentists, manufacturers

Project Need: The current standard is an identical adoption of ISO 17254:2016. This revision is to incorporate the 2020 amendment and update the national standard with the exception of the Sampling clause (5.1).

Interest Categories: Consumer, General Interest, Producer`

This standard applies to coiled springs for use in orthodontic appliances. This standard gives details of methods to compare the physical and mechanical behavior of coiled springs, the test methods by which they can be determined, as well as packaging and labelling requirements.

## ADA (Organization) (American Dental Association)

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***National Adoption***

BSR/ADA Standard No. 206-202x, Dentistry – Implantable materials for bone filling and augmentation in oral and maxillofacial surgery – Contents of a technical file (national adoption with modifications of ISO 22794:2007 )
Stakeholders: Government agencies, manufacturers, and dentists

Project Need: The current published version of ISO 22794:2007 is not used by regulatory agencies or manufacturers and there is a need for a standard that meets U.S. market needs.

Interest Categories: Consumer, General Interest, Producer`

This National Standard applied to implantable materials used as dental devices for filling and augmenting bones in oral and maxillofacial surgery. Products that are essentially pure (>90%) hydroxyapatite are not covered by this standard. Evaluation includes the physico-chemical, mechanical, biological, and clinical aspects and behavior of these implantable dental materials.

## ADA (Organization) (American Dental Association)

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***New Standard***

BSR/ADA Standard No. 207-202x, Dentistry – Dental Unit Water Quality Part One: Requirements for Manufacturers (new standard)
Stakeholders: Dentists, manufacturers, regulatory agencies.

Project Need: Since 2014, at least three outbreaks of pediatric mycobacterial infections have been reported across the US that were associated with contaminated water provided by untreated dental units. There are currently no voluntary consensus standards for validation of methods for controlling biofilm in dental units. This standard will provide a consensus document to help ensure safe treatment for patients and reduce risk for DHCP.

Interest Categories: Consumer, General Interest, Producer

This document will establish requirements and test methods for the manufacturers of dental units, dental water treatment devices, and chemical agents to meet or exceed Centers for Disease Control and Prevention (CDC) recommendations for dental water quality, current US and international voluntary consensus standards and regulatory and/or registration requirements of the US Food and Drug Administration (FDA) and state and federal Environmental Protection Agencies (EPA). The standard will be a modified adaptation of Dental Unit Water Quality: Organization for Safety, Asepsis and Prevention White Paper and Recommendations – 2018

## ADA (Organization) (American Dental Association)

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***National Adoption***

BSR/ADA Standard No. 32-202x, Dentistry - Orthodontic Wires (national adoption of ISO 15841:2014, with incorporation of ISO 15841:2014/Amd.1:2020 with modifications with modifications and revision of ANSI/ADA Standard No. 32-2017)
Stakeholders: Dentists, manufacturers

Project Need: The current standard is an identical adoption of ISO 15841:2014. This revision is to incorporate the 2020 amendment and update the national standard with the exception of the change to Sampling clause (6.1).

Interest Categories: Consumer, General Interest, Producer`

This standard specifies requirements and test methods for wires to be used in fixed and removable orthodontic appliances.

## ASME (American Society of Mechanical Engineers)

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***Revision***

BSR/ASME RT-202x, Safety Standard for Structural Requirements for Heavy Rail Transit Vehicles, Light Rail Vehicles (LRVs), and Streetcars (revision, redesignation and consolidation of ANSI/ASME RT-1-2020, ANSI/ASME RT-2-2021)
Stakeholders: Heavy Rail, Light Rail, and Streetcar Vehicle Manufacturers, Purchaser/Owner/Operators, General Interest, Employees/Union Interest, Regulatory/Trade Association, Services

Project Need: Consolidation of RT-1 and RT-2 for efficiency purposes by having one book. This would streamline the document and make it user and customer friendly by having everything in one document.

Interest Categories: AE Employee/Union Interest AF General Interest AK Manufacturer AO Owner AT Regulatory AV Trainer/Educator

This Standard addresses structural requirements for heavy rail transit vehicles, light rail vehicles (LRVs), and streetcars. The objectives of the passive safety requirements in this Standard are to reduce injury risk and equipment damage resulting from collision accidents by providing a means of protection when other possibilities of preventing an accident have failed. Application of this Standard provides protection for the occupants of new crashworthy vehicles through preserving structural integrity, reducing risk of overriding, and limiting collision accelerations. In addition, this standard provides measures for design of light rail vehicles and streetcars with the goal of reducing entrapment, override, and penetration of automobiles and light trucks. This Standard does not extend to the design of the vehicle interior structures that may help reduce injury risk caused by impacts between the occupants and vehicle interior, beyond limiting collision accelerations and consequential secondary impact velocities of passengers colliding with interior surfaces.

## CSA (CSA America Standards Inc.)

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***New Standard***

BSR/CSA B107-202x, Enclosed Hydrogen Equipment - Safety (new standard)
Stakeholders: Manufacturers of hydrogen equipment which is installed in an equipment enclosures.

Project Need: To support innovation and deployment within the hydrogen industry by providing requirements for the safe construction of hydrogen equipment that is installed in an equipment enclosure.

Interest Categories: Manufacturers, certification agencies, and general interest

This standard applies to assemblies of hydrogen equipment integrated into an enclosure such as a freight container or custom enclosure; intended for permanent installations or portable applications for indoor or outdoor use. This standard primarily addresses the safety requirements related to hydrogen and its use inside an enclosure. This standard applies to the combination of the hydrogen equipment and the enclosure it is integrated into. The equipment enclosure can be a custom-built enclosure or a modified freight container. This standard does not apply to products covered by a product safety standard such as: CSA/ANSI FC 1* CSA C22.2 No. 62282-3-100; ANSI/CSA America FC 3; CSA/ANSI FC 6 or CAN/CSA C22.2 No. 62282-2; CSA/ANSI B22734; and CSA/ANSI HGV 4.1. This standard also does not apply to: gas cabinets that are installed in accordance with and comply with the requirements of NFPA 2 Section 6.19; exhausted enclosures that are installed in accordance with and comply with the requirements of NFPA 2 Section 6.20; unenclosed hydrogen equipment installed in a room or building; or hydrogen equipment placed in shipping containers or custom enclosures solely for the purpose of transportation or temporary storage.

## CSA (CSA America Standards Inc.)

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

***New Standard***

BSR/CSA Z21.107-202x, Gas Thermal Shutoff Devices (same as CSA Z21.107) (new standard)
Stakeholders: Manufacturer, consumer, certification.

Project Need: To support innovation in the field of gas appliances and accessories by providing requirements for the construction/installation/use of gas thermal shutoff devices in the North American context.

Interest Categories: User's Interest, Government Agency, General Interest, Gas Supplier, Manufacturer, Research/Testing.

This Standard applies to gas thermal shutoff devices constructed entirely of new unused parts and materials intended for use after the service meter or second stage regulator (see Clause 3, Definitions), hereinafter referred to as devices, ranging from 3/8” (DN 10) up to 6 in (DN 150) nominal pipe size. Devices covered by this Standard automatically shuts off the gas flow when the device reaches a set temperature. This is a single-use control. This Standard applies to devices for use with natural or propane gas, at pressures not to exceed 72 psi (496 kPa). Devices are to have a minimum operating pressure of no greater than 5 in wc (1.24 kPa).

## CTA (Consumer Technology Association)

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***New Standard***

BSR/CTA 861-I Errata-202x, A DTV Profile for Uncompressed High Speed Digital Interfaces (new standard)
Stakeholders: Consumers, manufacturers and retailers

Project Need: This project is to create an Erratum for CTA-861-I that addresses a correction in Section S.3 "distribution_index". The correction updates the range from 0-99 to 0-100.

Interest Categories: General interest, user, producer

This project is to create an Erratum for CTA-861-I that addresses a correction in Section S.3 "distribution_index". The correction updates the range from 0-99 to 0-100.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE 1149.1-202x, Standard for Test Access Port and Boundary-Scan Architecture (revision of ANSI/IEEE 1149.1 -2013)
Stakeholders: Electronic design automation (EDA) suppliers, IP providers, IC producers, PCB manufacturers, and test equipment and test software vendors.

Project Need: Testing of assembled printed circuit boards and other products based on highly complex digital integrated circuits and high-density, surface-mounting assembly techniques has become extremely difficult due to test access limitations. Similar difficulties are faced by equipment used for the test of integrated circuits in the production of known-good die (KGD) required for complex system-in-package (SiP) technologies. Other standards, such as subordinate IEEE 1149 standards and related test technology standards IEEE Std 1500, IEEE Std 1532, IEEE Std 1687, and IEEE Std 1838, rely on this standard and its defined Test Access Port (TAP) to provide access to and control of features built into integrated circuits.

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

This standard defines test logic that can be included in an integrated circuit (IC), as well as structural and procedural description languages, to provide standardized approaches to:
- testing the interconnections between integrated circuits once they have been assembled onto a printed circuit board (PCB) or other substrate;
- testing the integrated circuit itself; and
- observing, modifying, or loading data inside an integrated circuit during test, programming, configuration, or debug of the integrated circuit or the circuitry connected to the component.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE 1680.2-202x, Standard for Environmental Assessment of Imaging Equipment (revision of ANSI/IEEE 1680.2 -2012)
Stakeholders: Imaging equipment manufacturers, suppliers of materials, equipment and packaging, electronics equipment recyclers and reuse organizations, trade associations, environmental advocacy organizations, purchasers and users, resellers/retailers, environmental representatives of government agencies academic experts in the field of electronics and the environment, and the general public.

Project Need: This PAR is intended for a limited/targeted update to IEEE 1680.2-2012. This Standard 1680.2:2012 consists of environmental criteria and other materials that relate specifically to imaging equipment products. It needs to be revised before its expiration in December 2022. The revision should add conformance information as needed from the now inactive 1680-2009 (1680.0), criteria from IEEE 1680.1-2018 and corrigendum (IEEE 1680.1-2020) that should be copied in full and as-written into the IEEE 1680.2 standard to replace or update criteria. The WG may also consider updates to criteria specific to imaging equipment such as: 4.5.3.1 - Standby power; 4.5.4.1 – Duplex printing, and sections 4.9 - consumables; and 4.10 - indoor air quality.

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

This standard defines environmental performance requirements for imaging equipment (as defined by the U.S. ENERGY STAR(R) Imaging Equipment Specification1) including copiers, digital duplicators, facsimile machines, multifunction devices, printers, mailing machines, and scanners, relating to reduction or elimination of environmentally sensitive materials, materials selection, design for end-of-life, life-cycle extension, energy conservation, end-of-life management, corporate performance, packaging, consumables, and indoor air quality.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE 1680.3-202x, Standard for Environmental Assessment of Televisions (revision of ANSI/IEEE 1680.3-2012)
Stakeholders: Television manufacturers, suppliers of materials, equipment and packaging, electronics equipment recyclers and reuse organizations, trade associations, environmental advocacy organizations, purchasers and users, resellers/retailers, environmental representatives of government agencies, academic experts in the field of electronics and the environment, and the general public.

Project Need: This PAR is intended for a limited/targeted update to IEEE 1680.3-2012. This Standard 1680.3:2012 consists of environmental criteria and other materials that relate specifically to television products. It needs to be revised before its expiration in December 2022. The revision should add conformance information as needed from the now inactive 1680-2009 (1680.0). Criteria for displays from IEEE 1680.1-2018 and corrigendum (IEEE 1680.1-2020) that are applicable to newer technology (flat screen) televisions that should be copied in full and as-written into the IEEE 1680.3 standard to replace or update criteria.

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

This standard defines environmental performance for televisions, television combination units, and component television units, relating to reduction or elimination of environmentally sensitive materials, materials selection, design for end of life, life-cycle extension, energy conservation, end-of-life management, corporate performance, and packaging. This standard applies to products that are primarily marketed as televisions, and does not cover computer displays as defined by IEEE 1680.1

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE 1692-202x, Guide for the Protection of Communication Installations from Lightning Effects (revision of ANSI/IEEE 1692-2011)
Stakeholders: Stakeholders for this standard include communications service providers, electrical power providers, and any other providers of communications services that utilize towers. Manufacturers of equipment that may be utilized to effect enhanced electrical protection from lightning currents and induced transients, undesired voltages, or interference that may be induced on communication circuits are also included.

Project Need: This project, triggered by a maintenance review of Std. 1692 and an industry request for interpretation, is needed to update the text of this standard for modernization and to bring the Guide in line with the latest IEEE-SA Style Manual.

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

This document presents engineering design guidelines for the prevention of lightning damage to communications equipment within structures.

## IEEE (Institute of Electrical and Electronics Engineers)

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***New Standard***

BSR/IEEE 3173-202x, Standard for Endocrine Disrupting Chemical Hazard Labelling (new standard)
Stakeholders: Health regulatory agencies, environmental regulatory agencies, consumer product regulatory agencies, trade regulatory agencies, Notified Bodies, standards organizations, industrial processors, recycling centers, electronics manufacturers, consumer product vendors, consumers, activists, scientists and researchers and manufacturers of materials and components.

Project Need: Endocrine Disrupting Chemicals are a class of substances found in a rapidly increasing number of industrial and consumer products. Endocrine Disrupting Chemicals are highly disruptive to human and non-human health and fertility, and are linked with congenital conditions. They can also have effects that persist across generations, affecting the descendants of an organism long after the original exposure. These chemicals are often described as 'forever chemicals', as they don't break down over time. Methods of cleansing an environment of Endocrine Disrupting Chemicals are very inefficient and expensive. Despite this, the quantity and variety of Endocrine Disrupting Chemicals has almost tripled in the past 20 years, as Endocrine Disrupting Chemicals often have useful properties. Endocrine Disrupting Chemicals are often found in everyday products, including plastics, fire-retardant foam, food and beverage packaging, fuels, cosmetics, and electronic components. Regulators have taken steps to reduce the usage of the most dangerous Endocrine Disrupting Chemicals. However, given their societal utility and ubiquity, finding alternatives is not always simple. A substantial proportion of e-waste contains endocrine-disrupting chemicals that have very negative effects on the public, including pregnant women and children, as well as wildlife. Recycling workers are at particular risk, especially when contaminated components end up in subsequent products made from recycled materials.

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

This standard specifies the design of hazard labelling for known and suspected endocrine-disrupting chemicals, with example implementations in a range of potential use cases, including labelling of chemicals, labelling of electrical and mechanical components, labelling of consumer products, labelling of food and drug preparations, and hazardous areas. Whether a use case merits or should require the application of this hazard labelling is not within the scope of this standard. This standard also describes a gradation of classes of risk which may be optionally displayed to inform about the particular level of a hazard. However, what substances, quantities, or concentrations may merit a particular risk classification is not within the scope of this standard. This standard is not intended to be applied within the domains of food and pharmaceuticals. However, packaging of food or pharmaceuticals that itself may contain endocrine disrupting chemicals remains in scope.

## IEEE (Institute of Electrical and Electronics Engineers)

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***New Standard***

BSR/IEEE 3186-202x, Standard for a Port Interface Representing Photonic Signals Using Simulation Program with Integrated Circuit Emphasis (SPICE)-class Circuit Simulators (new standard)
Stakeholders: 1. Foundries as main Process Design Kit (PDK) simulation model providers. 2. End users, who may choose to add a custom model into the simulation.3. Electronic Design Automation (EDA) vendors who provide the tools to define and simulate the circuits. The standard will allow them to connect the models correctly and display information about the optical signals to the end users.

Project Need: Models for simulating photonic components in SPICE-class circuit simulators are being developed by various groups using different port interface conventions to represent optical signals. These models allow for complex electro-optical circuits to be simulated using SPICE-class simulators. However, the lack of any port interface standard makes it difficult for models developed by different groups to interoperate with each other in a single simulation. Workarounds exist, such as port converter elements, but these are undesirable because they introduce non-physical devices into the schematic and, furthermore, the port conversion creator must have full insight into both conventions. This port interface standard will reconcile the multiple conventions currently in use without imposing any restrictions on the underlying models. In doing so, it will enable photonic circuit designers to simulate circuits composed of devices (with corresponding models) available from different sources.

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

This standard provides definitions for representing optical signals using the existing capabilities of SPICE-class simulators.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE C57.12.59-202x, Guide for Dry-Type Transformer Through-Fault Current Duration (revision of ANSI/IEEE C57.12.59-2015)
Stakeholders: Transformer manufacturers, consultants and end users involved in specification and/or coordination of protection for dry-type transformers.

Project Need: The need for the project is to update the references, make necessary corrections and additons to the Guide.

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

This guide for dry-type transformer through-fault current duration applies to dry-type distribution and power transformers built in accordance with C57.12.01 and referenced as Categories I, II and III.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE C57.135-202x, Guide for the Application, Specification, and Testing of Phase-Shifting Transformers (revision of ANSI/IEEE C57.135-2012)
Stakeholders: The stakeholders are large power utilities and transformer manufacturers.

Project Need: This revision is needed to maintain and provide necessary updates and corrections to this guide for the application, specification, and testing of phase shifting transformers. Corrections to graphical diagrams and equations will be made. Sections will be amended as needed to provide more detailed information for users of the guide and to improve understanding. The guide will be revised to remove out of scope material or sections covered in other standards or guides.

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

This guide covers the application, specification, theory, factory and field testing of liquid-immersed phase-shifting transformers (PSTs). The guide is limited to matters particular to PSTs and does not include matters relating to general power transformers covered in existing standards, recommended practices, or guides.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE C57.138-202x, Recommended Practice for Routine Impulse Tests for Distribution Transformers (revision of ANSI/IEEE C57.138-2016)
Stakeholders: Transformer Manufacturers and transformer owners.

Project Need: Review and update the document as it expires on 12/31/2026

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

This recommended practice covers routine impulse tests performed on distribution transformers, as required in IEEE Std C57.12.00(TM), and described in 10.4 of IEEE Std C57.12.90(TM)-2021(1). Distribution transformers covered by this recommended practice are overhead, pad mounted, and underground liquid-immersed distribution transformers with requirements specified in IEEE Std C57.12.20, IEEE Std C57.12.23, IEEE Std C57.12.24, IEEE Std C57.12.34, IEEE C57.12.36, IEEE Std C57.12.38 and IEEE Std C57.12.40. This recommended practice covers only those aspects of impulse testing that are specific to routine testing of distribution transformers. For more thorough coverage of impulse testing of transformers in general, IEEE Std C57.98(TM) should be consulted.

## IEEE (Institute of Electrical and Electronics Engineers)

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***New Standard***

BSR/IEEE C62.92.6-202x, Guide for Application of Neutral Grounding in Electrical Utility Systems, Part VI: Systems Supplied by Current-Regulated Sources (new standard)
Stakeholders: Electric utilities, Manufacturers and vendors of current-regulated electric power sources (e.g., inverters), Users of current-regulated electric power sources.

Project Need: The sources of energization of electrical utility systems have conventionally been rotating generators, which are well characterized as voltage sources in series with predominately inductive impedances. The conventional understanding of system grounding has been based on the assumption that all sources can be characterized as voltage sources. New forms of generation and energy storage are now being interconnected to three-phase electric utility systems via power-electronic conversion devices that are controlled as constant current or constant power devices. Situations where the current- or power-regulated devices become the dominant energization sources for a portion of the utility system can occur. The conventional understanding of system grounding is inadequate to address these situations. This guide fulfills the need to re-define and apply the principles of system grounding in the context of these regulated sources.

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

This guide applies to three-phase electrical utility systems and is Part VI of the IEEE C62.92(TM) series. This part provides definitions and considerations related to system grounding where the dominant sources of system energization are current-regulated or power-regulated power conversion devices.

## IEEE (Institute of Electrical and Electronics Engineers)

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***Revision***

BSR/IEEE C93.4-202x , Standard for Power Line Carrier Line-Tuning Equipment (30 kHz to 500 kHz) Associated with Power Transmission Lines (revision of ANSI/IEEE C93.4-2012)
Stakeholders: Power Utilities using communications via power lines

Project Need: The existing standard (C93.4-2012 - Standard for Power-Line Carrier Line-Tuning Equipment (30-500 kHz) Associated With Power Transmission Lines) is 10 years old. This document is in need of updating technically.

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

This standard applies to power line carrier (PLC) line-tuning equipment connected between the coupling capacitors and PLC transmitter/receiver terminals operating in the frequency range of 30 kHz to 500 kHz over power transmission lines and cables or to similar line-tuning equipment in a carrier bypass. PLC line-tuning equipment includes assemblies and components: tuning inductor, impedance matching transformer, balancing transformer, tuning capacitor, inductance-capacitance (LC) tuning unit, hybrid, filter, protective unit, interconnecting cables, and enclosure. This standard includes the devices that facilitate the operation and maintenance of the line-tuning components. This standard develops technical definitions, performance ratings, testing methods, and manufacturing requirements for the included line-tuning equipment.

## ISEA (ASC Z87) (International Safety Equipment Association)

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***Revision***

BSR ISEA Z87.1-202x, Occupational and Educational Personal Eye and Face Protection Devices (revision of ANSI ISEA Z87.1-2020)
Stakeholders: Product suppliers, regulatory agencies, industry sectors included chemicals, assembly and manufacturing, construction,agriculture; testing laboratories; trade and educational entities.

Project Need: Scheduled revision to reflect state-of-the art technology, current test methods, and applications for products covered under this standard.

Interest Categories: Users, manufactures, producers, government, general interest

This standard sets forth criteria related to the requirements, testing, permanent marking, selection, care, and use of protectors to minimize the occurrence and severity or prevention of injuries from such hazards as impact, non-ionizing radiation and liquid splash exposures in occupational and educational environments including, but not limited to, machinery operations, material welding and cutting, chemical handling, and assembly operations. Certain hazardous exposures are not covered in this standard. These include, but are not limited to: bloodborne pathogens, X-rays, high-energy particulate radiation, microwaves, radio-frequency radiation, lasers, masers, electric arc flash and sports and recreation.

## NEMTAC (Non-Emergency Medical Transportation Accreditation Commission)

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***New Standard***

BSR/NEMTAC 1003-202x, Non-Emergency Medical Transportation Modes of Transportation (new standard)
Stakeholders: Non-emergency medical transportation providers, stretcher transport services, wheelchair van transportation services, passengers/consumers, discharge planners, social workers, doctors, home healthcare providers, insurance plans, non-emergency medical transportation brokers, regulators, taxi services, transportation network companies

Project Need: Although people generally understand what it means to use a wheelchair or ambulatory transportation, there are gaps in the industry when it comes to defining these services for people of all heights and weights then finding the appropriate types of vehicles to provide these services. The goal of this project is to create clear definitions for these modes of transportation so that transportation providers, payers and regulators can communicate and understand each other better when requesting or providing these services. This will help ensure that everyone gets the mode of transportation they need.

Interest Categories: The consensus body created by NEMTAC includes: non-emergency medical transportation providers, stretcher transport services, wheelchair van transportation services, passengers/consumers, insurance plans, non-emergency medical transportation brokers, taxi services.

NEMTAC has identified different types of transportation services that passengers may need. To make sure that the passengers get the appropriate service, a standard set of definitions is been created that clearly outlines the type of vehicle that should be used for each service. This standard will help non-emergency medical transportation providers to describe their available modes of transportation in plain language. The healthcare provider can then request the appropriate transportation mode for the individual being transported.

## NEMTAC (Non-Emergency Medical Transportation Accreditation Commission)

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***New Standard***

BSR/NEMTAC 1004-202X, Certified Transport Specialist (new standard)
Stakeholders: Non-emergency medical transportation providers, stretcher transport services, wheelchair van transportation services, passengers/consumers, discharge planners, social workers, doctors, home healthcare providers, insurance plans, non-emergency medical transportation brokers, regulators, taxi services, transportation network companies

Project Need: With the training requirements varying from state to state, we believe it is important to develop a standard which transportation providers, payers, and regulators may use to determine the qualification of the individuals responsible for operating NEMT vehicles.

Interest Categories: Non-emergency medical transportation providers, stretcher transport services, wheelchair van transportation services, passengers/consumers, discharge planners, social workers, doctors, home healthcare providers, insurance plans, non-emergency medical transportation brokers, regulators, taxi services, transportation network companies

This project aims to create a set of educational requirements for drivers who offer non-emergency medical transport. These requirements will need to be met in order for drivers to receive certification as a certified transportation specialist. The goal is to design a framework that includes necessary educational content to ensure that drivers are appropriately qualified to transport passengers for their medical needs. The education may involve a combination of existing training programs or completely new content, as long as it meets the standards set forth by this framework.

## TVC (ASC Z80) (The Vision Council)

Michele Stolberg <ascz80@thevisioncouncil.org> | 225 Reinekers Lane, Suite 700 | Alexandria, VA 22314 www.z80asc.com

***Revision***

BSR Z80.9-202x, Ophthalmics - Devices for Low Vision (revision of ANSI Z80.9-2020)
Stakeholders: Optometrists, Ophthalmologists, Manufacturers of Low Vision Devices

Project Need: Revision in preparation to meet ANSI's 5-year review and incorporate errata corrections.

Interest Categories: Nationwide organizations of manufacturers and ophthalmic laboratories, professional organizations of ophthalmologists, optometrists, and opticians, federal agencies that are purchasers of ophthalmic materials, and individual members, companies, and experts.

This Standard applies to optical and electro-optical devices specified by the manufacturer for use by visually impaired persons as low-vision devices. It specifies optical and mechanical requirements and test methods. It includes devices with optical and/or electrical and/or electronic components used for image capture or display.

# 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: May 28, 2023

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

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

***Addenda***

BSR/ASHRAE Addendum 62.2d-202x, Ventilation and Acceptable Indoor Air Quality in Residential Buildings (addenda to ANSI/ASHRAE Standard 62.2-2022)
This proposed addendum clarifies the intent of Section 6.6, Air Inlets, and modifies terminology to be more consistent with that used by industry and by building codes.
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 | rshanley@ashrae.org, www.ashrae.org

***Addenda***

BSR/ASHRAE Addendum d to BSR/ASHRAE Standard 15.2-202x, Safety Standard for Refrigeration Systems in Residential Applications (addenda to ANSI/ASHRAE Standard 15.2-2022)
This proposed addendum expands the scope of ANSI/ASHRAE Standard 15.2 to apply to both direct and indirect refrigeration systems in residential applications.
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: May 28, 2023

**ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)**
180 Technology Parkway, Peachtree Corners, GA 30092 | tloxley@ashrae.org, www.ashrae.org

***Addenda***

BSR/ASHRAE/ICC/IES/USGBC Addendum ak to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Addendum k to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)
This addendum (2nd PPR ISC) aligns with the requirements proposed for EPD disclosure in Addendum z. The requirements include a minimum number of procured products to meet GWP limits set at 125% of the industry-wide EPD average. Projects can comply by providing an EPD or LCA for each building product that show the product's GWP is less than 125% of the industry average for cradle-to-gate production. This addendum provides the environmental benefit of lowering GHG emissions through the selection of building products with lower GWP.
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 | tloxley@ashrae.org, www.ashrae.org

***Addenda***

BSR/ASHRAE/ICC/IES/USGBC Addendum ba to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)
This Addendum revises the definition of potable water to match the definition in the International Plumbing Code. The change will avoid confusion by excluding natural freshwater sources that are not considered "potable" under most common definitions. These changes are not expected to add cost to the standard.
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 | tloxley@ashrae.org, www.ashrae.org

***Addenda***

BSR/ASHRAE/ICC/IES/USGBC Addendum bc to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)
This addendum updates the references in Section 11 Normative References.
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: May 28, 2023

**ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)**
180 Technology Parkway, Peachtree Corners, GA 30092 | tloxley@ashrae.org, www.ashrae.org

***Addenda***

BSR/ASHRAE/ICC/IES/USGBC Addendum t to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)
This third independent substantive change (ISC) removes an exception in the 2nd ISC to the renewable energy requirement for greenhouses and grow facilities dedicated to food for human consumption.
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 c to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
Modifies dead band requirements to include separate, adjustable set points for thermostats used to control both heating and cooling. Would also require a minimum of 1°F (0.5°C) dead band between heating and cooling for all occupancies.
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 e to BSR/ASHRAE/IES Standard 90.2-202x, High-Performance Energy Design of Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.2-2018)
Addendum e introduces a new section for lighting controls in common and public areas where previously only a reference to the 90.1 requirements was available. In this independent substantive change, power reduction for luminaires serving outdoor parking lots is adjusted from the originally proposed value of 75% to 50% as a safety measure.
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 g to BSR/ASHRAE/IES Standard 90.1-202x, Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2022)
Updates Table G3.1.1-1 to clarify how baseline fenestration area is determined for retail buildings.
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: May 28, 2023

### 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 h to BSR/ASHRAE/IES Standard 90.2-202x, High-Performance Energy Design of Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.2-2018)
This addendum proposes changes to the maximum allowable air leakage in the building thermal envelope. The increase from 5 to 3.6 ACH_50 is consistent with the latest requirements of ASHRAE 62.2-2022. Updates to Appendix C are also proposed so that testing can be performed as a whole building or by dwelling unit where appropriate.
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 48105-9723 | jsnider@nsf.org, www.nsf.org

***Revision***

BSR/NSF 50-202x (i199r2), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2021)
This standard covers materials, chemicals, components, products, equipment and systems related to public and residential recreational water facility operation.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Jason Snider <jsnider@nsf.org>

### ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, https://ulse.org/

***Revision***

BSR/UL 498-202x, The Standard for Safety for Attachment Plugs and Receptacles (revision of ANSI/UL 498 -2022)
This revision of ANSI/UL 498 includes an exception for Clause 12.6.1 regarding Hospital Grade plugs and connectors
Click here to view these changes in full
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 & Engagement)

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

***Revision***

BSR/UL 1897-202X, Standard for Safety for Uplift Tests for Roof Covering Systems (revision of ANSI/UL 1897 -2015 (R2020))
(1) Change to Section 5, Test Assembly – 5 × 9 ft.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx.

# Comment Deadline: May 28, 2023

### ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Julio.Morales@UL.org, https://ulse.org/

***Revision***

BSR/UL 1994-202x, Standard for Safety for Luminous Egress Path Marking Systems (revision of ANSI/UL 1994 -2010 (R2020))
This proposal covers (1) Markings locations and (2) Use of website and QR code markings for instructions.
Click here to view these changes in full
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 & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | Heather.Sakellariou@ul.org, https://ulse.org/

***Revision***

BSR/UL 2388-202x, Standard for Safety for Flexible Lighting Products (revision of ANSI/UL 2388-2017 (R2022))
The following changes in requirements are being proposed for your review: (1) Addition of UL 969A, the Standard for Marking and Labeling Systems – Flag Labels, Flag Tags, Wrap-Around Labels and Related Products, as an Option into UL 2388.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://csds.ul.com/Home/ProposalsDefault.aspx

### ULSE (UL Standards & Engagement)

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

***Revision***

BSR/UL 62841-3-10-202x, UL Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-10: Particular Requirements for Transportable Cut-Off Machines (revision of ANSI/UL 62841-3-6-2018)
Proposed adoption of amendment – IEC 62841-3-10 Amendment 1 (2022-05).
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx.

# Comment Deadline: June 12, 2023

### 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 013-202x, Standard for Friction Ridge Examination Conclusions (new standard)
This standard defines terms and establishes qualitative expressions for the categories of conclusions reached following friction ridge comparisons. This standard does not cover the following topics:
- the manner by which examiners arrive at their assessments of the strength or weight of the findings with respect to the source of the questioned impression;
- suitability determinations rendered on a friction ridge impression;
- documentation of conclusions;
- how an agency or other forensic service provider (FSP) will define or validate the criteria used for selecting source conclusions.

Single copy price: Free
Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: www.aafs.org/academy-standards-board.
Send comments (copy psa@ansi.org) to: asb@aafs.org

### 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 167-202x, Standard for Reporting Results from Friction Ridge Examinations (new standard)
This document prescribes the minimum administrative and technical information that are required to be included in friction ridge examination reports. This document does not include the requirements for supporting documentation of reported elements (e.g., case notes, custody documents), or testimony.
Single copy price: Free
Obtain an electronic copy from: This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: www.aafs.org/academy-standards-board.
Send comments (copy psa@ansi.org) to: asb@aafs.org

### ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 | eparks@abycinc.org, www.abycinc.org

*Revision*

BSR/ABYC A-33-202x, Emergency Engine Propulsion Cut-Off Devices (revision of ANSI/ABYC A-33-2020)
This standard addresses the design, construction, installation and performance of devices used to disable the propulsion system when the operator is unexpectedly displaced from the boat and may include provisions to alert the operator when passengers are unexpectedly displaced from the boat. This standard applies to recreational boats less than 26 ft (8 m) capable of developing 115 lb (52.2 kg) or more of static thrust, mechanically powered boats equipped with devices that disable propulsion when the operator is unexpectedly displaced from the boat, and boats equipped with a warning system for passengers unexpectedly displaced from the boat.
Single copy price: $50.00
Obtain an electronic copy from: abycinc.org
Send comments (copy psa@ansi.org) to: comments@abycinc.org

# Comment Deadline: June 12, 2023

### ADA (American Dental Association)

211 East Chicago Avenue, Chicago, IL 60611-2678 | bralowerp@ada.org, www.ada.org

*New Standard*

BSR/ADA Standard No. 1099-202x, Quality Assurance for Digital Panoramic and Cephalometric Radiographic Systems (new standard)
This standard has been developed to address the quality assurance of digital panoramic and cephalometric radiographic systems. Quality assurance entails the consistent production of x-ray images of high quality in order to provide the maximum amount of diagnostic information with minimal radiation exposure to the patient. The four components involved with any digital panoramic and cephalometric radiographic system: The x-ray source, digital image acquisition device (solid-state sensor and acquisition-software), image display device (computer, monitor, and display-software), and image viewing environment are addressed in this standard.
Single copy price: $25.00
Obtain an electronic copy from: standards@ada.org
Send comments (copy psa@ansi.org) to: Same

### AGA (ASC Z223) (American Gas Association)

400 North Capitol Street, NW, Suite 450, Washington, DC 20001 | lescobar@aga.org, www.aga.org

*Revision*

BSR Z223.1/NFPA 54-202x, National Fuel Gas Code (revision of ANSI Z223.1/NFPA 54-2021)
This code offers criteria for the installation and operation of gas piping and gas equipment on consumers' premises. It is the cumulative result of years of experience of many individuals and many organizations acquainted with the installation of gas piping and equipment designed for utilization of gaseous fuels. It is intended to promote public safety by providing requirements for the safe and satisfactory utilization of gas.
Single copy price: Free
Obtain an electronic copy from: www.aga.org/ansi
Send comments (copy psa@ansi.org) to: Same

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

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

*Addenda*

BSR/ASHRAE Addendum 62.1ab-202x, Ventilation and Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2022)
Using CO2 to control outdoor air ventilation rates, called Demand Control Ventilation (DCV), has become increasingly popular to achieve energy savings in buildings that have varying occupancy rates. This proposed addendum adds differential CO2 concentration limits above ambient to Table 6-1 specifically for use with CO2 DCV systems. CO2 limits shown in Table 6-1 are the differential concentration above ambient. In recognition of the uncertainty due to the range of assumptions, and for ease of use, the resulting differential CO2 concentration limits were then rounded off to the nearest multiple of 300 ppm. Some occupancies have CO2 limits listed as "NA", meaning DCV is not applicable and may not be used. This public review draft shows changes to the previous public review.
Single copy price: $35.00
Obtain an electronic copy from: Free download at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts
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: June 12, 2023

### CSA (CSA America Standards Inc.)

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

*New Standard*

BSR/CSA HGV 4.5-202x, Priority and sequencing equipment for hydrogen fuelling stations (new standard)
This Standard applies to priority and sequencing equipment used in compressed gaseous hydrogen fuelling stations and specifies general, materials, construction, and assembly requirements. This Standard does not apply to equipment already covered by CSA/ANSI HGV 4.9.
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 | cakers@cta.tech, www.cta.tech

*Revision*

BSR/CTA 2107-A-202x, The Use of Artificial Intelligence in Health Care: Managing, Characterizing, and Safeguarding Data (revision and redesignation of ANSI/CTA 2107-2022)
Project to update CTA 2107 clarifying existing language. To include:
- Clarifying the use of the term “validation”;
- Relocating some of the text to be more consistent. For example, in section 5.4.1 about training data, there is a requirement for the testing dataset;
- Consider either removing or re-writing the section in Data Enrichment and Annex C. During the review and edit, consider alignment with the FDA CAD Guidance Document;
- Review and update the document for various editorial issues.

Single copy price: Free
Obtain an electronic copy from: standards@cta.tech
Send comments (copy psa@ansi.org) to: Catrina Akers <cakers@cta.tech>

### GBI (Green Building Initiative)

PO Box 80010, Portland, 97280 | emarx@thegbi.org, www.thegbi.org

*New Standard*

BSR/GBI 02-202x, Green Globes Assessment Protocol for Existing Buildings (new standard)
The Standard includes criteria and practices for resource-efficient, healthy, resilient, and environmentally preferable construction of commercial existing buildings. Six areas of green building design will be included: environmental, social, and governance management, site, energy, water, materials, and indoor environment quality.
Single copy price: Paper: $25.00 USD; Online: $0 USD
Obtain an electronic copy from: https://thegbi.org/green-building-standards/green-building-standards-eb/
Send comments (copy psa@ansi.org) to: Same

# Comment Deadline: June 12, 2023

### HSI (Healthcare Standards Institute)

3004 Sea Pines Place, League City, TX 77573 | lwebster@ingenesis.com, www.hsi.health/

*New Standard*

BSR/HSI 2000-202X, Performance Standard: Healthcare Germicidal Light Whole-Room Surface Disinfection (new standard)
An American committee of infection control professionals, researchers, industrial hygienists, microbiologists, physicians, ultraviolet experts, and equipment manufacturers convened to write a patient-centric performance standard to assist healthcare facilities evaluate and rate the plethora of germicidal light offerings. Certified Bio-Safety Level 2 third party testing facilities are to perform the testing. Germicidal light emitters of various wavelengths and form factors are eligible for testing to this performance standard in high fidelity patient care test rooms. Emitters may undergo testing in a patient room/bathroom, operating room, or both. Specifications are provided regarding the healthcare test room's size, temperature, humidity, reflectance, and furnishings. Real-world healthcare associated infection (HAI) pathogens (C. diff & MRSA) are inoculated onto material and texture specific carriers with 104 to 105 microbes per carrier. 50 sites are specified in each test room as most likely to be contaminated and pose the greatest risk to the patient. At each of the 50 sites, only the carrier with the higher log10 reduction is utilized for awarding points per the rubric in enclosed tables is used to determine the letter grade for the system based upon the sum of points awarded at each site.
Single copy price: Free
Obtain an electronic copy from: lwebster@ingenesis.com
Send comments (copy psa@ansi.org) to: Lee Webster <lwebster@ingenesis.com>

### NECA (National Electrical Contractors Association)

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

*New Standard*

BSR/NECA 500-202X, Recommended Practice for Installing and Maintaining Indoor Commercial Lighting Systems (new standard)
This Standard describes installation and maintenance procedures for permanently installed incandescent, halogen, fluorescent, LED, and high-intensity discharge (HID) lighting systems operating at 1,000 Volts or less installed indoors and commonly used in commercial and retail buildings, including, but not necessarily limited to, the following:
(1) Recessed lighting systems, such as troffers, downlights, wallwashers, valance lights, and accent lights;
(2) Surface mounted lighting systems, such as surface troffers, wraparounds, surface downlights, monopoints, and decorative fixtures;
(3) Suspended lighting systems, such as pendant luminaires, direct, indirect, and uplight systems, and decorative luminaires;
(4) Wall-mounted lighting systems, such as sconces or wallpacks;
(5) Track lighting systems.
In addition to luminaires, this Standard includes construction materials related to luminaires, including, but not necessarily limited to, lamps, conductors, wiring methods, various special screws and clips, and structural suspension components.
Single copy price: Member- $30.00/Nonmember- $60.00
Obtain an electronic copy from: NEIS@NECAnet.org OR https://neca-neis.org/about-neis/neis-review
Send comments (copy psa@ansi.org) to: Same

# Comment Deadline: June 12, 2023

### RVIA (Recreational Vehicle Industry Association)

2465 J-17 Centreville Road, #801, Herndon, VA 20171 | treamer@rvia.org, www.rvia.org

***Revision***

BSR/RVIA UPA-1-202x, Uniform Plan Approval Recreational Vehicles (revision of ANSI/RVIA UPA-1-2019)
This standard addresses plan approval requirements that specifically address the plumbing, electric, mechanical equipment, and components installed and located in recreational vehicles and outlines the criteria on how such plans are to be submitted for approval to authorities having jurisdiction or their agent.
Single copy price: Free
Obtain an electronic copy from: treamer@rvia.org
Send comments (copy psa@ansi.org) to: Tyler Reamer <treamer@rvia.org>

### SERI (Sustainable Electronics Recycling International)

P.O. Box 721, Hastings, MN 55033 | Mike@SustainableElectronics.org, www.sustainableelectronics.org

***Addenda***

BSR/SERI R2v3 (3.1)-202x, The Sustainable Electronics Reuse & Recycling (R2) Standard (addenda to ANSI/SERI R2-V3-2020)
With the rapidly increasing adoption of solar power globally, the quantity of photovoltaic (PV) modules and other associated equipment being produced and used in the market is increasing at a significant rate. Once this PV equipment reaches the end of its first use, sustainable solutions for its safe and environmentally sound reuse and recycling are required. The review and revision of the R2 Standard to include PV equipment has been completed and an addenda to the R2 Standard (Appendix G -Photovoltaic (PV) Modules), will ensure that R2 facilities that handle PV modules identify some of the key risks associated with processing this equipment; and R2 facilities are enabled to demonstrate their operations meet the defined R2 sustainable practices for processing PV modules; and provide generators of PV equipment insight into how it is safely and sustainably managed.
Single copy price: Free
Obtain an electronic copy from: https://sustainableelectronics.org/r2-pv-public-comments/
Send comments (copy psa@ansi.org) to: https://sustainableelectronics.org/r2-pv-public-comments/

# Comment Deadline: June 12, 2023

### TCIA (ASC A300) (Tree Care Industry Association)

136 Harvey Road, Suite 101, Londonderry, NH 03053 | rrouse@tcia.org, www.treecareindustry.org

***Revision***

BSR A300-202x, A300 Tree Care Standards (revision, redesignation and consolidation of ANSI A300 Part 1-2017; ANSI A300 Part 2-2018; ANSI A300 Part 3-2013; ANSI A300 Part 4-2014; ANSI A300 Part 5-2019; ANSI A300 Part 6-2012 (R2018); ANSI A300 Part 7-2018; ANSI A300 Part 8-2019; ANSI A300 Part 9-2017; ANSI A300 Part 10-2016)
A300 performance standards cover the care and management of trees, shrubs, palms, and other woody landscape plants, including the following activities: Pruning; Soil Management and Fertilization; Supplemental Support System installation and maintenance; Lightning Protection System installation and maintenance, Management during construction activities; Planting; Transplanting; Integrated Vegetation Management; Root Management; Risk Assessment; and Integrated Pest Management. A300 standards are intended for the development of work practices, written specifications, best management practices, regulations, and other guidance documents. These standards may be excerpted or incorporated by reference; however, they are not intended to be adopted in their entirety into laws and regulations or as work specifications without additional information and clarification, such as A300 specification writing guidelines. A300 standards shall apply to any person or entity engaged in the management of trees, shrubs, palms, or other woody plants, including federal, state or local agencies, utilities, arborists, consultants, arboricultural or landscape firms, and managers or owners of property. ANSI A300 standards do not apply to commercial agricultural, horticultural production, or silviculture unless this standard, or a portion thereof, is expressly referenced in other standards or specifications. This project will revise, redesignate, and consolidate the current ANSI A300 Part 1 to Part 10 standards for tree care management into one A300 standard for tree care.
Single copy price: Free for electronic copy. $250.00 for paper copy
Obtain an electronic copy from: rrouse@tcia.org
Send comments (copy psa@ansi.org) to: https://www.tcia.org/TCIA/Build_Your_Business/A300_Standards/Current_Projects.aspx

### ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709 | anna.roessing-zewe@ul.org, https://ulse.org/

***Reaffirmation***

BSR/UL 155-2009 (R202x), Standard for Safety for Tests for Fire Resistance of Vault and File Room Doors (reaffirmation of ANSI/UL 155-2009 (R2018))
1.1 These requirements cover the test procedure applicable to the fire-resistance classification of doors intended for the protection of openings of vaults and file rooms. 1.2 Recommendations for record protection equipment and techniques, including the use and installation of vault or file room door assemblies, are contained in the Standard for Protection of Records, NFPA 232. 1.3 The terms "vault doors" and "file room doors" refer to assemblies consisting of doors, single or in pairs, the frame into which doors are hung, and the necessary hardware. These assemblies are intended to provide fire resistance and protection to contents from heat for periods designated by the classifications to an extent described in these requirements. 1.4 Vault doors are recommended for use on enclosures of limited volume [not exceeding 5000 cubic feet (142 m3)], constructed so that no point on the interior surface will reach a temperature exceeding 350°F (177°C) when separate vault members or the vault as a whole are exposed to a fire regulated according to the standard time-temperature curve. See Figure 8.2. Remainder of scope is truncated.
Single copy price: Free
Obtain an electronic copy from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

# Comment Deadline: June 12, 2023

### ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | roger.pareja@ul.org, https://ulse.org/

***Reaffirmation***

BSR/UL 489A-2008 (R202x), Standard for Circuit Breakers for Use in Communications Equipment (reaffirmation of ANSI/UL 489A-2008 (R2018))
Reaffirmation of the first edition of the Standard for Circuit Breakers for Use in Communications Equipment, UL 489A, as an standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Send comments (copy psa@ansi.org) to: http://csds.ul.com

### ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709 | anna.roessing-zewe@ul.org, https://ulse.org/

***Reaffirmation***

BSR/UL 680-2004 (R202x), Standard for Safety for Emergency Vault Ventilators and Vault-Ventilating Ports (reaffirmation of ANSI/UL 680-2004 (R2018))
1.1 These requirements cover emergency vault ventilators and vault-ventilating ports for installation in a wall. 1.2 Emergency vault ventilators are intended to provide fresh air to persons locked in the vault by accident or during a robbery. 1.3 Vault-ventilating ports are intended for connection to an outside ventilating system that provides circulating air while the vault is open. 1.4 These requirements are intended to evaluate the integrity of electrical wiring and components and to establish burglary resistant ratings. The ratings, based on the net working time to effect entry, are as follows: (a) Class M - 1/4 hour; (b) Class 1 - 1/2 hour; (c) Class 2 - 1 hour; and (d) Class 3 - 2 hours. 1.5 When installed in either a vault door or modular panel that complies with the requirements in the Standard for Burglary Resistant Vault Doors and Modular Panels, UL 608; or a reinforced concrete wall according to the manufacturer's instructions and the Standard Classification for Bank and Mercantile Vault Construction, ASTM F 1090, the products covered by these requirements do not affect the burglary resistance of the vault wall.
Single copy price: Free
Obtain an electronic copy from: shopULstandards.com
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/ProposalAvailable

### ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709 | lauren.valentino@ul.org, https://ulse.org/

***Reaffirmation***

BSR/UL 2021-2021 (R202x), Standard for Safety for Combination Locks (reaffirmation of ANSI/UL 2021-2021)
This proposal covers: (1) Reaffirmation and continuance of the 8th Edition of the Standard for Safety for Combination Locks, UL 768, as a standard.
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.

# Comment Deadline: June 12, 2023

### ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Tony.Partridge@ul.org, https://ulse.org/

***Reaffirmation***

BSR/UL 60384-14-2017 (R202x), Safety Requirements for Fixed Capacitors for Use in Electronic Equipment - Part 14: Sectional Specification: Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains (reaffirmation of ANSI/UL 60384-14-2017)
(1) Reaffirmation and continuance of the second edition of the Safety Requirements for Fixed Capacitors for Use in Electronic Equipment - Part 14: Sectional Specification: Fixed Capacitors for Electromagnetic Interference Suppression and Connection to the Supply Mains, UL 60384-14, as an American National Standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area https://csds.ul.com/Home/ProposalsDefault.aspx

### ULSE (UL Standards & Engagement)

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

***Reaffirmation***

BSR/UL 61724-1-2019 (R202x), Standard for Photovoltaic System Performance - Part 1: Monitoring (reaffirmation of ANSI/UL 61724-1-2019)
Reaffirmation and continuance of the First Edition of the Standard for Photovoltaic System Performance - Part 1: Monitoring, UL 61724-1, as an American National Standard.
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 & Engagement)

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

***Reaffirmation***

BSR/UL 61724-2-2019 (R202x), Standard for Photovoltaic System Performance - Part 2: Capacity Evaluation Method (reaffirmation of ANSI/UL 61724-2-2019)
Reaffirmation and continuance of the First Edition of the Standard for Photovoltaic System Performance - Part 2: Capacity Evaluation Method, UL 61724-2, as an American National Standard.
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

# Comment Deadline: June 12, 2023

### ULSE (UL Standards & Engagement)

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

***Reaffirmation***

BSR/UL 61724-3-2019 (R202x), Standard for Photovoltaic System Performance - Part 3: Energy Evaluation Method (reaffirmation of ANSI/UL 61724-3-2019)
Reaffirmation and continuance of the First Edition of the Standard for Photovoltaic System Performance - Part 3: Energy Evaluation Method, UL 61724-3, as an American National Standard.
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 & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | alan.t.mcgrath@ul.org, https://ulse.org/

***Revision***

BSR/UL 244B-202X, Field Installed and/or Field Connected Appliance Controls (revision of ANSI/UL 244B-2022)
Proposed revisions to item 37(d) of Table 47.1, Marking and Instructions, to read, "To Reduce the Risk of Overheating and Possible Damage To Other Equipment, Do Not Install Where the Marked Ampere Rating of the Control Exceeds the Marked Ampere Rating of the Separable Terminal Assembly."
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

### ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, https://ulse.org/

***Revision***

BSR/UL 1686-202x, The Standard for Safety for Pin and Sleeve Configurations (revision of ANSI/UL 1686-2014 (R2018))
This fifth edition of the Standard for Pin and Sleeve Configurations is being proposed as a Trinational Standard with ANCE and CSA.
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

# Comment Deadline: June 12, 2023

### ULSE (UL Standards & Engagement)

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

***Revision***

BSR/UL 4200A-202x, UL Standard for Safety for Products Incorporating Button or Coin Cell Batteries of Lithium Technologies (revision of ANSI/UL 4200A-2021)
(1) Proposed revision of title of Standard and standard scope; (2) Proposed addition of 5.4A Tension Test – Seams; (3) Proposed revision of 5.6 to provide clarification to captive screws exemptions; (4) Proposed clarification to 5.5 - opens with two independent and simultaneous movements; (5) Proposed addition of definitions for Hand-Held Products and Portable Devices and proposed revision to Drop Test; (6) Proposed addition of Compression Test; (7) Proposed addition of Torque Test; (8) Proposed addition of Tension Test; (9) Proposed revision to 6.3.5.1 to increase applied force in Compliance for Accessibility Probe Compliance Test; (10) Proposed revisions for requirements for Marking 7A General; (11) Proposed revisions for requirements for 7B Packaging Markings; (12) Proposed revisions for requirements for 7C Product Markings; (13) Proposed addition of 7E Permanence of Markings requirements; (14) Proposed addition of Instructions 8A General clause 8A.1, 8A.2, and 8A.3.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx.
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

### ULSE (UL Standards & Engagement)

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

***Revision***

BSR/UL 62841-3-6-202x, Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-6: Particular Requirements for Transportable Diamond Drills with Liquid System (revision of ANSI/UL 62841-3-6-2018)
This proposal covers: (1) Proposed adoption of IEC 62841-3-6 AMD 1.
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.

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

929 W. Portobello Avenue, Mesa, AZ 85210 | jing.kwok@vita.com, www.vita.com

***Revision***

BSR/VITA 46.0-202x, VPX Baseline Standard (revision of ANSI/VITA 65.0-2021)
This standard is the VPX Baseline Standard; an evolutionary step forward for the provision of high-speed interconnects in harsh environment applications. This revision adds verification methodologies to all Rules and Recommendations, adds guide socket/pin rotations for additional power supply configurations, provides further clarifications to power wafer current ratings, and makes other changes to clarify the requirements of this standard.
Single copy price: $25.00
Obtain an electronic copy from: admin@vita.com
Send comments (copy psa@ansi.org) to: admin@vita.com

# Comment Deadline: June 27, 2023

### ULSE (UL Standards & Engagement)

12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Julio.Morales@UL.org, https://ulse.org/

*New Standard*

BSR/UL 8802-202x, Standard for Safety for Ultraviolet (UV) Germicidal Equipment and Systems (new standard)
This proposal is to create a new ANS for Ultraviolet (UV) Germicidal Equipment and Systems. This standard covers UV Germicidal Equipment, UV Emitter Assemblies, UV Germicidal Systems, UV Germicidal Retrofit Kits, and Contained UV Germicidal Equipment intended for installation and use in accordance with the U.S. National Electrical Code (NEC), ANSI/NFPA 70 and in accordance with the Canadian Electrical Code, Part I (CEC), CSA C22.1. This standard does not apply to UV equipment covered by other (UL or CSA) standards for safety.
Single copy price: Free
Order 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

# Technical Reports Registered with ANSI

Technical Reports Registered with ANSI are not consensus documents. Rather, all material contained in Technical Reports Registered with ANSI is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject. Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to (psa@ansi.org).

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

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

*New Technical Report*

ASSP/ISO TR 45006-2023, Occupational health and safety management - Guidelines for organizations on preventing and managing infectious diseases (technical report)
This document gives guidelines for organizations on how to prevent or control exposure to infectious agents and manage the risks associated with infectious diseases.

# Technical Reports Registered with ANSI

Technical Reports Registered with ANSI are not consensus documents. Rather, all material contained in Technical Reports Registered with ANSI is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject. Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to (psa@ansi.org).

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

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

***New Technical Report***

ISO/ASSP 45002-2023, Occupational health and safety management systems - General guidelines for the implementation of ISO 45001:2018 (technical report)
This document gives guidance on the establishment, implementation, maintenance and continual improvement of an occupational health and safety (OH&S) management system that can help organizations conform to ISO 45001:2018.

Technical Reports Registered with ANSI are not consensus documents. Rather, all material contained in Technical Reports Registered with ANSI is informational in nature. Technical reports may include, for example, reports of technical research, tutorials, factual data obtained from a survey carried out among standards developers and/or national bodies, or information on the "state of the art" in relation to standards of national or international bodies on a particular subject. Immediately following the end of a 30-day announcement period in Standards Action, the Technical Report will be registered by ANSI. Please submit any comments regarding this registration to the organization indicated, with a copy to (psa@ansi.org).

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

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

***New Technical Report***

INCITS/ISO/IEC TR 30117:2014 [2023], Information technology - Guide to on-card biometric comparison standards and application (technical report)
This document summarizes how some of the main international standards and recommendations approach personal identification and its related information security, with regard to the integration of biometrics and integrated circuit cards (ICCs). It also provides examples of how biometrics and ICCs are integrated in applications.
Send comments (copy psa@ansi.org) to: Deborah Spittle <comments@standards.incits.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.

## ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Pk, IL 60526 | pschroeder@ans.org, www.ans.org

ANSI/ANS 10.7-2013 (R2023), Non-Real-Time, High-Integrity Software for the Nuclear Industry - Developer Requirements (reaffirmation of ANSI/ANS 10.7-2013 (R2018)) Final Action Date: 4/19/2023 | *Reaffirmation*

## 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 PTC 4.4-2023, Gas Turbine Heat Recovery Steam Generators (revision of ANSI/ASME PTC 4.4-2008 (R2013)) Final Action Date: 4/19/2023 | *Revision*

## ECIA (Electronic Components Industry Association)

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

ANSI/EIA 364-09D-2018 (R2023), Durability Test Procedure for Electrical Connectors and Contacts (reaffirmation of ANSI/EIA 364-09D-2018) Final Action Date: 4/19/2023 | *Reaffirmation*

ANSI/EIA 364-57A-2017 (R2023), Coupling Pin Strength Test Procedure for Circular Bayonet Electrical Connectors (reaffirmation of ANSI/EIA 364-57A-2017) Final Action Date: 4/19/2023 | *Reaffirmation*

ANSI/EIA 364-78C-2018 (R2023), Cavity Leakage Bonding Integrity Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-78C-2018) Final Action Date: 4/19/2023 | *Reaffirmation*

ANSI/EIA 364-83A-2017 (R2023), Shell-to-Shell and Shell-to-Bulkhead Resistance Test Procedure for Electrical Connectors (reaffirmation of ANSI/EIA 364-83A-2017) Final Action Date: 4/19/2023 | *Reaffirmation*

ANSI/EIA 364-117-2017 (R2023), Dielectric Breakdown Voltage Test Procedure for Electrical Connectors, Sockets and Coaxial Contacts (reaffirmation of ANSI/EIA 364-117-2017) Final Action Date: 4/19/2023 | *Reaffirmation*

## IAPMO (Z) (International Association of Plumbing & Mechanical Officials)

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 | terry.burger@asse-plumbing.org, https://www.

ANSI/IAPMO Z1167-2023, Solid Waste Containment Interceptors (new standard) Final Action Date: 4/19/2023 | *New Standard*

## ULSE (UL Standards & Engagement)

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

ANSI/UL 1008S-2012 (R2023), Standard for Safety for Solid-State Transfer Switches (reaffirmation of ANSI/UL 1008S -2012 (R2018)) Final Action Date: 4/19/2023 | *Reaffirmation*

ANSI/UL 1389-2023, Standard for Safety for Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations (revision of ANSI/UL 1389-2021) Final Action Date: 4/20/2023 | *Revision*

ANSI/UL 2108-2023, Standard for Safety for Low Voltage Lighting Systems (revision of ANSI/UL 2108-2021) Final Action Date: 4/18/2023 | *Revision*

ANSI/UL 9595-2023, Standard for Factory Follow-Up Services for Personal Flotation Devices (revision of ANSI/UL 9595 -2021) Final Action Date: 4/18/2023 | *Revision*

# Call for Members (ANS Consensus Bodies)

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

## 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 ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.
Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures.
More information is available at www.scte.org or by e-mail from standards@scte.org.

### ABYC (American Boat and Yacht Council)

613 Third Street, Suite 10, Annapolis, MD 21403 | eparks@abycinc.org, www.abycinc.org

BSR/ABYC A-33-202x, Emergency Engine Propulsion Cut-Off Devices (revision of ANSI/ABYC A-33-2020)
Interest Categories: Soliciting for category: Insurance/Survey

### AGA (ASC Z223) (American Gas Association)

400 North Capitol Street, NW, Suite 450, Washington, DC 20001 | lescobar@aga.org, www.aga.org

BSR Z223.1/NFPA 54-202x, National Fuel Gas Code (revision of ANSI Z223.1/NFPA 54-2021)

### CTA (Consumer Technology Association)

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

BSR/CTA 2107-A-202x, The Use of Artificial Intelligence in Health Care: Managing, Characterizing, and Safeguarding Data (revision and redesignation of ANSI/CTA 2107-2022)
Interest Categories: CTA is seeking new members to join the consensus body to participate in the effort to create CTA-2107. CTA and the R13 Artificial Intelligence Committee are particularly interested in adding new members (called "users" who acquire AI from those who create them) as well as those with a general interest.

### CTA (Consumer Technology Association)

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

BSR/CTA 861-I Errata-202x, A DTV Profile for Uncompressed High Speed Digital Interfaces (new standard)

### ISEA (ASC Z87) (International Safety Equipment Association)

1101 Wilson Blvd, Suite 1425, Arlington, VA 22209 | hwoehrle@safetyequipment.org, www.safetyequipment.org

BSR ISEA Z87.1-202x, Occupational and Educational Personal Eye and Face Protection Devices (revision of ANSI ISEA Z87.1-2020)

### NECA (National Electrical Contractors Association)

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

BSR/NECA 500-202X, Recommended Practice for Installing and Maintaining Indoor Commercial Lighting Systems (new standard)

### NSF (NSF International)

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

BSR/NSF 50-202x (i199r2), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2021)

### TCIA (ASC A300) (Tree Care Industry Association)

136 Harvey Road, Suite 101, Londonderry, NH 03053 | rrouse@tcia.org, www.treecareindustry.org

BSR A300-202x, A300 Tree Care Standards (revision, redesignation and consolidation of ANSI A300 Part 1-2017; ANSI A300 Part 2-2018; ANSI A300 Part 3-2013; ANSI A300 Part 4-2014; ANSI A300 Part 5-2019; ANSI A300 Part 6-2012 (R2018); ANSI A300 Part 7-2018; ANSI A300 Part 8-2019; ANSI A300 Part 9-2017; ANSI A300 Part 10 -2016)

## ULSE (UL Standards & Engagement)

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

BSR/UL 1897-202X, Standard for Safety for Uplift Tests for Roof Covering Systems (revision of ANSI/UL 1897-2015 (R2020))

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

929 W. Portobello Avenue, Mesa, AZ 85210 | jing.kwok@vita.com, www.vita.com

BSR/VITA 46.0-202x, VPX Baseline Standard (revision of ANSI/VITA 65.0-2021)

# 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 linkis 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)

PRCA (Professional Ropes Course Association)

RESNET (Residential Energy Services Network, Inc.)

SAE (SAE International)

TCNA (Tile Council of North America)

TIA (Telecommunications Industry Association)

ULSE (UL Standards & Engagement)

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at www.ansi.org/asd, 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 Tony Zertuche, General Secretary, USNC/IEC, at ANSI's New York offices (tzertuche@ansi.org). The final date for offering comments is listed after each draft.

**ORDERING INSTRUCTIONS**

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

## ISO Standards

### Acoustics (TC 43)

ISO/DIS 13473-4, Characterization of pavement texture by use of surface profiles - Part 4: One third octave band spectral analysis of surface profiles - 7/10/2023, $102.00

### Building environment design (TC 205)

ISO 11855-7:2019/DAmd 1, - Amendment 1: Building environment design - Design, dimensioning, installation and control of embedded radiant heating and cooling systems - Part 7: Input parameters for the energy calculation - Amendment 1 - 7/8/2023, $33.00

### Carbon dioxide capture, transportation, and geological storage (TC 265)

ISO/DIS 27913, Carbon dioxide capture, transportation and geological storage - Pipeline transportation systems - 7/7/2023, $125.00

### Furniture (TC 136)

ISO/DIS 16502-1, Furniture - Assessment of the ignitability of mattresses and upholstered bed bases - Part 1: Ignition source: smouldering cigarette - 7/8/2023, $46.00

ISO/DIS 16502-2, Furniture - Assessment of the ignitability of mattresses and upholstered bed bases - Part 2: Ignition source: match flame equivalent - 7/8/2023, $46.00

### Graphical symbols (TC 145)

ISO/DIS 3864-3, Graphical symbols - Safety colours and safety signs - Part 3: Design principles for graphical symbols for use in safety signs - 7/13/2023, $88.00

### Hydrometric determinations (TC 113)

ISO/DIS 6640, Measurement of density of water-sediment mixture using radiation transmission method - 7/9/2023, $62.00

### Natural gas (TC 193)

ISO/DIS 2620, Analysis of natural gas - Biomethane - Determination of VOCs by thermal desorption gas chromatography with flame ionization and/or mass spectrometry detectors - 7/9/2023, $46.00

### Paints and varnishes (TC 35)

ISO 11890-2:2020/DAmd 1, - Amendment 1: Paints and varnishes - Determination of volatile organic compounds(VOC) and/or semi volatile organic compounds (SVOC) content - Part 2: Gas-chromatographic method - Amendment 1 - 7/10/2023, $33.00

### Road vehicles (TC 22)

ISO/DIS 11565, Road vehicles - Spark-plugs - Test methods and requirements - 7/9/2023, $53.00

### Rubber and rubber products (TC 45)

ISO/DIS 7617-1, Plastics-coated fabrics for upholstery - Part 1: Specification for PVC-coated knitted fabrics - 7/8/2023, $58.00

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

ISO/DIS 13141, Electronic fee collection - Localisation augmentation communication for autonomous systems - 7/9/2023, $107.00

ISO/DIS 6029-1, Intelligent transport systems - Seamless positioning for multimodal transportation in ITS stations - Part 1: General information and use case definition - 7/8/2023, $112.00

## ISO/IEC JTC 1, Information Technology

ISO/IEC DIS 17760-105, Information technology - ATA Command Set - 5 (ACS-5) - Part 105: Title missing - 7/6/2023, $301.00

# IEC Standards

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

100/3899(F)/FDIS, IEC 60728-106 ED1: Cable networks for television signals, sound signals and interactive services - Part 106: Optical equipment for systems loaded with digital channels only, 05/05/2023

100/3900(F)/FDIS, IEC 60728-113 ED2: Cable networks for television signals, sound signals and interactive services - Part 113: Optical systems for broadcast signal transmissions loaded with digital channels only, 05/05/2023

### Dependability (TC 56)

56/1993A/CD, IEC 60300-3-17 ED1: Dependability management - Part 3-17: Application guide - Availability, 06/09/2023

### Electric cables (TC 20)

20/2108/FDIS, IEC 61442 ED3: Test methods for accessories for power cables with rated voltages from 6 kV (Um = 7,2 kV) up to 30 kV (Um = 36 kV), 06/02/2023

### Electric welding (TC 26)

26/744(F)/FDIS, IEC 62822-3 ED2: Electric welding equipment - Assessment of restrictions related to human exposure to electromagnetic fields (0 Hz to 300 Hz) - Part 3: Resistance welding equipment, 05/05/2023

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

31J/335/CDV, IEC 60079-14 ED6: Electrical installation design, selection and installation of equipment, including initial inspection, 07/14/2023

31M/182/CDV, ISO/IEC 80079-41 ED1: Explosive atmospheres - Part 41: Reciprocating internal combustion engines, 07/14/2023

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

62D/2041/NP, PNW 62D-2041 ED1: Medical electrical equipment - Part 2-93: Part 2-9x: Particular requirements for basic safety and essential performance of inhalational therapy nebulizer equipment, 07/14/2023

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

97/252/CDV, IEC 61820-2 ED1: Electrical installations for lighting and beaconing of aerodromes Part 1-2: Particular requirements for series circuits, 07/14/2023

### Electrostatics (TC 101)

101/684/CD, IEC 61340-4-11 ED1: Electrostatics - Part 4-11: Standard test methods for specific applications - Testing of electrostatic properties of composite IBC, 06/16/2023

### Environmental standardization for electrical and electronic products and systems (TC 111)

111/702/CD, IEC TS 63428 ED1: Guidance on material circularity considerations in environmentally conscious design, 07/14/2023

### High-voltage testing techniques (TC 42)

42/416/CDV, IEC 60060-2 ED4: High-voltage test techniques - Part 2: Measuring systems, 07/14/2023

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

65C/1258/CD, IEC 61784-3-19 ED1: Industrial communication networks - Profiles - Part 3-19: Functional safety fieldbuses - Additional specifications for CPF 19, 07/14/2023

### Laser equipment (TC 76)

76/732/CD, ISO 11553-2 ED2: Safety of machinery - Laser processing machines - Part 2: Safety requirements for hand-held or hand-operated laser processing machines, 07/14/2023

### Magnetic alloys and steels (TC 68)

68/740/CD, IEC 60404-1/AMD1 ED3: Amendment 1 - Magnetic materials - Part 1: Classification, 07/14/2023

### Magnetic components and ferrite materials (TC 51)

51/1435/CDV, IEC 62024-2 ED3: High frequency inductive components - Electrical characteristics and measuring methods - Part 2: Rated current of inductors for DC-to-DC converters, 07/14/2023

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

113/765/CD, IEC TS 62565-4-3 Nanomanufacturing - Product specifications - Part 4-3: Quantum dots materials - Blank detail specification: Light emitting diodes (QLED), 07/14/2023

113/764/CD, IEC TS 62876-4-1, Nanomanufacturing - Reliability assessments - Part 4-1: Quantum dots light conversion film (QLCF - Test: Temperature, humidity and light exposure, 07/14/2023

113/763/CD, IEC TS 62565-4-4 ED1, Nanomanufacturing - Product specifications - Part 4-4: Quantum dots materials - Blank detail specification: Light conversion films (QLCF), 07/14/2023

**Power electronics (TC 22)**

22F/728/CD, IEC TR 63500 ED1: Unified power flow controller (UPFC) installations - System tests, 07/14/2023

**Power system control and associated communications (TC 57)**

57/2592/CD, IEC TR 61850-7-6 ED2: Communication networks and systems for power utility automation - Part 7-6: Guideline for definition of Basic Application Profiles (BAPs) using IEC 61850, 07/14/2023

**Rotating machinery (TC 2)**

2/2131/CDV, IEC 60034-30-3 ED1: Rotating electrical machines - Part 30-3: Efficiency classes of high voltage AC motors (IE code), 07/14/2023

**Safety of machinery - Electrotechnical aspects (TC 44)**

44/1000(F)/FDIS, IEC 60204-32 ED3: Safety of machinery - Electrical equipment of machines - Part 32: Requirements for hoisting machines, 05/05/2023

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

21/1166/CDV, IEC 61427-2 ED2: Secondary cells and batteries for renewable energy storage - General requirements and methods of test - Part 2: On-grid applications, 07/14/2023

**Semiconductor devices (TC 47)**

47E/807/CD, IEC 60747-5-4/AMD1 ED2: Amendment 1 - Semiconductor devices - Part 5-4: Optoelectronic devices - Semiconductor lasers, 06/16/2023

**Solar photovoltaic energy systems (TC 82)**

82/2149/CD, IEC TS 62804-1 ED2: Photovoltaic (PV) modules - Test methods for the detection of potential-induced degradation - Part 1: Crystalline silicon, 07/14/2023

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

8B/168/NP, PNW TS 8B-168 ED1: Microgrids - Technical Requirements - Emergency supply of microgrids by electric vehicles, 07/14/2023

**(TC )**

CIS/F/837/CDV, CISPR 15/AMD1 ED9: Amendment 1 - Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment, 07/14/2023

SyCSmartCities/292/CD, IEC SRD 63233-4 ED1: Systems Reference Deliverable (SRD) - Smart City Standards Inventory and Mapping - Part 4: Guidance on standards for public health emergencies, 07/14/2023

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

88/951/NP, PNW 88-951 ED1: Wind energy generation systems - Part 32: Operations and maintenance of blades, 07/14/2023

# 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

**Aircraft and space vehicles (TC 20)**

ISO 21349:2023, Space systems - Project reviews, $157.00

**Fine ceramics (TC 206)**

ISO 24687:2023, Fine ceramics (advanced ceramics, advanced technical ceramics) - Measurement of Seebeck coefficient and electrical conductivity of bulk-type thermoelectric materials at room and high temperatures, $157.00

**Geographic information/Geomatics (TC 211)**

ISO 19157-1:2023, Geographic information - Data quality - Part 1: General requirements, $263.00

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

ISO 13132:2023, Laboratory glassware - Petri dishes, $77.00

**Machine tools (TC 39)**

ISO 10791-2:2023, Test conditions for machining centres - Part 2: Geometric tests for machines with vertical spindle (vertical Z-axis), $263.00

**Optics and optical instruments (TC 172)**

ISO 23701:2023, Optics and photonics - Laser and laser-related equipment - Photothermal technique for absorption measurement and mapping of optical laser components, $157.00

**Photography (TC 42)**

ISO 15739:2023, Photography - Electronic still-picture imaging - Noise measurements, $210.00

**Plastics (TC 61)**

ISO 23949:2023, Plastics - Application of spread of flame test to plastic pipes, $77.00

ISO 4907-1:2023, Plastics - Ion exchange resin - Part 1: Determination of exchange capacity of acrylic anion exchange resins, $116.00

ISO 4907-2:2023, Plastics - Ion exchange resin - Part 2: Determination of water content of anion exchange resins in hydroxide form by centrifugation, $77.00

ISO 4907-3:2023, Plastics - Ion exchange resin - Part 3: Determination of exchange capacity of anion exchange resins in hydroxide form, $77.00

ISO 22007-7:2023, Plastics - Determination of thermal conductivity and thermal diffusivity - Part 7: Transient measurement of thermal effusivity using a plane heat source, $116.00

**Powder metallurgy (TC 119)**

ISO 4491-2:2023, Metallic powders - Determination of oxygen content by reduction methods - Part 2: Loss of mass on hydrogen reduction (hydrogen loss), $77.00

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

ISO 5774:2023, Plastics hoses - Textile-reinforced types for compressed-air applications - Specification, $116.00

**Screw threads (TC 1)**

ISO 262:2023, ISO general purpose metric screw threads - Selected sizes for bolts, screws, studs and nuts, $51.00

ISO 724:2023, ISO general purpose metric screw threads - Basic dimensions, $77.00

**Steel wire ropes (TC 105)**

ISO 3444:2023, Stainless-steel wire ropes, $116.00

**Textiles (TC 38)**

ISO 5773:2023, Textiles - Determination of components in flax fibres, $77.00

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

ISO 5718-1:2023, Harvesting equipment - Requirements for cutting elements - Part 1: Blades used on rotary disc mowers and rotary drum mowers, $77.00

ISO 5718-2:2023, Harvesting equipment - Requirements for cutting elements - Part 2: Blades used on large rotary mowers, $77.00

ISO 4254-13:2023, Agricultural machinery - Safety - Part 13: Large rotary mowers, $183.00

**Welding and allied processes (TC 44)**

ISO 17663:2023, Welding - Quality requirements for heat treatment in connection with welding and allied processes, $77.00

## ISO Technical Reports

### Banking and related financial services (TC 68)

ISO/TR 24374:2023, Financial services - Security information for PKI in blockchain and DLT implementations, $116.00

## ISO Technical Specifications

### Concrete, reinforced concrete and pre-stressed concrete (TC 71)

ISO/TS 16774-2:2023, Test methods for repair materials for water-leakage cracks in underground concrete structures - Part 2: Test method for chemical resistance, $77.00

ISO/TS 16774-3:2023, Test methods for repair materials for water-leakage cracks in underground concrete structures - Part 3: Test method for water (wash out) resistance, $77.00

ISO/TS 16774-4:2023, Test methods for repair materials for water-leakage cracks in underground concrete structures - Part 4: Test method for adhesion on wet concrete surface, $77.00

### Industrial automation systems and integration (TC 184)

ISO/TS 15926-11:2023, Industrial automation systems and integration - Integration of life-cycle data for process plants including oil and gas production facilities - Part 11: Simplified industrial usage of reference data based on RDFS methodology, $237.00

## ISO/IEC JTC 1, Information Technology

ISO/IEC 18013-2:2020/Amd 1:2023, - Amendment 1: Personal identification - ISO-compliant driving licence - Part 2: Machine-readable technologies - Amendment 1: DG11 length for compact encoding, $22.00

ISO/IEC 18013-3:2017/Amd 2:2023, - Amendment 2: Information technology - Personal identification - ISO-compliant driving licence - Part 3: Access control, authentication and integrity validation - Amendment 2: Updates for passive authentication, $22.00

ISO/IEC 20008-2:2013/Amd 2:2023, - Amendment 2: Information technology - Security techniques - Anonymous digital signatures - Part 2: Mechanisms using a group public key - Amendment 2, $157.00

# IEC Standards

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

IEC 62439-3 Ed. 4.0 b Cor.1:2023, Corrigendum 1 - Industrial communication networks - High availability automation networks - Part 3: Parallel Redundancy Protocol (PRP) and High-availability Seamless Redundancy (HSR), $0.00

### Lamps and related equipment (TC 34)

IEC 60838-2-3 Amd.1 Ed. 1.0 b:2023, Amendment 1 - Miscellaneous lampholders - Part 2-3: Particular requirements - Lampholders for double-capped linear LED lamps, $25.00

IEC 60838-2-3 Ed. 1.1 b:2023, Miscellaneous lampholders - Part 2-3: Particular requirements - Lampholders for double-capped linear LED lamps, $228.00

### Measuring relays and protection equipment (TC 95)

IEC 60255-187-1 Ed. 1.0 b Cor.1:2023, Corrigendum 1 - Measuring relays and protection equipment - Part 187-1: Functional requirements for differential protection - Restrained and unrestrained differential protection of motors, generators and transformers, $0.00

# International Organization for Standardization (ISO)

## Call for Comment on ISO Standard

### Integrated Pest Management for Crops

**Comment Deadline: May 26, 2023**

SAC, the ISO member body for China, has submitted to ISO a proposal for a new field of ISO technical activity on Integrated Pest Management for Crops, with the following scope statement:

Standardization of integrated pest management in crop production process, including management services, effectiveness assessments, testing and analysis and other related standards which involved in the process of monitoring and forecasting, prevention and control and emergency measures.

Excluded:
— Tractors and machinery for agriculture and forestry (covered by ISO/TC 23)
— Common names for pesticides and other agrochemicals (covered by ISO/TC 81)
— Personal safety -- Personal protective equipment (covered by ISO/TC94)

Note: Crops refer to all kinds of plants cultivated in agriculture, including food crops, cash crops, industrial raw material crops, feed crops, etc.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, May 26, 2023.

## Establishment of ISO Technical Committee

### ISO/TC 17/SC 21 – Environment related to climate change in the iron and steel industry

.ISO/TC 17 – *Steel* has created a new ISO Subcommittee on *Environment related to climate change in the iron and steel industry* (ISO/TC 17/SC 21). The Secretariat has been assigned to Japan (JISC).

ISO/TC 17/SC 21 operates under the following scope:

*Development of standards in the field of Environment related to climate change in the iron and steel industry within the scope of ISO/TC 17:*

*Standardization in the field of cast, wrought and cold-formed steel, including technical delivery conditions for steel tubes for pressure purposes.*

*Excluded: steel tubes within the scope of ISO/TC 5; line pipe, casing, tubing and drill pipe within the scope of ISO/TC 67; methods of mechanical testing of metals within the scope of ISO/TC 164.*

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

# International Organization for Standardization (ISO)

## Re-establishment of ISO Technical Committee

### ISO/TC 101 – Continuous mechanical handling equipment

The ISO Technical Management Board (TMB) has recently approved the re-establishment of ISO/TC 101 – *Continuous mechanical handling equipment*. The Secretariat has been assigned to Germany (DIN).

ISO/TC 101 operates under the following scope:

*Standardization in the field of continuous mechanical handling equipment for loose bulk materials or unit loads, comprising terminology, general design and construction, leading dimensions, safety requirements and testing and inspection methods.*

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

# Meeting Notices (International)

## ANSI Accredited U.S TAG to ISO

### JTC 1/SC 36, Information technology for learning, education and training

**Establishment of a New Technical Committee INCITS/Education - Zoom on Tuesday, May 23, 2023 Meeting Notice and Call for Members**

At the March 2023 INCITS Executive Board meeting, a new Technical Committee (TC), INCITS/Education, was established. The TC will serve as the **U.S. TAG to ISO/IEC JTC 1 Subcommittee 36 - Information Technology for Learning, Education and Training**.

The scope of work is standardization in the field of information technologies for learning, education, and training to support individuals, groups, or organizations, and to enable interoperability and reusability of resources and tool. Excluded from this scope are:

· standards or technical reports that define educational standards (competencies), cultural conventions, learning objectives, or specific learning content.

· work done by other ISO or IEC TCs, SCs, or WGs with respect to their component, specialty, or domain. Instead, when appropriate, normative or informative references to other standards shall be included. Examples include documents on special topics such as multimedia, web content, cultural adaptation, and security.

RSVPs for the meeting should be submitted to Bill Ash (bash@itic.org) as soon as possible.

Organizational Meeting – Tuesday, May 23, 2023. The organizational meeting of the new TC on INCITS/Education will be held electronically via **Zoom on Tuesday, May 23, 2023** (1:00 PM to 4:00 PM (Eastern) / 10:00 AM to 1:00 PM (Pacific)).

Membership – Membership in INCITS is open to all directly and materially interested parties who return a signed INCITS Membership Agreement and pay the applicable service fees. For more information, click here.

# 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.

**BSR/ASHRAE Addendum d**
**to ANSI/ASHRAE Standard 62.2-2022**

## Public Review Draft

# Proposed Addendum d to Standard 62.2-2022, Ventilation and Acceptable Indoor Air Quality in Residential Buildings

**First Public Review (March 2023)**
**(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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**ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092**

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# FOREWORD

*This proposed addendum clarifies the intent of Section 6.6 Air Inlets and modifies terminology to be more consistent with that used by industry and by building codes.*

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

## Addendum d to 62.2-2022

***Revise Section 6.6 as shown below. The remainder of Section 6.6 is unchanged.***

**6.6 Air Inlets**. Air inlets that are part of the ventilation design shall be located a minimum of 10 ft (3m) from known sources of contamination, including but not limited to ~~such as~~ a plumbing vent termination ~~stack~~, combustion vent termination, exhaust termination ~~hood~~, driveway, street, alley, parking lot, or loading dock ~~or vehicle exhaust~~. The air inlet ~~intake~~ shall be placed so that entering air is not physically obstructed ~~by snow, plantings, or other material~~. Forced air inlets shall be provided with ~~rodent/insect~~ screens, louvers, or grilles having a maximum opening size of ½ in. (13 mm) in any direction ~~(mesh not larger than 1/2 in. [13 mm])~~.

**Exceptions to 6.6:**

1. Ventilation air inlets ~~openings~~ in a ~~the~~ wall ~~may~~ shall be permitted to be as close as a stretched-string distance of 3 ft (1 m) from dryer exhaust terminations or sources of contamination exiting through a ~~the~~ roof above the ventilation air inlet ~~or dryer exhausts~~.

[…]

**BSR/ASHRAE Addendum d**
**to ANSI/ASHRAE Standard 15.2-2022**

**First Public Review Draft**

# Proposed Addendum d to Standard 15-2019, Safety Standard for Refrigeration Systems in Residential Applications

**First Public Review (April 2023)**
**(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, use the change submittal form available on the ASHRAE website, www.ashrae.org.

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

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## FOREWORD

*This proposed addendum expands the scope of ANSI/ASHRAE Standard 15.2 to apply to both direct and indirect refrigeration systems in residential applications.*

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

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**Addendum d to Standard 15.2-2022**

***Modify Section 2 as follows. The remainder of Section 2 remains unchanged.***

## 2. SCOPE

**2.1** This standard applies to *listed* ~~*direct*~~ *refrigeration systems* in the following residential applications that are limited to serving only a single *dwelling unit* or *sleeping unit*:

a. One- and two-family *dwellings* and townhouses

b. Detached outbuildings associated with a one- or two-family *dwelling* or townhouse and located on the same property included in Section 2.1(a)

c. Individual *dwelling units* and *sleeping units* located in a *multifamily dwelling*

# Public Review Draft

**Proposed Addendum ak to Standard 189.1-2020**

# Standard for the Design of High-Performance Green Buildings

## Except Low-Rise Residential Buildings

Second Public Review Independent Substantive Changes (May, 2023)
(Draft Shows Proposed Changes to First Public Review Draft)

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).

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# Foreword

This addendum aligns with the requirements proposed for EPD disclosure in Addendum z. The requirements include a minimum number of procured products to meet GWP limits set at 125% of the industry-wide EPD average. Flexibility is allowed in selecting which products are subject to the limits.
A jurisdiction-determined percentage of the cost of procured products must have a global warming potential (GWP) less than 125% of the industry average. In addition to the jurisdiction selected percentage, a minimum of 10 building products, and all of the building products representing not less than 5% of the total cost of building materials, must meet the 125% GWP targets.
Projects can comply by providing an EPD or LCA for each building product that show the product's GWP is less than 125% of the industry average for cradle-to-gate production. The product and the industry-wide EPD baseline must be governed by the same Product Category Rules for the same geographic region. Product assemblies, like windows or composite flooring, can be used for compliance when component parts representing at least 80% of the assembly's GWP meet the product's GWP limit.
This ISC to the original addendum includes the following modifications in response to comments:

- The entirety of section 9.4.2 is included as a jurisdictional option in Table 4.2. It was already a JO in section 9.4.2.
- Language is added in 9.4.2.1.b requiring product life-cycle reports to be consistent with applicable product category rule (PCR) for the building product.
- References to EN 15804 are added in addition to the existing references to ISO 21930.
- Clarification is provided in 9.4.2.2.1.b clarifying that it is the PCR of the geographic region of the building project that EPDs must comply with in the calculation of an industry average when no industry-wide EPD is available.

The numbering and ordering of Section 9 was modified as an editorial change in Addendum u, which removed the headings of prescriptive and performance paths and moved the requirements as two optional paths in the new Section 9.5. Addendum z, still in process, moved the EPD Section from the new Section 9.5 to its own Section 9.4. Addendum z will become 9.4.1 and Addendum ak will become 9.4.2 under the heading of 9.4 Environmental Product Declarations and Global Warming Potential.

This addendum provides the environmental benefit of lowering GHG emissions through the selection of building products with lower GWP. In most cases, it will be cost neutral to the building project but manufacturers that do not currently have EPDs may increase costs of their products to cover development of EPDs. Several states, and the federal government, are beginning to implement Buy Clean programs that require EPDs and set embodied carbon thresholds for purchasing based on them. The construction materials included in these programs varies with different jurisdictions.

***[Note to Reviewers: In this ISC, changes to the Addendum z are indicated in the text by <u>underlining</u> (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]***

# Addendum *ak* 2nd PR ISC to 189.1-2020

*Revise Section 3.2 as follows:*

**Building product:** Any material, ~~or~~ product, or component part of a *building product assembly* procured for permanent installation in the *building project*. Any material, ~~or~~ product, or component part of a *building product assembly* with the same specification requirements, and classified by the same product category rules (PCR), shall be defined as the same *building product*.

**Building product assembly:** *Building products* delivered to the project site as a completed assembly prepared for installation.

**Cradle-to-gate:** Inclusive of the production stage modules A1 through A3, according to ISO 21930.

*Add to Section 3.3 Abbreviations and Acronyms as follows:*

| | |
|---|---|
| IW-EPD | industry-wide-environmental product declaration |
| PCR | product category rules |

Revise *Table 4.2 as follows.*

**Table 4.2 Requirements Determined by the Jurisdiction**

| Section | Section Title and Description | Jurisdictional Requirement |
|---|---|---|
| 9.4.2 | Product Procurement | [__] No |
| 9.4.2~~.a~~ | Product Procurement - Percentage of Building Product Cost | [_] 10%<br>[ ] 15% |

*Revise section 9.4.2 as follows.*

**9.4 Environmental Product Declarations and Global Warming Potential**

**9.4.1 Environmental Product Declarations and Global Warming Potential Reporting** *[proposed addendum z]*

**9.4.2 [JO] Product Procurement.**

Documentation in accordance with 9.4.2.1 and 9.4.2.2 and the corresponding industry-wide Type III EPD, where available, shall be submitted for not less than 10 *building products* representing not less than 15% [JO] of the total estimated cost of *building products*. Any *building product* representing not less than 5% of the total estimated cost of *building products* shall be included in this requirement.

**9.4.2.1 Building Product Documentation.** A *building product's* global warming potential (GWP) or in the case of *a building product assembly's GWP,* component parts comprising not less than 80% of the assembly's total cost or weight, shall be documented with one of the following:

a) **Product-specific Declaration.** A product-specific, Type III EPD shall be manufacturer-specific. Type III EPDs shall comply with the goal and scope for not less than *cradle-to-gate* requirements in accordance with ISO 14025 and ISO 21930 or EN 15804.

**b.) Product Life Cycle Report.** A publicly available third-party report of a product's ~~life cycle assessment (~~LCA~~)~~, consistent with the applicable product category rules (PCR) for the *building product* and ISO 21930 or EN 15804, in accordance with ISO 14040 and ISO 14044. The report shall verify compliance with the goal and scope for not less than the *cradle-to-gate* requirements.

**9.4.2.2 Compliance.** Submitted documentation shall document a *cradle-to-gate* GWP of less than 125% of the industry average *cradle-to-gate* GWP for the *building product* in accordance with Section 9.4.2.2.1 or for *building product assemblies* in accordance with 9.4.2.2.2.

All product-specific and industry-wide EPDs for a *building product* shall be based on the same regionally applicable PCR ~~Product Category Rule~~ for the *building product* in which the *building project* is constructed.

**9.4.2.2.1 Determination of Industry Average**. The industry-wide average GWP for the *building product* shall be based on one of the following:

a) a currently valid publicly available Type III industry-wide EPD (IW-EPD) or LCA developed for the geographic region in which the *building project* ~~building project~~ is constructed,

b) where no Type III IW-EPD or LCA is available for a *building product* ~~building product~~ representing not less than 5% of the total cost of *building products* permanently installed in the project, the average of not less than 5 publicly available, product-specific Type III EPDs using the same PCR ~~Product Category Rule~~ for the same geographic region in which the *building project* is constructed ~~for the *building product*~~ is allowed to be used as the industry average.

**9.4.2.2.2 Building Product Assemblies.** *Building product assemblies* shall document compliance with this section based on either:

a) the *building product assembly's* publicly available Type III IW-EPD or LCA developed for the geographic region in which the *building project* ~~building project~~ is constructed, or

b) the individual product component parts' publicly available Type III EPD or LCAs comprising at least 80% of the *building product assembly's* total cost or weight.

*Add the following to Section 11 - Normative References:*

**11. NORMATIVE REFERENCES**

Section numbers indicate where the reference occurs in this document.

| Reference | Title | Section |
|---|---|---|
| **European Committee for Standardization (CEN)<br>Rue de la Science 23<br>B - 1040<br>Brussels, Belgium<br>Belgium + 32 2 550 08 11<br>https://www.cencenelec.eu** | | |
| EN 15804:2012+A2:2020 | Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products | 9.4.2 |

*Revise Informative Appendix G.2 (it was alphabetized)*

**INFORMATIVE APPENDIX G**

**G.1 INFORMATIVE REFERENCES**

**G.2 POTENTIAL SOURCES OF NORTH AMERICAN INDUSTRY-WIDE ENVIRONMENTAL PRODUCT DECLARATIONS**

This list might not reflect all of the industry-wide EPDs available.

Aluminum Extruders Council
American Institute of Steel Construction
American Wood Council, Canadian Wood Council
Asphalt Roofing Manufacturing Association (ARMA)
Canadian Wood Council
Cellulose Insulation Manufacturers Association
Chemical Fabrics and Film Association
Composite Panel Association
Concrete Reinforcing Steel Institute
EPS Industry Alliance
Gypsum Association
Metal Building Manufacturers Association
Metal Construction Association
Mineral Products Association
~~Athena Sustainable Materials Institute~~
National Glass Association
National Ready Mixed Concrete Association
North American Insulation Manufacturers Association (NAIMA)
Polyisocyanurate Insulation Manufacturers Association
Resilient Floor Covering Institute
Spray Polyurethane Foam Association (SPFA)
Steel Deck Institute
Steel Joist Institute
Steel Tube Institute
~~Sustainable Minds~~

***This ends the changes available for comment on Addendum ak. The information presented below is for informational purposes only and not open for public comment.***

*Note to reviewers: Section 9.4.1 is part of Addendum z, 2nd PRD ISC, and is provided below for reference.*

**9.4.1 Environmental Product Declarations and Global Warming Potential Reporting.**

**9.4.1.1 Environmental Product Declarations (EPDs).** EPDs shall be submitted for *building products* ~~products~~ that together represent not less than 25% of the total estimated cost of all *building products* ~~products~~ permanently installed in the building project, or not less than 30 EPDs such that a, b, c and d are satisfied. EPDs submitted shall:

a) represent *building products* ~~products~~ ~~that are~~ permanently installed ~~in the building project~~ at the time of issuance of the certificate of occupancy,

b) represent *building products* ~~products~~ from not less than 10 different manufacturers,

c) represent not less than 20 different *building products* ~~products~~, and

d) include any *building product* ~~product~~ with a value that exceeds 5% of the total cost of all *building products* ~~products~~ permanently installed in the building project.

A value of 45% of the total estimated construction cost shall be permitted to be used in lieu of the total cost of all *building products* ~~products~~ permanently installed in the building project.

**9.4.1.2 EPD Requirements.** EPDs used to comply with 9.4.1.1 shall be third-party verified Type III EPDs consistent with ISO 21930 or ISO 14025, with not less than a cradle-to-gate scope. Where an industrywide or product-specific Type III EPD is not available for a *building product* ~~product~~, a critically reviewed third-party life cycle assessment report based on ISO Standards 14040 and 14044 or third-party verified summary thereof shall be permitted as an alternative method for demonstrating compliance.

*Building product* ~~Product~~ compliance shall be shown by submitting either a product-specific EPD or a regional- or industry-wide EPD. Each product-specific EPD shall be counted as one *building product* ~~product~~. Each regional- or industry-wide EPD shall be counted as ½ *building product* ~~product~~.

*Building products* ~~Products~~ delivered to the building project site as an *building product assembly* ~~assembly~~ comprised of multiple components and ready for installation into the building project shall be considered a single *building product* ~~product~~. Compliance with 9.4.1.1 shall be based on either:

a) an EPD representing the *building product assembly* ~~assembly~~, or

b) the individual *building product* component parts' EPDs comprising not less than 80% of the *building product assembly's* total cost or weight. ~~EPDs of individual components within the assembly.~~

**9.4.1.3 Reporting of Global Warming Potential Contribution.** For each of the *building products* ~~products~~ with EPDs used to comply with section 9.4.1.1, the global warming potential reported in the applicable EPD as a declared unit or functional unit shall be multiplied by the number of declared units or functional units of *building product* ~~product~~ used in the building project. A report listing the results on a per *building product* ~~product~~ basis and the total square footage of the building project shall be provided to the project owner and be made available to the *authority having jurisdiction (AHJ).*

# Public Review Draft

## Proposed Addendum ba to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings

## Except Low-Rise Residential Buildings

First Public Review (May, 2023)
(Draft Shows Proposed Changes to Current Standard)

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## Foreword

*This Addendum revises the definition of potable water to match the definition in the International Plumbing Code. The change will avoid confusion by excluding natural freshwater sources that are not considered "potable" under most common definitions.*

*These changes are not expected to add cost to the standard.*

…

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

## Addendum *ba* to 189.1-2020

*Revise Section 3.1 "Definitions" as follows:*

***water, potable****:* ~~water from public drinking water systems or from natural freshwater sources, such as lakes, streams, and aquifers, where water from such natural sources would or could meet drinking water standards.~~ water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the bacteriological and chemical quality requirements of the public health service drinking water standards or the regulations of the public health authority having jurisdiction.

# Public Review Draft

## Proposed Addendum bc to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings

## Except Low-Rise Residential Buildings

First Public Review (May, 2023)
(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).

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## Foreword

This addendum updates the references in Section 11 Normative References.

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

## Addendum *bc* to 189.1-2020

*Update Section 11 as follows:*

# 11. NORMATIVE REFERENCES

Section numbers indicate where the reference occurs in this document.

| Reference | Title | Section |
|---|---|---|
| **Air-Conditioning, Heating, and Refrigeration Institute (AHRI)<br>2111 Wilson Blvd, Suite 500<br>Arlington, VA 22201, United States 1-703-524-8800;<br>www.ahrinet.org** | | |
| ~~ANSI/~~AHRI 210/240-~~2017~~ 2023 (2020) | Performance Rating of Unitary Air-Conditioning and Air-Source Heat Pump Equipment | Appendix B |
| ~~ANSI/~~AHRI 310/380-(2017) | Standard for Packaged Terminal Air-Conditioners and Heat Pumps (CSA-C744-14) | Appendix B |
| AHRI 340/360-~~2019~~ 2022 (I-P) | Performance Rating of Commercial and | Appendix B |

| | | |
|---|---|---|
| | Industrial Unitary Air-Conditioning and Heat Pump Equipment | |
| ANSI/AHRI 365~~-2009~~ (I-P/2009)<br>ANSI/AHRI 366~~-2009~~ (SI/2009) | Performance Rating of Commercial and Industrial Unitary Air-Conditioning Condensing Units | Appendix B |
| ANSI/AHRI 460-(2005) | Performance Rating of Remote Mechanical-Draft Air-Cooled Refrigerant Condensers | Appendix B |
| ANSI/AHRI 1230-~~2014 (with Addendum 1)~~ (I-P)~~-~~2021) | Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment | Appendix B |
| **Cooling Roof Rating Council (CRRC)**<br>**~~449 15th Street, Suite 400~~**<br>**~~Oakland, CA 94612 United States~~**<br>**2435 N. Lombard St., Portland, OR 97217**<br>**1-866-465-2523; www.coolroofs.org** | | |
| **United States Environmental Protection Agency (USEPA)**<br>**1200 Pennsylvania Avenue, NW Washington, DC 20460,**<br>**United States; www.epa.gov**<br>**ENERGY STAR ® www.energystar.gov**<br>**WaterSense www.epa.gov/watersense** | | |
| Version ~~1.0, November 3, 2011~~ 1.1 September 22, 2021 | WaterSense Specification for Weather-Based Irrigation Controllers | 6.3.1.2 |
| Version 6.1 January 1, 2023 ~~5.0, September, 15, 2015~~ | ENERGY STAR Program Requirements for ASHPs and Central Air Conditioners | 7.4.7 |

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*Note to reviewers:*

*The information here supersedes that in addendum ap for AHRI references and for WaterSense Specification for Weather-Based Irrigation Controllers.*

# Public Review Draft

## Proposed Addendum t to Standard 189.1-2020

# Standard for the Design of High-Performance Green Buildings

## Except Low-Rise Residential Buildings

Third Public Review Independent Substantive Changes (May 2023)
(Draft Shows Proposed Changes to Second Public Review Draft)

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).

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## Foreword

*Indoor agriculture energy usage is projected to grow significantly nationwide in this decade, driven in large part by state legalization of medical and recreational marijuana and growing demand for locally grown produce. In 2017, a total of 20 million square feet of building space was dedicated to growing crops indoors which can have energy use intensities that rival data centers. Energy use in these facilities is dominated by lighting systems which accounts for 25 to 70% of the facilities energy use and HVAC and dehumidification systems which accounts of the bulk of the remaining energy use. This addendum addresses the energy use of these facilities in three ways.*

*The proposal adds additional lighting efficacy and renewable energy requirements to these facilities. Lighting in non-stacked indoor operations operate on average 4,600 hours per year or 12 hours per day. ASHRAE 90.1-2022 establishes efficacy requirements for lighting in indoor horticulture at 1.9 PPE, and 1.7 PPE for greenhouses. This proposal increases the efficacy requirement to 2.1 PPE. 92% of LED products that meet the Design Light Consortium criteria already meet an efficacy of 2.1 PPE which is a 10% savings over a 1.9PPE standard and 20% savings over a 1.7PPE standard. This proposal will also require lighting from these facilities be provided by renewable energy to account for increased carbon emissions from indoor grow and greenhouse facilities compared with growing crops outdoors. This measure will increase construction costs but reduce operating costs.*

*This third independent substantive change (ISC) removes an exception in the 2nd ISC to the renewable energy requirement for greenhouses and grow facilities dedicated to food for human consumption. The 2nd ISC is reconstructed below the line to show the reader the other previously accepted changes. The additions of language in the 2nd ISC are highlighted.*

***Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) and additions in the second ISC are highlighted except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed substantive changes.]***

## Addendum to t 189.1-2020, 3rd PPR, ISC

*Remove the exception in Section 7.3.6.2 as follows:*

~~**Exception to 7.3.6.2:** *Greenhouses* and *indoor grow spaces* dedicated to food for human consumption.~~

*The following changes are below the line and not available for public comment. Revise definitions to Section 3 as follows:*

***greenhouse**:* a *space* with a skylight roof ratio of 50% or more above the growing area, used exclusively for horticultural production, cultivation or maintenance by utilizing a sunlit environment and is erected for a period of 180 days or more.

***horticultural lighting**:* electric lighting used for horticultural production, cultivation or maintenance with either cord-and-plug or hard-wired connections for electric power.

***indoor grow space**:* a *space*, other than a *greenhouse,* used exclusively for horticultural production, cultivation, or maintenance.

***photosynthetic photon efficacy (PPE)**:* photosynthetic photon flux between 400- 700nm emitted by a light source divided by its electrical input power, expressed in units of micromoles per second per watt, or micromoles per joule (µmol/J) as defined by ANSI/ASABE S640

*Revise as follows:*

**7.3.6 Energy Systems for Horticulture.**

**7.3.6.1 Horticultural Lighting.** *Luminaires* in *indoor grow spaces* and *greenhouses* used for *horticultural lighting* shall have a *photosynthetic photon efficacy (PPE)* of not less than 2.1 µmol/J.

**7.3.6.2 Additional Renewable Energy.** Additional renewable energy for *horticultural lighting* shall be provided and sized to provide the amount of adjusted renewable energy calculated in accordance with Section 7.4.1.2 and qualified in accordance with Section 7.4.1.3. The adjusted renewable energy shall be equal to or greater than the installed *horticultural lighting* wattage multiplied by 4,600 full load hours per year for *indoor grow spaces* and the installed *horticultural lighting* wattage multiplied by 2,100 full load hours per year for *greenhouses*.

**Exception to 7.3.6.2:** *Greenhouses* and *indoor grow spaces* dedicated to food for human consumption.

*Revise Normative Reference as follows:*

| | | |
|---|---|---|
| **American Society of Agricultural and Biological Engineers (ASABE)**<br>**2950 Niles Road**<br>**St. Joseph, MI 49085 USA**<br>**1-269-429-0300; www.asabe.org** | | |
| **ANSI/ASABE S640-2017** | **Quantities and Units of Electromagnetic Radiation for Plants (Photosynthetic Organisms)** | **3** |

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

## Public Review Draft

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

**First Public Review (April 2023)**
**(Draft Shows Proposed Changes to Current Standard)**

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## FOREWORD

Standard 90.1 has required a temperature deadband between heating and cooling set points since 1989. The deadband must be capable of being adjusted to at least 5°F. In 2016, a requirement was added to set the deadband to 5°F. But like any set point, the deadband is adjustable and is often set to a lower value and the standard does not have a lower limit on the deadband. Furthermore, many thermostats with displays and set point adjustment capability only display only the heating or cooling set point, requiring the user to select the one they want to see.

For systems with manual changeover between heating and cooling, the displayed value is that for the active mode, so there is no confusion. But for systems that automatically changeover between heating and cooling, users often do not know what set point they are adjusting. In some systems, the displayed set point is between the two set points; in others it is the cooling set point with the heating set point equal to the cooling set point less a deadband that is typically not user adjustable. Either way, when the user adjusts the set point, both heating and cooling move together, maintaining the currently programmed deadband. But if the programmed deadband is set to a low value, say 1°F, then any set point adjustment more than 1°F will cause the system to change modes though that may not be what the occupant intended. The classic example is a hotel room where the housekeeper often turns the set point down to 65°F, then the guest arrives and wants the room to be warmer. By changing the set point to, say 70°F, the system switches to heating because the internal deadband is almost always set to a low value. The more efficient operation would raise the cooling set point, but not the heating set point, and allow the space to naturally rise to 70°F without any heating.

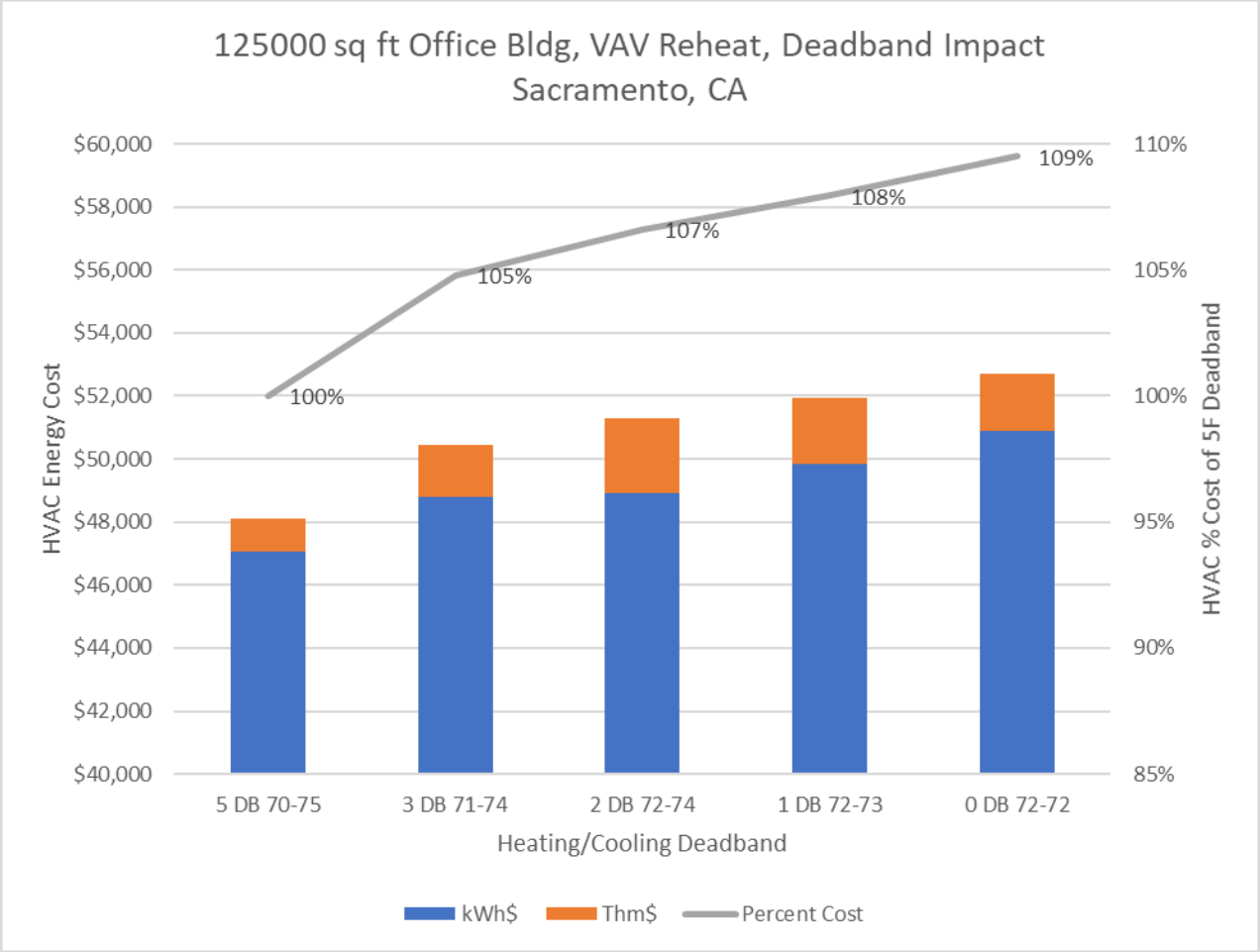
Another example is set point adjustment for demand response: when utilities (or local demand limiting logic) indicate a need to reduce demand, cooling set points are adjusted upwards while heating set points are adjusted downwards; this cannot happen if systems have the two set points tied together, and if they are, raising the cooling set point might push a zone into heating and inadvertently increase electricity demand for systems using electricity for heating.

To address these issues, this addendum:

1. Requires separate set points for heating and cooling, each individually adjusted without one being tied to the other.
2. Establishes a minimum of 1°F for the deadband between heating and cooling.
3. The exception for occupancies needing tighter control is now only an exception to the deadband configuration value, set to 1°F instead of 5°F. There is no reason for these occupancies to not have the capability of separate set points and wider deadband values. Since these occupancies generally use the same control systems as other occupancies, changing this exception as shown will have minimal or no impact on control system hardware and software.

4. Where set points are displayed and user adjustable, either both set points must be displayed or the active set point and its mode (heating or cooling) must be displayed.

Note that ASHRAE Guideline 36 Advanced Sequences of Control is already written assuming this capability. The energy cost impact of various dead bands was simulated for an office in Sacramento (Zone 3c):




The impact is similar in other applications and climates – the more extreme the climate, the greater the savings.

The Capability Exists in Most Thermostats and Control Systems

Most modern controllers already have dual set points since the deadband capability has been a requirement of Standard 90.1 since 1989. And many already have displays that meet the new requirements. Direct digital control systems generally have configurable displays that can be readily modified to meet the proposed requirements. So the primary first cost impact will be to modify the displays of non-DDC (firmware) thermostats, but these are low-cost thermostats to begin with and also the thermostats that this addendum is targeting.

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## Addendum c to 90.1-2022

*Modify the standard as follows for IP (and SI) Units:*

**6.4.3.1.2 Dead band**
Where used to control both heating and cooling, zone *thermostatic controls* shall:

1) have separate *set points* for heating and cooling, each individually adjustable,
2) be capable of and initially configured to provide a temperature range or *dead band* between the two *set points* of ~~at least~~ not less than 5°F (3°C) within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum, and
3) have a minimum *dead band* of not less than 1°F (0.5°C) when *set points* are adjusted.

**Exceptions to 6.4.3.1.2**
1. *Thermostats* that require manual changeover between heating and cooling modes.
2. Special occupancy or special applications where wide temperature ranges are not acceptable (such as retirement homes, process applications, museums, some areas of hospitals, pharmacies) shall be permitted to be configured to not less than 1°F (0.5°C) *dead band*. ~~and are approved by the authority having jurisdiction.~~

**6.4.3.1.3 Set point Adjustment and Display**
Where *thermostatic control set points* are capable of being adjusted by occupants or *HVAC system* operators, the adjustment shall be independent for the heating *set point* and the cooling *set point*; when one *set point* is changed, the other shall not change except as needed to maintain the minimum *dead band* required by Section 6.4.3.1.2. For *thermostatic controls* that display *set points*, both the heating and cooling *set points* shall be displayed simultaneously, or the *set point* of the currently active mode (heating or cooling) shall be displayed along with an indication of that mode.

**6.4.3.2 Set Point Overlap Restriction**
Where heating and cooling to a zone are controlled by separate zone *thermostatic controls* located within the zone, means (such as limit switches; mechanical stops; or, for *DDC systems*, software programming) shall be provided to prevent the heating *set point* from exceeding the cooling *set point*, minus ~~any applicable proportional~~ the *dead band* required by Section 6.4.3.1.2.

**BSR/ASHRAE/IES Addendum e**
**to ANSI/ASHRAE/IES Standard 90.2-2018**

**Public Review Draft**

# Proposed Addendum e to Standard 90.2-2018, High-Performance Energy Design of Residential Buildings

**Second Public Review (February 2023)**
**(Draft Shows Proposed Independent Substantive Changes to Previous Public Review Draft)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed 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).

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# FOREWORD

*This proposal expands and clarifies the requirements for lighting controls in common and public areas. The previous language referred users of the standard to 90.1 for common area lighting control requirements. This new language provides the lighting control requirements embedded as part of the standard. The new lighting control requirements are simpler yet more stringent than 90.1-2022, maintaining the energy-efficiency leadership status for standard 90.2. Lastly, projects can still follow the 90.1-2022 mandatory lighting control requirements as an alternative per the last exception in the proposal.*

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

## Addendum e to 90.2-2018

*Modify the standard as follows (IP and SI Units)*

**7.5.4 Common and Public Areas**

**7.5.4.1 Public and Common Areas of *Residential Buildings*.** In public and common *spaces* of *residential buildings*, the lighting shall meet the following requirements:

**7.5.4.1.1 Lighting Controls.**

a. **Local control**. Each *space* shall have a manual control device that allows the occupant to reduce lighting power by a minimum of 50% and to turn the lighting off.

b. **Shutoff control**. All lighting shall be automatically controlled to turn off when the *space* is either unoccupied or scheduled to be unoccupied.

**Exception to 7.5.4.1.1 (b):** Lighting load not exceeding 0.02 W/ft$^2$ (0.22 W/m$^2$) of the *space* shall be permitted to operate at all times.

c. **Occupancy sensor control**. Each *space* less than 300 ft$^2$ (28 m$^2$) shall be controlled by an *occupancy sensor*.

d. **Automatic partial-off control**. Stairwells and corridors shall be controlled by occupant sensors that reduce the lighting power by a minimum of 50% when no activity is detected for not longer than 15 minutes.

e. **Daylight responsive control**. Luminaires that are completely or partially within a horizontal distance of 10 ft (3 m) from the edge of a window or skylight shall be controlled with continuous daylight dimming controls that have the capability to adjust lighting levels down to 10% or less of full output and the capability to turn the lighting off.

**Exception to 7.5.4.1.1 (e)**:

i. *Space*s where the combined maximum rated lighting power completely or partially within in 10 ft (3 m) from windows or skylights is less than 75 W.

ii. *Space*s where the top of any existing adjacent structure or natural object is at least twice as high above the windows as its horizontal distance away from the windows.

iii. *Space*s where the total glazing area is less than 20 $ft^2$ (1.9 $m^2$).

iv. *Luminaires* controlled by astronomical time switches that are programmed to turn off during *daylight hours*.

f. **Parking garage control**. Lighting in parking garages shall be controlled by occupant sensors that reduce the power by a minimum of 50% when no activity is detected for not longer than 15 minutes. No device shall control more than 3600 $ft^2$ (334 $m^2$). Luminaires ~~with~~within 20 ft (6.1 m) of a perimeter opening shall be controlled by daylight responsive controls that have the capability to adjust lighting levels down to 10% or less of full output and the capability to turn the lighting off.

**Exception to 7.5.4.1.1(f)**: Parking garages serving an individual dwelling unit.

g. **Parking lot and other exterior lighting control**.

i. Luminaires shall be automatically turned off during *daylight hours* or when daylight is present.

ii. Luminaires serving outdoor parking areas which are mounted 25 ft (7.6 m) or less above grade shall be controlled to reduce the power by at least ~~75~~50% when no activity is detected for not longer than 15 minutes. No more than 1500 W of lighting power shall be controlled together.

**Exception to 7.5.4.1.1**. *Space*s complying with the control requirements of ASHRAE/IES Standard 90.1, Table 9.5.2.1.

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

## Public Review Draft

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

**First Public Review (April 2023)**
**(Draft Shows Proposed Changes to Current Standard)**

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# FOREWORD

*This addendum updates Table G3.1.1-1 to clarify how baseline fenestration area is determined for retail buildings.*

*This addendum impacts an optional performance path in the standard designed to provide increased flexibility and therefore was not subjected to cost effectiveness analysis.*

*Modify Appendix G as follows:*

### Table G3.1.1-1 Baseline Building Vertical Fenestration Area

| Building Area Types | Baseline Building Vertical Fenestration Area as a Percentage of Gross Above-Grade-Wall Area |
|---|---|
| Retail (grocery store) | 7% |
| Healthcare (outpatient) | 21% |
| Hospital | 27% |
| Hotel/motel (≤75 rooms) | 24% |
| Hotel/motel (>75 rooms) | 34% |
| Office (≤5000 $ft^2$) | 19% |
| Office (5000 $ft^2$ to 50,000 $ft^2$) | 31% |
| Office (>50,000 $ft^2$) | 40% |
| Restaurant (quick service) | 34% |
| Restaurant (full service) | 24% |
| Retail (stand alone and all other retail) | 11% |
| Retail (strip mall) | 20% |
| School (primary) | 22% |
| School (secondary and university) | 22% |
| Warehouse (nonrefrigerated) | 6% |

**BSR/ASHRAE/IES Addendum h**
**to ANSI/ASHRAE/IES Standard 90.2-2018**

**Public Review Draft**

# Proposed Addendum h to Standard 90.2-2018, Energy-Efficient Design of Low-Rise Residential Buildings

**First Public Review (Date)**
**(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).

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# FOREWORD

*This proposal updates the air leakage maximum values and testing protocols to better align 90.2 with other relevant codes and standards, including ASHRAE 62.2 and the IECC (2024 first public draft). More specifically this addendum makes the following changes to the standard:*
*1) Reduces the maximum air leakage (increases stringency) to be consistent with the updated requirements in ASHRAE 62.2-2022.*
*2) Updates the air leakage testing protocol to allow for testing as a whole building or as multiple dwelling units in multi-family buildings. The updates are designed to provide better coordination with the IECC.*

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

## Addendum h to 90.2-2018

**Add the following definitions to Chapter 2:**

***attached dwelling unit.*** A *dwelling unit* sharing demising walls, floors, ceilings or common corridors with another *dwelling unit* or occupiable space.

***dwelling unit enclosure area.*** The sum of the area of ceiling, floors, and walls separating a *dwelling unit's conditioned space* from the exterior or from adjacent conditioned or unconditioned spaces. Wall height shall be measured from the finished floor of the *dwelling unit* to the underside of the floor above.

**Revise as follows:**

**7.1.2 Building Thermal Envelope Air leakage.** The *building thermal envelope* shall have a tested air leakage rate not ~~exceeding~~ greater than either ~~5~~ 3.6 $ACH_{50}$, or 0.20 cfm/square foot of *dwelling unit enclosure area (1.0 L/s x m2)* at a pressure differential of 0.2 inch water gauge (50 Pa).

**8.2.4 Building Thermal Envelope Airtightness Verification**

8.2.4.1 Building airtightness testing to confirm that built airtightness is in accordance with the proposed design shall be performed on all residential dwellings in accordance with Normative Appendix C.

8.2.4.2 Testing shall be performed by entities approved by the AHJ.

8.2.4.3 Report of testing shall be provided to the AHJ.

8.2.4.4 Testing shall be permitted to be conducted at any point after the building has been enclosed.

**NORMATIVE APPENDIX C**

**AIR LEAKAGE TESTING**

**C1. AIR LEAKAGE TESTING**

C1.1 Testing shall be performed by a fan pressurization technique in accordance with ASTM E779, ASTM E1827, ASTM E3158 or ANSI/RESNET/ICC 380, Section 3.

C1.2 Testing shall be permitted to be conducted at any point after the building has been enclosed.

C1.3 ~~**Single-Zone**~~ **Single Dwelling Unit Buildings.** ~~Single-zone buildings~~ Buildings comprised of a single *dwelling unit* shall be tested with a single fan pressurization test and represent the leakage rate for the entire structure. Where the tested leakage rate exceeds 115% of the design target, diagnostics shall be performed to identify corrective air-leakage sealing measures necessary to achieve compliance. These corrective measures shall be applied and the building retested for compliance.

**C1.4 ~~Multizone~~ Attached Dwelling Unit Buildings.** ~~Multizone buildings~~ Buildings comprised of two or more attached *dwelling units* or common areas shall be permitted to be tested either as ~~an individual zone or by inducing equal pressures in adjacent zones.~~ a whole building or as *dwelling units* in accordance with C1.4.1. ~~Multizone buildings shall have a random sample of a minimum 20% of all zones tested, including a minimum of two zones, and at least one of the zones shall have at least three exterior sides. The average leakage rate of all zones tested shall determine compliance, provided that none of the zones have an ACH50 greater than 115% of the design target ACH50. Where the average leakage rate of all tested zones exceeds the design target ACH50, or where any one of the tested zones exceeds 115% of the design target ACH50, diagnostics shall be performed on the tested noncompliant zones to identify corrective air-leakage sealing measures necessary to achieve compliance. These corrective measures shall be applied to all found compliant. A new random sample of previously nontested zones shall be selected for testing to verify compliance.~~

**C1.4.1 Dwelling Unit Testing**

Where multiple *dwelling units* or other spaces are contained within one *building thermal envelope*, each unit shall be considered an individual testing unit, and the building air leakage shall be the weighted average of all testing tested unit results, weighted by each testing unit's enclosure area as follows:

1. Where buildings have fewer less than eight total dwelling or sleeping testing units, each testing unit shall be tested.

2. Where buildings with have eight or more dwelling or sleeping testing units, the greater of seven units or 20 percent of the testing units in the building shall be tested, including a top floor unit, a middle floor unit, a ground floor unit and a unit with the largest testing unit enclosure area. For each tested unit that exceeds 115% of the target air leakage rate, an additional three units shall be tested, including a mixture of testing unit types and locations.

3. Common areas with not less than one exterior wall in the building thermal envelope shall be tested and included in the weighted average.

Exception: Corridors, stairwells, and enclosed spaces having a conditioned floor area not greater than 1,500 ft (139 $m^2$).

Where the average leakage rate of all tested units exceeds the 115% of the design target, or where any one of the tested units exceeds 115% of the design target, diagnostics shall be performed on the tested noncompliant units to identify corrective air-leakage sealing measures necessary to achieve compliance. These corrective measures shall be applied. A new random sample of previously nontested units shall be tested to verify compliance.

C1.5 Test Protocol

C1.5.1 Air leakage tests shall be conducted under the following conditions:

a. *Ventilation* fans and exhaust fans are turned OFF.

b. Combustion equipment using conditioned air shall be disabled or put in pilot position.

c. Prior to testing, all doors, fireplaces, windows and operable windows shall bed closed but not sealed.

d. Prior to testing, all intentional openings (dryer ducts, bath fans, fresh air *ventilation* systems, plumbing traps, fill with water) shall be sealed.

e. Prior to testing, all interior doors shall be opened.

f. Heating and cooling supply and return ducts shall not be sealed.

C1.5.2 Air leakage results shall be reported as $ACH_{50}$ or as cfm/$ft^2$ (1.0 L/s x $m^2$) of *dwelling unit enclosure area* at pressure differential of 0.2 inch water gauge (50 Pa). The conditioned volume (CV) of the building or building portion shall be calculated by taking the conditioned floor area per ANSI Z765 or BOMA Z65.4 and multiplying by the average ceiling height. If the ceiling is not finished, the height of the lower portion of the floor joist/rafter shall be used to determine average ceiling height. $ACH_{50}$ shall be calculated using the following equation:

$$ACH_{50} = 60 \times cfm_{50}/CV\ (ft^3)$$

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

NSF/ANSI/CAN Standard

# Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and other Recreational Water Facilities

Evaluation criteria for materials, components, products, equipment, and systems for use at recreational water facilities

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## 3 Definitions

- 
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**3.XX best efficiency point (BEP):** the pump hydraulic power operating point (consisting of both flow and head conditions) that results in the maximum hydraulic efficiency.

**3.XX preferred operating region (POR):** a manufacturer-defined range of flows on either side of a pump's BEP within which the hydraulic efficiency and the operational reliability of a pump is not substantially degraded as determined by the manufacturer.

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## 7 Centrifugal pumps

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### 7.6 Pump performance curve

**7.6.1** For each pump model or model series, the manufacturer shall provide a pump performance curve that plots the pump's total dynamic head versus the discharge flow rate. The manufacturer shall also have a curve available that plots the net positive suction head (NPSH) or total dynamic suction lift (TDSL), brake horsepower, and pump efficiency in relation to the performance curve. Pumps with a rating of 5 HP (3.7 kW) or less are not required to have a NPSH curve.

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For pumps utilizing motors rated for multiple voltages, if the pump performance curve varies between rated voltages, such as may occur between 230 V and 208 V, the manufacturer shall provide a pump performance curve for each rated motor voltage.

**7.6.2** The ~~actual pump curve~~ tested pump performance, as determined in accordance with Section N-3.1, shall be within a range of -3% to +5% of the total dynamic head or -5% to +5% of the flow, whichever is greater, ~~indicated by the~~ when compared to the provided pump performance curve. ~~Data taken above 90% full flow shall not be judged to the acceptance criteria.~~

Pumps with more than one operating speed shall be tested as documented below:

— fixed multispeed pump or motor assemblies, test at each speed; or
— variable speed pump or motor assemblies, test at 100%, 50%, and the lowest speed.

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•
•

**7.7 Operating and installation instructions**

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**7.7.4** For pumps using the alternate performance curve test method using POR, the POR shall be included in the pump manual or through another method readily available to users (e.g., included on published curves, included in online manuals, data books)

•
•
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## Normative Annex 3
(formerly Annex C)

**Test methods for the evaluation of centrifugal pumps**

NOTE — The test conditions specified in this Annex are not intended to represent recommended field use conditions.

## N-3.1 Performance curve verification

### N-3.1.1 Purpose

The purpose of this test is to verify the accuracy of the manufacturer's pump performance curve, as required in Section 7.6.

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### N-3.1.4 Performance curve verification method

a) Pump shall be installed and operated according to the manufacturer's instructions. The manufacturer shall state the inlet conditions under which the published performance curves were

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established, and barometric pressure.

b) Air leaks shall be avoided in the suction line. Piping shall be clean and free of scale, burrs, etc.

c) The suction pipe end shall be submerged a distance of at least ten pipe diameters. Liquid around the suction pipe shall be relatively quiet, without entrained air, swirls, etc., from recirculated discharge.

d) The suction and discharge gauge / manometer lines shall be purged so that the suction gauge line is free of water and the discharge gauge line is free of air.
e) The test shall be conducted with normal rated voltage (± 5%) at motor terminals.

f) The connection pipe shall be the same size as the pump suction and discharge tappings. A minimum of ten pipe diameters shall precede the gauges; a minimum of five pipe diameters shall follow the gauges.

g) Discharge pressures shall be measured by a gauge or manometer to obtain results accurate to ± 0.25 psi (± 3 kPa). The vacuum shall be measured by a manometer or gauge to obtain results accurate to ± 0.5 in (± 12 mm) of mercury.

h) Readings shall be taken at the center line of the pump impeller or corrected to the center line.

i) The total dynamic head (TDH) shall be determined at a minimum of ten points along the complete range of flow rates for the rated speed of the pump.

— A minimum of 8 test points shall be made below 90% flow evaluated according to N-3.1.5. Test points above 90% flow are not evaluated.

— Alternate Method: For pumps with a manufacturer's identified preferred operating region (POR), a minimum of 5 test points shall be made within (POR) and evaluated according to N-3.1.5. The POR shall be provided to customers to utilize this alternate test method.

The TDH shall be determined from measurements of the following:

—lift from the centerline of the pump impeller to the discharge pressure tap;
—flow rate;
—vacuum (negative gauge pressure) in the suction line;
—pressure in the discharge line; and
—length and diameter of inlet and discharge pipes.

j) Capacity measurement – Capacity shall be measured using a quantity meter (weight or volume) or a flow rate meter. The measurement device shall have an accuracy of ± 1.5% of the measured values.

k) Power measurement – Power input shall be measured using a device having an accuracy of ± 1.5% of the measured values.

### N-3.1.5 Acceptance criteria

The pump performance shall meet the criteria specified in Section N-3.1.5.1 or N-3.1.5.2.

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When the alternative POR method is elected and where the speed of the manufacturer-provided performance curve and the speed of the testing differs, speed correction is allowed using the following equations. Variation in tested speed cannot exceed ±20% of the published speed.

$$Flow_{corrected} = Flow_{tested} \frac{rpm_{published}}{rpm_{tested}}$$

$$Head_{corrected} = Head_{tested} \left(\frac{rpm_{published}}{rpm_{tested}}\right)^2$$

**N-3.1.5.1** ~~Over the range of flow rates up to 90% of the maximum flow, the total dynamic head at each point determined by the test~~ The total dynamic head at each test point within the evaluated range of flow shall be:

—no less than 97% of the total dynamic head indicated by the manufacturer's provided performance curve; and

—no more than 105% of the total dynamic head indicated by the manufacturer's provided performance curve.

**N-3.1.5.2** ~~Over the range of total dynamic head up to 90% of the maximum flow, the flow rate at each point determined by the test~~ The flow rate at each test point, as defined in N-3.1.4 within the evaluated range of flow shall be:

- no less than 95% of the flow rate indicated by the manufacturer's provided performance curve; and
- no more than 105% of the flow rate indicated by the manufacturer's provided performance curve.

**BSR/UL 498, Standard for Safety for Attachment Plugs and Receptacles**

**1. An exception for Clause 12.6.1 regarding Hospital Grade plugs and connectors**

## PROPOSAL

12.6.1 In addition to the requirements contained in this standard, a device employing a spring action clamp terminal shall also comply with the applicable requirements, as specified in the Standard for Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors, UL 486E. All tests shall be investigated with minimum and maximum conductor AWG size and for each type of conductor (solid and stranded), for each device construction.

*Exception: The spring-action clamp terminals of a Hospital Grade attachment plug or cord connector complying with Strain Relief Tests in Supplement SC - Hospital Grade Devices, shall not be subjected to the mechanical sequence (Secureness and Pullout) of the Standard for Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors, UL 486E.*

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**UL 1897, Standard for Safety for Uplift Tests for Roof Covering Systems**

**1. Change to Section 5, Test Assembly – 5 × 9 ft**

## PROPOSAL

5.1 The 5 × 9 Wind Uplift Test Procedure shall be permitted to be used to evaluate various types of roof assemblies in accordance with (a) – (f). The Simulated Wind Uplift Resistance Rating obtained using this procedure shall be limited to a maximum of 90 lbs/ft$^2$ (4.3 kPa):

a) Mechanically-attached and spot welded membranes are to be of sufficient size to incorporate a minimum of three batten or fastener rows The batten or fastener row spacing shall not be in excess of 4-ft (1.2-m) on center. The batten or fastener rows shall be oriented parallel to the 5-ft (1.5-m) width of the chamber. The batten or fastener rows shall incorporate a minimum of three fasteners per row and shall not be in excess of 2-ft (0.6-m) on center;

b) Assemblies with adhered membranes to fastened board layers (spot or grid affixed) shall be spaced a maximum 2 × 4-ft (0.64 ×1.2-m) on center with the 4-ft (1.2-m) dimension oriented along the length of the chamber. At least one full size board shall be incorporated into the assembly. The board shall be centered in the specimen and not in direct contact with the chamber seal along the perimeter of the assembly;

c) Assemblies shall not be permitted to incorporate an air barrier;

e) Standing/lap seam metal roof systems shall not be permitted; and

f) Air permeable roof systems, e.g. those require polyethylene film to seal the roof covering to attain test pressure, shall not be permitted.

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**BSR/UL 1994, Standard for Safety for Luminous Egress Path Marking Systems**

**1. Markings locations**

## PROPOSAL

41.1.2 A product marking that is required to be permanent shall be molded, die-stamped, paint-stenciled, stamped, or etched metal that is permanently secured, or on pressure-sensitive labels that comply with the applicable provisions of the Standard for Marking and Labeling Systems, UL 969.

41.1.3 Each system component shall be marked as specified in (a) – (d). The marking shall be visible during installation. For system components designed for adhesive securement and with a removable backing, a marking on the removeable backing or on the smallest unit package is considered visible during installation.

a) The manufacturer's or private labeler's name or identifying symbol.

b) A distinctive type, model, or material designation.

c) The electrical rating (for externally powered systems), in volts, amps, and Hz.

d) The phrase "Egress Path Marker" in minimum 1/4-inch (6.3-mm) high letters.

**2. Use of website and QR code markings for instructions**

## PROPOSAL

44.3 Instructions are to accompany each unit and accessory, either individually or with each bulk shipment to the installer. If the instructions for the unit do not cover a field installed accessory, instructions are to be furnished with the accessory. The instructions are permitted to be separately provided on a publicly accessible web site if the equipment is permanently marked with a QR code or "See (specific website address inserted here) for installation, operation, and maintenance instructions." As an alternative to a product marking, the QR code or website address can be provided on a stuffer sheet packaged with the equipment.

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**BSR/UL 2388, Standard for Safety for Flexible Lighting Products**

**1. Addition of UL 969A, the Standard for Marking and Labeling Systems – Flag Labels, Flag Tags, Wrap-Around Labels and Related Products, as an Option into UL 2388**

## PROPOSAL

40.2.5 In addition to the conditioning described in 40.2.2 – 40.2.4, if the tag is intended to be applied to the cord of a product intended for outdoor use, ~~twelve~~ nine additional cord tags are each to be applied to a cord and conditioned as described in 40.2.6 – 40.2.9, as indicated, before being tested as described in 40.3.1 and 40.3.2.

~~40.2.7 Each of three tags is to be tested after 24 hours of exposure conditioning at 23.0 ±2.0°C (73.4 ±3.6°F) and 50 ±5 percent relative humidity, followed by 10 days of exposure in an air-circulating oven at a temperature of 60°C (140°F). Testing in accordance with 40.3.1 and 40.3.2 shall be performed 30 minutes after the conditioning.~~

40.3.1 The tag is to be tested with each cord size to which it is intended to be applied. The cord, with the attachment plug or current tap pointing up, is to be held tautly in a vertical plane. A force of 5 lbs (22.2 N) is to be applied for 1 minute to the uppermost corner of the tag farthest from the cord, within 1/4 inch (6.4 mm) of the vertical edge of the tag. The force is to be applied vertically downward in a direction parallel to the major axis of the cord. In determining compliance with 40.1.1(~~d~~c), manipulation, such as straightening of the tag by hand, is permissible.

47.1 The markings specified in Sections 47 and 48 shall be located on a tag attached to the product or within 6 inches (152.4 mm) of the face of the attachment plug or supply connector. The tag ~~shall comply with Section 40, Test for Permanence of Cord Tag, and~~ shall have the marking in black on a white background and shall comply with either:

a) The Standard for Marking and Labeling Systems – Flag Labels, Flag Tags, Wrap-Around Labels and Related Products, UL 969A, and before the temperature, type of cord, and environment, such as indoor or outdoor, for which it is intended;
b) The Standard for Marking and Labeling Systems, UL 969; or
c) The Test for Permanence of Cord Tag, Section 40.

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**BSR/UL 62841-3-10 Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 3-10: Particular Requirements for Transportable Cut-Off Machines**

**1. Proposed adoption of amendment – IEC 62841-3-10 Amendment 1 (2022-05)**

## PROPOSAL

**2 Normative references**

This clause of Part 1 is applicable except as follows:

*Addition:*

ISO 603-15,
*Bonded abrasive products - Dimensions - Part 15: Grinding wheels for cuttingoff on stationary or mobile cutting-off machines*

~~ISO 630 (all parts),~~
~~*Structural steels*~~

ISO 630-2:2011[1], Structural steels − Part 2: Technical delivery conditions for structural steels for general purposes

[1] This document has been replaced by a new edition, but the listed edition applies.

*Addition:*

IEC 62841-1:2014, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements*

**18 Abnormal operation**

This clause of Part 1 is applicable, except as follows:

*18.8 Replacement of Table 4 ~~by the following:~~*

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**Table 4 - Required performance levels**

| Type and purpose of SCF | Minimum performance level (PL) |
|---|---|
| **Power switch** – prevent unwanted switch-on | Shall be evaluated using the fault conditions of 18.6.1 without the loss of this **SCF** |
| **Power switch** – provide desired switch-off | ~~*Shall be evaluated using the fault conditions of 18.6.1 without the loss of this* **SCF**~~ c |
| Any electronic control to pass the test of 18.3 | c |
| Prevent exceeding thermal limits as in 18.4 and 18.5.3 | a |
| Over-speed prevention to prevent output speed above 120 % of rated (no-load) speed | c |
| Provide desired direction of rotation | b |
| ~~Lock-off~~ Function to have two separate and dissimilar actions before the motor is switched on as required by 21.18.2.3 | b |
| ~~Prevent exceeding thermal limits as in Clause~~ | ~~a~~ |
| ~~Prevent self-resetting as required in 23.3~~ | ~~a~~ |

**19.105**.1 **General**

Flanges shall be flat and have no sharp edges. One of the flanges shall be keyed to the output spindle.

Flanges shall meet the dimensions of 19.105.2.

For tools that are intended to be used with **diamond wheels**, an additional set of flanges may be provided that meet the dimensional requirements in 19.105.3.

The **inner flange** and the **outer flange** shall have the same diameter $D_f$ or the overlap of the **inner flange** and **outer flange** bearing surfaces shall be at least ~~equal to dimension *C*, with~~ 1,5 mm.

~~C ≥ 1,5 mm.~~

*Compliance is checked by inspection and by measurement.*

19.105.3 Flanges for **diamond wheels** shall have the following dimensions illustrated in Figure 106, where **D** is the maximum outside diameter of the wheel, *G* and *W* are the dimensions of the recess, C is the width of the clamping surface and $D_f$ is the outside diameter of the flange clamping surface.

$$D_f \geq 0{,}15\ \mathbf{D}$$

Dimensions *G* and *W* shall be:

$$W \geq 0,\ G \geq 0$$

*Compliance is checked by measurement.*

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*20.102.1 The tool is assembled as for **normal use**.*

*A bonded wheel with the maximum thickness recommended in 8.14.2 a) 101) and with a diameter **D** is mounted to the spindle in accordance with the instructions.*

*The **cut-off machine** is operated at **rated voltage** and at no-load for a minimum of 5 min. ~~The speed of the wheel is measured and recorded.~~*

*The tool is then subjected to the test specified in 20.102.2.*

**21.35**

This subclause of Part 1 is not applicable.

**23 Components**

This clause of Part 1 is applicable, except as follows:

*23.3 ~~Addition:~~*

~~**Cut-off machines** are regarded as tools having a risk associated with inadvertent starting.~~

This subclause of Part 1 is not applicable.

**Table I.101**
**Noise test conditions for cut-off machines**

| | |
|---|---|
| **Workpiece** | Cutting a horizontal square mild steel bar ~~according~~, similar to type S235 in accordance with ISO 630-2:2011, with the dimensions 40 mm x 40 mm and a minimum length of 500 mm prior to the entire series of tests |
| **Tool bit** | New **bonded reinforced wheel** as recommended by the manufacturer, to be used for the entire series of tests |
| **Feed force** | Just sufficient to achieve steady cutting |
| **Depth of cut** | Through the 40 mm square material |
| **Test cycle** | Cutting off approximately 10 mm wide pieces from the steel bar. Five cuts quickly following each other constitutes one complete test cycle. |
| | The measurement is conducted (averaged) over the complete test cycle. |

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