

CONTENTS

American National Standards

Project Initiation Notification System (PINS)	2
Call for Comment on Standards Proposals	6
Final Actions - (Approved ANS)	22
Call for Members (ANS Consensus Bodies)	25
Accreditation Announcements (Standards Developers)	28
American National Standards (ANS) Process	29
ANS Under Continuous Maintenance	30
ANSI-Accredited Standards Developer Contacts	31

International Standards

ISO and IEC Draft Standards	33
ISO and IEC Newly Published Standards	40
International Organization for Standardization (ISO)	43

Information Concerning

Registration of Organization Names in the United States	44
Proposed Foreign Government Regulations	45

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.

ADA (Organization) (American Dental Association)

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

New Standard

BSR/ADA Standard No. 1111-202x, Oral Dataset Interoperability Network (ODIN) (new standard)

Stakeholders: Vendors, Dentists

Project Need: There is a need to standardize ADA-HL7 data to provide interoperability with various EDR systems and other dental applications, as well as with non-EDR dental practice software solutions. The intent of this new standard is to provide dental practices and vendors appropriate access to data that allows for innovation, leading to improved patient care.

Interest Categories: Consumer, General Interest, Producer

Scope: This standard will provide guidance for the identification and implementation of secure synchronization, access, user authentication, transfer, and storage of dental data within an interoperable network.

ASPE (American Society of Plumbing Engineers)

Gretchen Pienta; gpienta@aspe.org | 6400 Shafer Court, Suite 350 | Rosemont, IL 60018 www.aspe.org

New Standard

BSR/ASPE 99-202x, Implementation and Management of the Thermal Disinfection Process in Domestic Hot Water Systems (new standard)

Stakeholders: Mechanical/electrical/plumbing engineers, healthcare facility owners and management and operations personnel, plumbing product manufacturers

Project Need: Performing thermal disinfection in a domestic hot water system poses challenges on many levels, especially in an occupied healthcare facility. Patient and staff safety, implementation cost, management cost, responsiveness, optimized utilization of resources, and proactive vs. reactive thermal disinfection are examples of the many challenges facing the healthcare and engineering communities today, and this standard would help alleviate such concerns.

Interest Categories: Engineer/Designer, Producer, User, General Interest

Scope: This proposed standard will provide guidelines to the healthcare and mechanical/electrical/plumbing engineering communities on approaches to optimally implement and manage the thermal disinfection process. Thermal disinfection is one of the primary Legionella mitigation methods used in healthcare today, and several plumbing manufacturers have developed products to facilitate implementing a thermal disinfection process, including balancing valves, master and point-of-use mixing valves, water heaters, fixtures, etc. This standard will provide direction on how to effectively implement and manage the thermal disinfection process utilizing these components.

NEMA (ASC C119) (National Electrical Manufacturers Association)

Paul Orr; Pau_orr@nema.org | 1300 North 17th Street, Suite 900 | Rosslyn, VA 22209 www.nema.org

New Standard

BSR C119.8-202x, Electric Connectors - Overhead Medium Voltage Covered Conductors (new standard)

Stakeholders: Connector manufacturers, electric utilities, third party testing

Project Need: With wildfires an ever-growing threat, particularly in the western U.S., utilities are looking to insulated (covered) cables as a prevention and mitigation tool. Connectors for this application are known as Insulated Piercing Connectors (IPCs). While ANSI C119.5 has IPCs in scope, C119.8 will expand to higher ratings and applications.

Interest Categories: Users, Producers, and General Interest

Scope: This Standard covers piercing and non-piercing connectors used for making electrical connections between aluminum-to-aluminum, aluminum-to-copper, or copper-to-copper covered conductors, rated 48 kV or less, and operated not greater than 90 °C, on overhead distribution lines by electric utilities. This standard establishes the electrical and mechanical test requirements for connectors with a separate cover, as well as connectors with integrated covering.

ULSE (UL Standards & Engagement)

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

New Standard

BSR/UL 62841-3-5-202x, Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-5: Particular requirements for transportable band saws (new standard)

Stakeholders: Consumers and manufacturers of electric motor operated hand-held tools, transportable tools and lawn and garden machinery, specifically related to transportable band saws.

Project Need: To obtain standard recognition for a new Standard covering requirements for transportable band saws with the adoption of IEC 62841-3-5:2022. The Standard is intended to harmonize terminology, design & construction specifications, and test methods used for verification of safety requirements related specifically to transportable band saws. The adoption of this Standard is important to continue to provide harmonized international-based requirements for electric motor-operated hand-held tools, transportable tools and lawn and gardening machinery.

Interest Categories: AHJ, Commercial/Industrial Users, Consumers, General, Government, International Delegate, Producers, Supply Chain, and Testing & Standards.

Scope: This International Standard deals with the safety of Electric Motor-Operated Hand-Held, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-5 Particular requirements for transportable band saws.

ULSE (UL Standards & Engagement)

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

New Standard

BSR/UL 62841-4-5-202x, Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 4-5: Particular Requirements for Grass Shears (new standard)

Stakeholders: Consumers and manufacturers of electric motor operated hand-held tools, transportable tools and lawn and garden machinery, specifically related to grass shears.

Project Need: To obtain standard recognition for a new Standard covering requirements for grass shears with the adoption of IEC 62841-4-5:2021. The Standard is intended to harmonize terminology, design & construction specifications, and test methods used for verification of safety requirements related specifically to grass shears with a maximum cutting width of 200 mm designed primarily for cutting grass. The adoption of this Standard is important to continue to provide harmonized international based requirements for electric motor-operated hand-held, transportable tools and lawn and garden machinery.

Interest Categories: AHJ, Commercial/Industrial Users, Consumers, General, Government, International Delegate, Producers, Supply Chain, and Testing & Standards

Scope: This International Standard deals with the safety of electric motor-operated hand-held tools, transportable tools and lawn and garden machinery and applies requirements particular to grass shears with a maximum cutting width of 200 mm designed primarily for cutting grass.

ULSE (UL Standards & Engagement)

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

New Standard

BSR/UL 62841-4-6-202x, Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums (new standard)

Stakeholders: Consumers and manufacturers of electric motor operated hand-held tools, transportable tools and lawn and garden machinery, specifically related to garden blowers, garden vacuums and garden blower/vacuums

Project Need: To obtain standard recognition for a new Standard covering requirements for garden blowers, garden vacuums and garden blower/vacuums with the adoption of IEC 62841-4-6. The Standard is intended to harmonize terminology, design & construction specifications, and test methods used for verification of safety requirements related specifically to garden blowers, garden vacuums and garden blower/vacuums. The adoption of this Standard is important to continue to provide harmonized international based requirements for electric motor-operated hand-held, transportable tools and lawn and garden machinery.

Interest Categories: AHJ, Commercial/Industrial Users, Consumers, General, Government, International Delegate, Producers, Supply Chain, and Testing & Standards

Scope: This International Standard deals with the safety of Electric Motor-Operated Hand-Held, Transportable Tools and Lawn and Garden Machinery - Safety - Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums

ULSE (UL Standards & Engagement)

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

New Standard

BSR/UL 62841-4-7-202x, Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 4-7: Particular requirements for pedestrian controlled walk-behind lawn scarifiers and aerators (new standard)

Stakeholders: Consumers and manufacturers of electric-motor-operated hand-held tools, transportable tools and lawn and garden machinery, specifically related to pedestrian controlled walk-behind lawn scarifiers and aerator

Project Need: To obtain standard recognition for a new Standard covering requirements for pedestrian-controlled walk-behind lawn scarifiers and aerators with the adoption of IEC 62841-4-7. The Standard is intended to harmonize terminology, design & construction specifications, and test methods used for verification of safety requirements related specifically to pedestrian controlled walk-behind lawn scarifiers and aerators. The adoption of this Standard is important to continue to provide harmonized international based requirements for electric motor-operated hand-held tools, transportable tools and lawn and garden machinery.

Interest Categories: AHJ, Commercial/Industrial Users, Consumers, General, Government, International Delegate, Producers, Supply Chain, and Testing & Standards.

Scope: This International Standard deals with the safety of Electric Motor-Operated Hand-Held, Transportable Tools and Lawn and Garden Machinery - Safety - Part 4-7: Particular requirements for pedestrian controlled walk-behind lawn scarifiers and aerators

Call for Comment on Standards Proposals

American National Standards

This section solicits public comments on proposed draft new American National Standards, including the national adoption of ISO and IEC standards as American National Standards, and on proposals to revise, reaffirm or withdraw approval of existing American National Standards. A draft standard is listed in this section under the ANSI-accredited standards developer (ASD) that sponsors it and from whom a copy may be obtained. Comments in connection with a draft American National Standard must be submitted in writing to the ASD no later than the last day of the comment period specified herein. Such comments shall be specific to the section (s) of the standard under review and include sufficient detail so as to enable the reader to understand the commenter's position, concerns and suggested alternative language, if appropriate. Please note that the ANSI Executive Standards Council (ExSC) has determined that an ASD has the right to require that interested parties submit public review comments electronically, in accordance with the developer's procedures.

Ordering Instructions for "Call-for-Comment" Listings

1. Order from the organization indicated for the specific proposal.
2. Use the full identification in your order, including the BSR prefix; for example, Electric Fuses BSR/SAE J554.
3. Include remittance with all orders.
4. BSR proposals will not be available after the deadline of call for comment.

Comments should be addressed to the organization indicated, with a copy to the Board of Standards Review, American National Standards Institute, 25 West 43rd Street, New York, NY 10036. e-mail: psa@ansi.org

* Standard for consumer products

Comment Deadline: August 14, 2022

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

This proposed addendum revises the purpose and scope of the standard. Revision of the purpose clarifies that the standard may address any measure that affects acceptable indoor air quality in individual dwelling units. Confining the purpose to individual dwelling units provides better alignment with the existing scope. The scope has been modified to remove the reference to "residential occupancies," which was believed to be redundant to the reference to dwelling units. Additionally, the scope has been revised to permit the standard to address filtration of outdoor air.

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

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

Comment Deadline: August 14, 2022

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

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

Addenda

BSR/ASHRAE Addendum h to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4-2019)

Addendum h makes changes to the UPS requirements due to recent changes in UPS efficiency. Likewise, due to changes in transformer efficiency, Addendum h also adjusts the minimum efficiency (maximum loss) requirements for the ITE Distribution Segment of the ELC to correspond to the loading levels more common to data centers (80% for non-redundant, and 40% - 45% for redundant systems). The result is increased ITE Distribution Segment efficiency requirements at load levels above and below the federally prescribed 35% level as well as adherence to the maximum loss values prescribed in Electrical Codes for Feeders and Branch Circuit Conductors. To parallel the MLC, the ELC has now been adjusted to require compliance at all four load levels. The ELC Maximum Loss (Minimum Efficiency) tables have been revised to reflect these changes. Lastly, Addendum h requires adherence to federal transformer regulations and Electrical Code dictums and restricts the ELC calculation to the UPS and Distribution segments.

[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 14-202x (i119r2), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2021)

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

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

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

NSF (NSF International)

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

Revision

BSR/NSF 40-202x (i44r2), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

This wastewater standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1514 L/day (400 gal/day) and 5678 L/day (1500 gal/day). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard.

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

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

Comment Deadline: August 14, 2022

NSF (NSF International)

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

Revision

BSR/NSF 40-202x (i51r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

This Standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1,514 L/d (400 gal/d) and 5,678 L/d (1,500 gal/d). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard. System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

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

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

NSF (NSF International)

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

Revision

BSR/NSF 53-202x (i142r1), Drinking Water Treatment Units - Health Affects (revision of ANSI/NSF 53-2021)

It is the purpose of this Standard to establish minimum requirements for materials, design and construction, and performance of point-of-use and point -of-entry drinking water treatment systems that are designed to reduce specific health-related contaminants in public or private water supplies. Such systems include point-of-entry drinking water treatment systems used to treat all or part of the water at the inlet to a residential facility or a bottled water production facility, and includes the material and components used in these systems. This Standard also specifies the minimum product literature and labeling information that a manufacturer shall supply to authorized representatives and system owners, as well as the minimum service-related obligations that the manufacturer shall extend to system owners.

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

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

NSF (NSF International)

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

Revision

BSR/NSF 245-202x (i32r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020)

This wastewater standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities of 1514 L/d (400 gal/d) to 5678 L/d (1500 gal/d) that are designed to provide reduction of nitrogen in residential wastewater. Management methods for the treated effluent discharged from these systems are not addressed by this Standard. A system, in the same configuration, must either be demonstrated to have met the Class I requirements of NSF/ANSI 40 or must meet the Class I requirements of NSF/ANSI 40 during concurrent testing for nutrient removal.

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

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

Comment Deadline: August 14, 2022

NSF (NSF International)

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

Revision

BSR/NSF 350-202x (i73r1), Onsite Residential and Commercial, Water Reuse Treatment Systems (revision of ANSI/NSF 350-2020)

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

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

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

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | mitchell.gold@ul.org, https://ul.org/

Revision

BSR/UL 347-202x, Standard for Safety for Medium-Voltage AC Contactors, Controllers, and Control Centers (revision of ANSI/UL 347-2020)

Recirculation of the following topics balloted on February 11, 2022: (1) Restructuring of Scope; (2) Chiller Duty or OEM Defined Duty for Motor Starting Reduced Voltage Autotransformers; (7) Addition of Earthing Switch to UL 347.

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

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

ULSE (UL Standards & Engagement)

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

Revision

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

This proposal for UL 705 covers: (1) Add new requirement for NEC Class 2 Marking.

[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."

ULSE (UL Standards & Engagement)

333 Pfingsten Road, Northbrook, IL 60062-2096 | jeffrey.prusko@ul.org, https://ul.org/

Revision

BSR/UL 1769-202x, Standard for Safety for Cylinder Valves (revision of ANSI/UL 1769-2016)

The following is being proposed: (1) Revision to tolerances in manufacturing and production test.

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

Send comments (copy psa@ansi.org) to: Jeff Prusko, jeffrey.prusko@ul.org

Comment Deadline: August 29, 2022

AARST (American Association of Radon Scientists and Technologists)

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

Revision

BSR/AARST CCAH-202x, Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses (revision of ANSI/AARST CCAH-2020)

This standard provides minimum requirements for the rough-in of radon control system components in new dwelling units under construction. CCAH also includes minimum requirements for verifying if radon concentrations are below the national action level and, if required, activation of radon control systems. These proposed revisions relate to entities that qualify individuals for professional services.

Single copy price: \$TBD

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

Order from: StandardsAssist@gmail.com

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

AARST (American Association of Radon Scientists and Technologists)

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

Revision

BSR/AARST CC-1000-202x, Soil Gas Control Systems in New Construction of Buildings (revision of ANSI/AARST CC-1000-2018)

The provisions in this standard provide minimum requirements for the construction of any building intended for human occupancy, except for 1 and 2 family dwellings, in order to reduce occupant exposure to radon and other hazardous soil gases. Proposed revisions being reviewed are relative to closure of between soil air and indoor air.

Single copy price: \$TBD

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

Order from: StandardsAssist@gmail.com

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

Comment Deadline: August 29, 2022

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

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

Addenda

BSR/ASHRAE Addendum g to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4-2019)

Addendum g modifies and clarifies the mechanical load component (MLC) calculations. The baseline process cooling MLC values provided in Table 6.5 were based on simulation data for a mechanical system designed to condition only the ITE equipment. The energy simulations did not include cooling for UPS and other electrical losses, therefore, the MLC mechanical compliance target values in Table 6.5 were made less stringent. Also, the addition of a single piece of cooling equipment will no longer trigger the need to re-calculate ELC and MLC for the entire data center including the new cooling equipment. Lastly, definitions were added in Section 3, language to support the regulation of process heat and process ventilation in Section 6, and changes were made in anticipation of water cooled ITE.

Single copy price: \$35.00

Obtain an electronic copy from: standards.section@ashrae.org

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 90.2-202x, Energy Efficient Design of Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.2-2018)

Proposes independent substantive changes that arose from comment resolution efforts following the first public review. Additions include definitions for “energy performance” and “greenhouse gas emission performance” terminology used in the new TPS. A previous exception that excluded operations and maintenance provisions was also eliminated. The original intent of Addendum c, which is still applicable to this ISC, was to advance 90.2 as a leadership standard that can address a wider range of criteria and residential building types.

Single copy price: \$35.00

Obtain an electronic copy from: standards.section@ashrea.org

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

ASME (American Society of Mechanical Engineers)

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

Revision

BSR/ASME NM-3-202x, Nonmetallic Materials - Part 1: Thermoplastic Material Specifications; Part 2: Thermoset Material Specifications; Part 3: Properties (revision of ANSI/ASME NM-3-2020)

This standard includes specifications for non-metallic materials (except wood, non-fibrous glass and concrete); and in conformance with the requirements of the individual construction codes, methodologies, design values, limits, and cautions on the use of materials.

Single copy price: Free

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

Send comments (copy psa@ansi.org) to: Colleen O'Brien; obrienc@asme.org

Comment Deadline: August 29, 2022

AWS (American Welding Society)

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

Revision

BSR/AWS A5.5/A5.5M-202x, Specification for Low-Alloy Steel Electrodes for Shielded Metal Arc Welding (revision of ANSI/AWS A5.5/A5.5M-2014)

This specification prescribes the requirements for classification of low-alloy steel covered electrodes used for shielded metal arc welding. The requirements include chemical composition and mechanical properties of weld metal, weld metal soundness, usability tests of electrodes, and moisture tests of the low-hydrogen electrode covering. Requirements for standard sizes and lengths, marking, manufacturing, and packaging are also included. Optional supplemental requirements include tests for absorbed moisture in the electrode covering and for diffusible hydrogen in the weld metal. This specification makes use of both U.S. Customary Units and the International System of Units (SI). Since these are not equivalent, each system must be used independently of the other.

Single copy price: \$28.00 (AWS members) / \$37.00 (non-members)

Obtain an electronic copy from: kbulger@aws.org

Order from: Kevin Bulger; kbulger@aws.org

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

AWWA (American Water Works Association)

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

Revision

BSR/AWWA C216-202x, Heat-Shrinkable Cross-Linked Polyolefin Coatings for Steel Water Pipe and Fittings (revision of ANSI/AWWA C216-2014)

This standard describes the material, application, and field-procedure requirements for protective exterior coatings consisting of heat-shrinkable cross-linked polyolefin coatings.

Single copy price: Free

Obtain an electronic copy from: ETSsupport@awwa.org

Order from: AWWA, Attn: Vicki David; vdavid@awwa.org

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

AWWA (American Water Works Association)

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

Revision

BSR/AWWA C606-202x, Grooved and Shouldered Joints (revision of ANSI/AWWA C606-2015)

This standard describes grooved and shouldered joints for ductile-iron pipe (DIP), metallic pressure pipe of iron pipe size (IPS), fittings, and other components for water, wastewater, and reclaimed water systems, and other services.

Single copy price: Free

Obtain an electronic copy from: ETSsupport@awwa.org

Order from: AWWA, Attn: Vicki David; vdavid@awwa.org

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

Comment Deadline: August 29, 2022

CSA (CSA America Standards Inc.)

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

National Adoption

BSR/CSA C22.2 No. 19085-11-202x, Woodworking machines - Safety - Part 11: Combined machines (national adoption with modifications of ISO 19085-11)

This document gives the safety requirements and measures for stationary and displaceable combined woodworking machines, having at least two separately usable working units and with manual loading and unloading of the workpiece, hereinafter referred to as "machines". The integrated working units can be of these types only:

- a sawing unit;
- a moulding unit;
- a planing unit.

The machines are designed to cut solid wood and material with similar physical characteristics to wood. This document deals with all significant hazards, hazardous situations and events as listed in Clause 4, relevant to the machines, when operated, adjusted and maintained as intended and under the conditions foreseen by the manufacturer including reasonably foreseeable misuse. Also, transport, assembly, dismantling, disabling and scrapping phases have been taken into account.

Single copy price: Free

Obtain an electronic copy from: debbie.chesnik@csagroup.org

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

CSA (CSA America Standards Inc.)

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

National Adoption

BSR/CSA C22.2 No. 19085-13-202x, Woodworking machines - Safety - Part 13: Multi-blade rip sawing machines with manual loading and/or unloading (national adoption with modifications of ISO 19085-13)

This document gives the safety requirements and measures for stationary multi-blade rip sawing machines manually loaded and/or unloaded, hereinafter referred to as "machines", designed to cut solid wood and material with similar physical characteristics to wood. It deals with all significant hazards, hazardous situations and events as listed in Clause 4 relevant to machines, when operated, adjusted and maintained as intended and under the conditions foreseen by the manufacturer including reasonably foreseeable misuse. Also, transport, assembly, dismantling, disabling and scrapping phases are taken into account.

Single copy price: Free

Obtain an electronic copy from: debbie.chesnik@csagroup.org

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

Comment Deadline: August 29, 2022

CTA (Consumer Technology Association)

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

New Standard

BSR/CTA 2108-202x, Framework for Validation of Digital Health Technology-Derived Metrics under Naturalistic or Unconstrained Test Conditions (new standard)

This document explores the best practices for testing and measurement of health data solutions in a real-world setting.

Single copy price: Free

Obtain an electronic copy from: standards@cta.tech

Order from: standards@cta.tech

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

NEMA (ASC C137) (National Electrical Manufacturers Association)

1300 N 17th Street, Suite 900, Rosslyn, VA 22209 | Michael.Erbesfeld@nema.org, www.nema.org

Reaffirmation

BSR C137.3-2017 (R202x), Standard for Lighting Systems-Minimum Requirements for installation of Energy Efficient Power over Ethernet (PoE) Lighting Systems (reaffirmation of ANSI C137.3-2017)

This standard specifies the requirements for limiting energy losses due to cable selection when installing PoE lighting systems. This standard is not meant to replace existing PoE standards, but to build on them by addressing this specific area in installation of PoE lighting systems.

Single copy price: \$59.00

Obtain an electronic copy from: michael.erbesfeld@nema.org

Order from: Michael Erbesfeld; Michael.Erbesfeld@nema.org

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

Comment Deadline: August 29, 2022

NEMA (National Electrical Manufacturers Association)

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

New Standard

BSR/NEMA AB 4-202x, Guidelines for Inspection and Preventive Maintenance of Molded-Case Circuit Breakers Used in Commercial and Industrial Applications (new standard)

NEMA AB 4 sets forth, for use by qualified personnel, a number of basic procedures that may be used for the inspection and preventive maintenance of molded case circuit breakers used in industrial and commercial applications rated up to and including 1000 V 50/60 Hz AC or AC/DC. (Note— Consult the manufacturer for DC-only or 400 Hz circuit breakers.) The methods outlined may be used to verify specific characteristics of a molded case circuit breaker that was originally built and tested in compliance with the requirements of NEMA standards publication AB 1 (UL 489). These methods are intended for field application and are, therefore, non-destructive in nature. Accordingly, these methods cannot be used to verify all performance capabilities of a molded case circuit breaker since verification of some capabilities requires tests of a destructive nature. Many tests, including those of a destructive nature, as defined in AB 1 (UL 489), are performed on representative samples of circuit breakers by the manufacturer, as part of a routine program of factory inspection. The AB 4 standards publication is not intended, nor is it adequate, to verify proper electrical performance of a molded case circuit breaker that has been disassembled (broken factory seal or removal of rivets), modified, rebuilt, refurbished, or handled in any manner not intended or authorized by the original circuit breaker manufacturer. Such breakers should be removed from service.

Single copy price: Electronic Copy is free, and Hard Copy is \$131.00

Obtain an electronic copy from: zijun.tong@nema.org

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

NEMA (National Electrical Manufacturers Association)

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

New Standard

BSR/NEMA IM 60001-202x, Relative Temperature Indices of Industrial Thermosetting Laminates Standard (new standard)

To develop engineering information which would assist the user in the selection of the proper grade of thermosetting industrial laminate best suited for use in electrical insulation systems and products that may operate at higher than room temperatures.

Single copy price: \$120.00

Obtain an electronic copy from: communication@nema.org

Order from: khaled.masri@nema.org

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

Comment Deadline: August 29, 2022

NEMA (National Electrical Manufacturers Association)

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

New Standard

BSR/NEMA KS 3-202x, Guidelines for Inspection and Preventive Maintenance of Switches Used in Commercial and Industrial Applications (new standard)

This publication deals with guidelines for inspection and preventive maintenance of switches used in commercial and industrial applications. These guidelines are to be used to identify switches requiring maintenance or replacement. Good practice includes periodic switch maintenance during plant shutdown or during a regular maintenance period as specified, for example, in NFPA 70B. When a switch operates automatically, good practice dictates that the source of the overcurrent should be located, and if it is suspected that the operation was at or near the interrupting rating, the switch condition should be checked prior to circuit re-energization. It is not intended that switches be disassembled for inspection. Rather, NEMA KS 3 should be referenced during periodic maintenance or during specific inspection following a high short-circuit-current fault. This document is intended to ensure that switches are well maintained, and provides guidelines for switch replacement.

Single copy price: Electronic Copy is free, and Hard Copy is \$92.00

Obtain an electronic copy from: zijun.tong@nema.org

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

NEMA (National Electrical Manufacturers Association)

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

Reaffirmation

BSR/NEMA AB 3-2013 (R202x), Molded-Case Circuit Breakers and Their Application (reaffirmation of ANSI/NEMA AB 3-2013)

This application guide covers molded case circuit breakers and molded case switches, single-pole and multi-pole, fused and unfused, as well as accessories used with them. These circuit breakers and switches are assembled as integral units in supporting housings of insulating material and have rated voltages up to and including 1000 V, 50/60 Hz, AC or AC/DC, and have rated interrupting current ratings of 5000 amperes or more. This application guide addresses electrical systems with nominal ratings of 600 volts and below ac and dc, which represent the preponderance of the general use application.

Single copy price: Electronic Copy is free, and Hard Copy is \$139.00

Obtain an electronic copy from: zijun.tong@nema.org

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

Comment Deadline: August 29, 2022

NEMA (National Electrical Manufacturers Association)

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

Reaffirmation

BSR/NEMA KS 2-2013 (R202x), Distribution Equipment Switch Application Guide, A User's Reference (reaffirmation of ANSI/NEMA KS 2-2013)

This publication covers application information for distribution equipment switches that are: (a) Rated at not more than 600V and 6000A with or without a horsepower rating; (b) With or without provision for fuses; (c) With current-carrying parts and mechanisms enclosed in metallic or non-metallic cases, or that are enclosed when mounted in an enclosed switchboard, panelboard, or the like; (d) Manually operable by means of external handles. This publication does not cover: (a) The common form of snap switches; (b) Switching devices having features intended primarily for the starting and running protection of electric motors; (c) Circuit-breaker-type power circuit protectors; (d) Molded case switches; and (e) Transfer switches

Single copy price: Electronic Copy is free, and Hard Copy is \$92.00

Obtain an electronic copy from: zijun.tong@nema.org

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

NETA (InterNational Electrical Testing Association)

3050 Old Centre Road, Suite 101, Portage, MI 49024 | tbrammer@netaworld.org, www.netaworld.org

Revision

BSR/NETA MTS-202x, NETA Standard for Maintenance Testing Specifications for Electrical Power Equipment and Systems (revision of ANSI/NETA MTS-2019)

These specifications incorporate comprehensive field tests and inspections to assess the suitability for continued service, condition of maintenance, and reliability of electrical power distribution equipment and systems. The purpose of these specifications is to assure tested electrical equipment and systems are operational, are within applicable standards and manufacturer's tolerances, and are suitable for continued service.

Single copy price: \$495.00

Obtain an electronic copy from: Tania Brammer; tbrammer@netaworld.org

Order from: Tania Brammer; tbrammer@netaworld.org

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

Comment Deadline: August 29, 2022

NSF (NSF International)

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

Revision

BSR/NSF 244-202x (i14r1), Supplemental Microbiological Water Treatment Systems - Filtration (revision of ANSI/NSF 244-2021)

The point-of-use (POU) and point-of-entry (POE) systems addressed by this Standard are designed to be used for the supplemental microbial control of specific organisms that may occasionally be present in drinking water (public or private) because of intermittent incursions. Some of these specific organisms that may be introduced into the drinking water are considered established or potential health hazards. This Standard establishes requirements for POU and POE drinking water treatment systems, and the materials and components used in these systems.

Single copy price: Free

Obtain an electronic copy from: https://standards.nsf.org/apps/group_public/download.php/64461/244i14r1%20-%20JC%20Memo%20&%20Ballot.pdf

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

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org

Revision

BSR/TIA 1183-B-202x, Measurement Methods and Test Fixtures for Balun-less Measurements of Balanced Components and Systems (revision and redesignation of ANSI/TIA 1183-A-2017)

This project will create ANSI/TIA 1183-B, revision of ANSI/TIA 1183-A. Known errors will be corrected, nomenclature will be updated, and any general needed updates will be made.

Single copy price: \$146.00

Obtain an electronic copy from: standards-process@tiaonline.org

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

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

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 2202-202x, Standard for Safety for DC Charging Equipment for Electric Vehicles (revision of ANSI/UL 2202-2012 (R2018))

The Proposed Third Edition of the Standard for Electric Vehicle (EV) Charging System Equipment, UL 2202, is a trinational standard that is harmonized for Canada, Mexico, and the United States. In order to clarify the type of equipment being covered by this Standard as it is addressed in the CE Code and the NEC, the title of the new standard will be the Standard for DC Charging Equipment for Electric Vehicles, NMX-J-817-ANCE/CSA C22.2 No. 346/UL 2202.

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>.

Comment Deadline: September 13, 2022

ASME (American Society of Mechanical Engineers)

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

Reaffirmation

BSR/ASME B18.7-2007 (R202x), General Purpose Semi-Tubular Rivets, Full Tubular Rivets, Split Rivets and Rivet Caps (reaffirmation of ANSI/ASME B18.7-2007 (R2017))

This Standard covers complete general and dimensional data for semi-tubular rivets, full tubular rivets, split rivets, and rivet caps for use in general-purpose applications.

Single copy price: \$38.00

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

Send comments (copy psa@ansi.org) to: Robert Ryan; ryanr@asme.org

ASME (American Society of Mechanical Engineers)

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

Stabilized Maintenance

BSR/ASME B18.7.1M-2007 (S202x), Metric General Purpose Semi-Tubular Rivets (stabilized maintenance of ANSI/ASME B18.7.1M-2007 (R2017))

This Standard covers the general and dimensional data for oval-head semi-tubular rivets for use in general-purpose applications.

Single copy price: \$39.00

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

Send comments (copy psa@ansi.org) to: Robert Ryan; ryanr@asme.org

ASME (American Society of Mechanical Engineers)

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

Withdrawal

ANSI/ASME B18.2.4.3M-1979 (R2017), Metric Slotted Hex Nuts (withdrawal of ANSI/ASME B18.2.4.3M-1979 (R2017))

This standard covers the complete general and dimensional data for metric slotted hex nuts.

Correction: ANSI/ASME B18.2.4.3M-1979 (R2017) was announced in January 2022 as withdrawn by ASME in accordance with 4.2.1.3.2. However, this was incorrect and ASME has submitted a BSR-8 to withdraw the standard as an ANS that is published in today's issue of Standards Action.

Single copy price: \$39.00

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

Send comments (copy psa@ansi.org) to: Robert Ryan; ryanr@asme.org

Comment Deadline: September 13, 2022

TMA (The Monitoring Association)

7918 Jones Branch Drive, Suite 510, McLean, VA 22102 | bginn@tma.us, www.csaaul.org

New Standard

BSR/TMA AVS-01-202x, Alarm Validation Scoring Standard (new standard)

The increasing use of data by Public Safety has had a positive impact on the services they provide to the public. Datasets generated by commercial sources, such as the alarm industry, can be a valuable data source to Public Safety. Real time data from security providers will improve situational awareness as well as first responder safety. Sensor innovation driven by technological advances has raised the quantity and quality of data collected by alarm systems. Alarm monitoring centers can use this data to estimate the validity of an alarm event, which enables the creation of standardized "alarm scoring" metrics. Calls for Service to Emergency Call Centers/Public Safety Answering Points that include a standardized scoring metric can assist public safety departments that opt-in to the program, with their alarm response policies, similar to how Location accuracy and Crash Severity scoring are used. This standard, developed by a committee made up of Emergency Call Center management and alarm company manager's with the goal to provide public safety higher quality expectations of the information provided to them.

Single copy price: Free

Obtain an electronic copy from: <https://tma.us/proposed-tma-avs-01-alarm-validation-standard/>

Order from: bginn@tma.us

Send comments (copy psa@ansi.org) to: <https://tma.us/tma-avs-01-public-comment-portal/>

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).

ASQ (ASC Z1) (American Society for Quality)

600 N Plankinton Avenue, Milwaukee, WI 53201 | espaulding@asq.org, www.asq.org

New Technical Report

ASQ TR2:2018, Cost of Quality: Guidelines for Development, Implementation and Monitoring to Improve Quality and Performance (technical report)

Cost of Quality for development, implementation and monitoring to improve performance is applicable as needed to all processes performed by the organization, performed on behalf of the organization (e.g., external providers) and the results of the processes experienced by relevant interested parties (e.g., customers, end users, society, etc.). The Cost of Quality may also be stated as cost of performance, as it can include any aspect where the quality or performance of a process or its impact on or by the products or services involved are a factor.

Single copy price: \$59.00

Order from: standards@asq.org

Project Withdrawn

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

ULSE (UL Standards & Engagement)

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

BSR/UL 588-202x, Standard for Safety for Seasonal and Holiday Decorative Products (revision of ANSI/UL 588-2021)

Inquiries may be directed to Heather Sakellariou; Heather.Sakellariou@ul.org

Withdrawal of an ANS by ANSI-Accredited Standards Developer

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

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

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

ANSI/AHRI Standard 880 (I-P)-2011 with Addendum 1-2011, Performance Rating of Air Terminals

Direct inquiries to: Karl Best; kbest@ahrinet.org

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

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

ANSI/AHRI Standard 881 (SI), Adm1-2012 , Performance Rating of Air Terminals

Direct inquiries to: Karl Best; kbest@ahrinet.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.

ASTM (ASTM International)

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

New Standard

ANSI/ASTM F3555-2022, Test Method for Measuring Impact Attenuation Characteristics of Helmets Under Induced Rotational Loading Using an Inclined Anvil (new standard) Final Action Date: 6/21/2022

Reaffirmation

ANSI/ASTM F2092-2014 (R2022), Specification for Convection Oven - Gas or Electric (reaffirmation of ANSI/ASTM F2092-2014) Final Action Date: 6/21/2022

Reaffirmation

ANSI/ASTM F2521-2009 (R2022), Specification for Heavy-Duty Ranges, Gas and Electric (reaffirmation of ANSI/ASTM F2521-2009 (R2014)) Final Action Date: 6/21/2022

Revision

ANSI/ASTM E84-2022, Test Method for Surface Burning Characteristics of Building Materials (revision of ANSI/ASTM E84-2021) Final Action Date: 6/21/2022

Revision

ANSI/ASTM E162-2022, Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source (revision of ANSI/ASTM E162-2021) Final Action Date: 7/1/2022

Revision

ANSI/ASTM F513-2022, Specification for Eye and Face Protective Equipment for Hockey Players (revision of ANSI/ASTM F513-2012 (R2018)) Final Action Date: 6/21/2022

Revision

ANSI/ASTM F1122-2022, Specification for Quick Disconnect Couplings (6 in. NPS and Smaller) (revision of ANSI/ASTM F1122-2010 (R2021)) Final Action Date: 6/21/2022

Revision

ANSI/ASTM F1492-2022, Specification for Helmets Used in Skateboarding and Trick Roller Skating (revision of ANSI/ASTM F1492-2015) Final Action Date: 6/21/2022

Revision

ANSI/ASTM F1587-2022, Specification for Head and Face Protective Equipment for Ice Hockey Goaltenders (revision of ANSI/ASTM F1587-2013 (R2018)) Final Action Date: 6/21/2022

Revision

ANSI/ASTM F3340-2022, Test Method for Thermal Resistance of Camping Mattresses Using a Guarded Hot Plate Apparatus (revision of ANSI/ASTM F3340-2018) Final Action Date: 6/21/2022

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02169 | dbellis@nfpa.org, www.nfpa.org

Reaffirmation

ANSI/NFPA 790-2021 (R2024), Standard for Competency of Third-Party Field Evaluation Bodies (reaffirmation of ANSI/NFPA 790-2021) Final Action Date: 7/5/2022

Reaffirmation

ANSI/NFPA 791-2021 (R2024), Recommended Practice and Procedures for Unlabeled Electrical Equipment Evaluation (reaffirmation of ANSI/NFPA 791-2021) Final Action Date: 7/5/2022

Revision

ANSI/NFPA 55-2022, Compressed Gases and Cryogenic Fluids Code (revision of ANSI/NFPA 55-2020) Final Action Date: 7/6/2022

Revision

ANSI/NFPA 2112-2023, Standard on Flame-Resistant Clothing for Protection of Industrial Personnel against Short-Duration Thermal Exposures from Fire (revision of ANSI/NFPA 2112-2018) Final Action Date: 7/6/2022

NSF (NSF International)

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

Revision

ANSI/NSF 455-2-2022 (i30r1), Good Manufacturing Practices for Dietary Supplements (revision of ANSI/NSF 455-2-2021) Final Action Date: 6/30/2022

SPRI (Single Ply Roofing Industry)

465 Waverley Oaks Road, Suite 421, Waltham, MA 02452 | info@spri.org, www.spri.org

Reaffirmation

ANSI/SPRI GT-1-2016 (R2022), Test Standard for Gutter Systems (reaffirmation of ANSI/SPRI GT-1-2016) Final Action Date: 7/8/2022

ULSE (UL Standards & Engagement)

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

National Adoption

ANSI/UL 61010-2-012-2022, Standard for Safety for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 2-012: Particular Requirements for Climatic and Environmental Testing and Other Temperature Conditioning Equipment (national adoption of IEC 61010-2-012 with modifications and revision of ANSI/UL 61010-2-012-2017) Final Action Date: 6/15/2022

Reaffirmation

ANSI/UL 60730-2-10-2013 (R2022), Standard for Automatic Electrical Controls for Household and Similar Use; Part 2: Particular Requirements for Motor Starting Relays (reaffirmation of ANSI/UL 60730-2-10-2013 (R2018)) Final Action Date: 6/29/2022

Reaffirmation

ANSI/UL 60730-2-12-2017 (R2022), Standard for Automatic Electrical Controls - Part 2-12: Particular Requirements for Electrically Operated Door Locks (reaffirmation of ANSI/UL 60730-2-12-2017) Final Action Date: 6/9/2022

ULSE (UL Standards & Engagement)

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

Reaffirmation

ANSI/UL 60745-2-5-2012 (R2022), Standard For Safety for Hand-Held Motor-Operated Electric Tools - Safety - Part 2-5: Particular Requirements for Circular Saws (reaffirmation of ANSI/UL 60745-2-5-2012 (R2017)) Final Action Date: 7/5/2022

Revision

ANSI/UL 10D-2022, Standard for Fire Tests of Fire-Protective Curtain Assemblies (April 15, 2022) (revision of ANSI/UL 10D-2017a) Final Action Date: 7/6/2022

Revision

ANSI/UL 300-2022, Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment (April 8, 2022) (revision of ANSI/UL 300-2019) Final Action Date: 7/6/2022

Revision

ANSI/UL 998-2022, Standard for Safety for Humidifiers (revision of ANSI/UL 998-2016) Final Action Date: 7/5/2022

Revision

ANSI/UL 2272-2019, Standard for Safety for Electrical Systems for Personal E-Mobility Devices (revision of ANSI/UL 2272-2016) Final Action Date: 2/25/2019

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.

Call for Members (ANS Consensus Bodies)

AARST (American Association of Radon Scientists and Technologists)

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

BSR/AARST CCAH-202x, Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses (revision of ANSI/AARST CCAH-2020)

AARST (American Association of Radon Scientists and Technologists)

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

BSR/AARST CC-1000-202x, Soil Gas Control Systems in New Construction of Buildings (revision of ANSI/AARST CC-1000-2018)

AWS (American Welding Society)

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

BSR/AWS A5.5/A5.5M-202x, Specification for Low-Alloy Steel Electrodes for Shielded Metal Arc Welding (revision of ANSI/AWS A5.5/A5.5M-2014)

CTA (Consumer Technology Association)

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

BSR/CTA 2108-202x, Framework for Validation of Digital Health Technology-Derived Metrics under Naturalistic or Unconstrained Test Conditions (new standard)

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

NSF (NSF International)

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

BSR/NSF 14-202x (i119r2), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2021)

NSF (NSF International)

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

BSR/NSF 40-202x (i44r2), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)

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

BSR/NSF 40-202x (i51r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)

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

BSR/NSF 53-202x (i142r1), Drinking Water Treatment Units - Health Affects (revision of ANSI/NSF 53-2021)

Call for Members (ANS Consensus Bodies)

NSF (NSF International)

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

BSR/NSF 244-202x (i14r1), Supplemental Microbiological Water Treatment Systems - Filtration (revision of ANSI/NSF 244-2021)

NSF (NSF International)

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

BSR/NSF 245-202x (i32r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020)

NSF (NSF International)

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

BSR/NSF 350-202x (i73r1), Onsite Residential and Commercial, Water Reuse Treatment Systems (revision of ANSI/NSF 350-2020)

TIA (Telecommunications Industry Association)

1320 North Courthouse Road, Suite 200, Arlington, VA 22201-2598 | standards-process@tiaonline.org, www.tiaonline.org

BSR/TIA 1183-B-202x, Measurement Methods and Test Fixtures for Balun-less Measurements of Balanced Components and Systems (revision and redesignation of ANSI/TIA 1183-A-2017)

Accreditation Announcements (Standards Developers)

Approval of Reaccreditation – ASD

AGA (ASC Z223) - American Gas Association National Fuel Gas Code

Effective July 7, 2022

The reaccreditation of **American Gas Association-sponsored ASC Z223, National Fuel Gas Code** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on AGA/ASC Z223-sponsored American National Standards, effective **July 7, 2022**. For additional information, please contact: Luis Escobar, American Gas Association/ASC Z223 | 400 North Capitol Street, NW, Suite 450, Washington, DC 20001 | (202) 824-7058, lescobar@aga.org

Approval of Reaccreditation – ASD

AHAM - Association of Home Appliance Manufacturers

Effective July 11, 2022

The reaccreditation of **AHAM - Association of Home Appliance Manufacturers** has been approved at the direction of ANSI's Executive Standards Council, under its recently revised operating procedures for documenting consensus on AHAM-sponsored American National Standards, effective **July 11, 2022**. For additional information, please contact: Matthew Williams, Association of Home Appliance Manufacturers (AHAM) | 1111 19th Street N.W., Suite 402, Washington, DC 20036 | (202) 872-5955, mwilliams@aham.org

American National Standards (ANS) Process

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

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

Please visit ANSI's website (www.ansi.org)

- ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): www.ansi.org/essentialrequirements
- ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): www.ansi.org/standardsaction
- Accreditation information – for potential developers of American National Standards (ANS): www.ansi.org/sdoaccreditation
- ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): www.ansi.org/asd
- Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: www.ansi.org/asd
- American National Standards Key Steps: www.ansi.org/anskeysteps
- American National Standards Value: www.ansi.org/ansvalue
- ANS Web Forms for ANSI-Accredited Standards Developers - PINS, BSR8|108, BSR11, Technical Report: <https://www.ansi.org/portal/psawebforms/>
- Information about standards Incorporated by Reference (IBR): <https://ibr.ansi.org/>
- ANSI - Education and Training: www.standardslearn.org

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.

AARST

American Association of Radon Scientists and Technologists
527 N. Justice Street
Hendersonville, NC 28739
www.aarst.org
Gary Hodgden
StandardsAssist@gmail.com

ADA (Organization)

American Dental Association
211 East Chicago Avenue
Chicago, IL 60611
www.ada.org
Paul Bralower
bralowerp@ada.org

ASHRAE

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
180 Technology Parkway
Peachtree Corners, GA 30092
www.ashrae.org
Emily Toto
etoto@ashrae.org
Mark Weber
mweber@ashrae.org
Thomas Loxley
tloxley@ashrae.org

ASME

American Society of Mechanical Engineers
Two Park Avenue, M/S 6-2B
New York, NY 10016
www.asme.org
Terrell Henry
ansibox@asme.org

ASPE

American Society of Plumbing Engineers
6400 Shafer Court, Suite 350
Rosemont, IL 60018
www.aspe.org
Gretchen Pienta
gpienta@aspe.org

ASQ (ASC Z1)

American Society for Quality
600 N Plankinton Avenue
Milwaukee, WI 53201
www.asq.org

Elizabeth Spaulding
espaulding@asq.org

ASTM

ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428
www.astm.org
Laura Klineburger
accreditation@astm.org

AWS

American Welding Society
8669 NW 36th Street, Suite 130
Miami, FL 33166
www.aws.org
Kevin Bulger
kbulger@aws.org

AWWA

American Water Works Association
6666 W. Quincy Avenue
Denver, CO 80235
www.awwa.org
Paul Olson
polson@awwa.org

CSA

CSA America Standards Inc.
8501 East Pleasant Valley Road
Cleveland, OH 44131
www.csagroup.org
Debbie Chesnik
ansi.contact@csagroup.org

CTA

Consumer Technology Association
1919 S. Eads Street
Arlington, VA 22202
www.cta.tech
Catrina Akers
cakers@cta.tech

NEMA

National Electrical Manufacturers Association
1300 North 17th Street
Rosslyn, VA 22209
www.nema.org
Khaled Masri
Khaled.Masri@nema.org

NEMA

National Electrical Manufacturers Association
1300 North 17th Street, Suite 900
Rosslyn, VA 22209
www.nema.org
Zijun Tong
zijun.tong@nema.org

NEMA (ASC C12)

National Electrical Manufacturers Association
1300 North 17th Street, Suite 900
Rosslyn, VA 22209
www.nema.org
Paul Orr
Pau_orr@nema.org

NEMA (ASC C137)

National Electrical Manufacturers Association
1300 N 17th Street, Suite 900
Rosslyn, VA 22209
www.nema.org
Michael Erbesfeld
Michael.Erbesfeld@nema.org

NETA

InterNational Electrical Testing Association
3050 Old Centre Road, Suite 101
Portage, MI 49024
www.netaworld.org
Tania Brammer
tbrammer@netaworld.org

NFPA

National Fire Protection Association
One Batterymarch Park
Quincy, MA 02169
www.nfpa.org
Dawn Michele Bellis
dbellis@nfpa.org

NFPA

National Fire Protection Association
One Batterymarch Park
Quincy, MA 02269
www.nfpa.org
Patrick Foley
PFoley@nfpa.org

ANSI-Accredited Standards Developers Contact Information

NSF

NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105
www.nsf.org

Jason Snider
jsnider@nsf.org

Monica Milla
mmilla@nsf.org

Rachel Brooker
rbrooker@nsf.org

Alan McGrath
alan.t.mcgrath@ul.org

Amy Walker
Amy.K.Walker@ul.org

Jeff Prusko
jeffrey.prusko@ul.org

Megan Sepper
Megan.M.Sepper@ul.org

Mitchell Gold
mitchell.gold@ul.org

SPRI

Single Ply Roofing Industry
465 Waverley Oaks Road, Suite 421
Waltham, MA 02452
www.spri.org

Linda King
info@spri.org

TIA

Telecommunications Industry Association
1320 North Courthouse Road, Suite 200
Arlington, VA 22201
www.tiaonline.org

Teesha Jenkins
standards-process@tiaonline.org

TMA

The Monitoring Association
7918 Jones Branch Drive, Suite 510
McLean, VA 22102
www.csaaul.org

Bryan Ginn
bginn@tma.us

ULSE

UL Standards & Engagement
12 Laboratory Drive
Research Triangle Park, NC 27709
https://ul.org/

Doreen Stocker
Doreen.Stocker@ul.org

Nicolette Weeks
Nicolette.A.Weeks@ul.org

Patricia Sena
patricia.a.sena@ul.org

Vickie Hinton
Vickie.T.Hinton@ul.org

ULSE

UL Standards & Engagement
333 Pflingsten Road
Northbrook, IL 60062
https://ul.org/

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/FDIS 362-3, Acoustics - Measurement of noise emitted by accelerating road vehicles - Engineering method - Part 3: Indoor testing M and N categories - 4/29/2021, \$134.00

Additive manufacturing (TC 261)

ISO/ASTM DIS 52935, Additive manufacturing of metals - Qualification principles - Qualification of AM coordination personnel - 5/9/2022, \$62.00

Agricultural food products (TC 34)

ISO/DIS 937, Meat and meat products - Determination of nitrogen content - Reference method - 9/25/2022, \$46.00

ISO/DIS 7124, Eggs and egg products - Determination of fipronil and metabolites residues - Liquid chromatography-tandem mass spectrometry method - 9/25/2022, \$62.00

Aircraft and space vehicles (TC 20)

ISO/DIS 21349, Space systems - Project reviews - 5/12/2022, \$77.00

ISO/DIS 21350, Space systems - Off-the-shelf item utilization - 5/12/2022, \$67.00

Biotechnology (TC 276)

ISO/DIS 24190, Biotechnology - Analytical Methods - Risk-based approach for method selection and validation for rapid microbial detection in bioprocesses - 5/12/2022, \$112.00

ISO/DIS 24421, Biotechnology - Minimum requirements for optical signal measurements in photometric methods for biological samples - 9/24/2022, \$102.00

Cinematography (TC 36)

ISO/DIS 5926, Technical requirements and test methods for digital cinema stereoscopic projection - 9/23/2022, \$40.00

Clinical laboratory testing and in vitro diagnostic test systems (TC 212)

ISO/FDIS 18113-1, In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 1: Terms, definitions, and general requirements - 6/3/2021, \$125.00

ISO/FDIS 18113-2, In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 2: In vitro diagnostic reagents for professional use - 6/3/2021, \$67.00

ISO/FDIS 18113-3, In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 3: In vitro diagnostic instruments for professional use - 6/3/2021, \$62.00

ISO/FDIS 18113-4, In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 4: In vitro diagnostic reagents for self-testing - 6/3/2021, \$67.00

ISO/FDIS 18113-5, In vitro diagnostic medical devices - Information supplied by the manufacturer (labelling) - Part 5: In vitro diagnostic instruments for self-testing - 6/3/2021, \$62.00

Dentistry (TC 106)

ISO/DIS 4865, Dentistry - General requirements of non-hinged hand instruments - 5/12/2022, \$46.00

Equipment for fire protection and fire fighting (TC 21)

ISO/DIS 7240-7, Fire detection and alarm systems - Part 7: Point-type smoke detectors using scattered light, transmitted light or ionization - 5/12/2022, \$125.00

Ergonomics (TC 159)

ISO/DIS 15535, General requirements for establishing anthropometric databases - 9/25/2022, \$82.00

Fire safety (TC 92)

ISO/DIS 24678-5, Fire safety engineering - Requirements governing algebraic formulae - Part 5: Vent flows - 5/9/2022, \$112.00

Glass in building (TC 160)

ISO/DIS 23237, Glass in building - Test method of light transmittance for the glass photovoltaic (PV) module in buildings - 5/12/2022, \$46.00

Healthcare organization management (TC 304)

ISO/DIS 23447, Healthcare organization management - Hand hygiene performance and compliance - 9/29/2022, FREE

Information and documentation (TC 46)

ISO/DIS 11620, Information and documentation - Library performance indicators - 9/22/2022, \$175.00

Laboratory glassware and related apparatus (TC 48)

ISO/DIS 13132, Laboratory glassware - Petri dishes - 5/7/2022, \$46.00

Mechanical testing of metals (TC 164)

ISO/DIS 204, Metallic materials - Uniaxial creep testing in tension - Method of test - 5/8/2022, \$119.00

ISO/DIS 6507-1, Metallic materials - Vickers hardness test - Part 1: Test method - 5/12/2022, \$102.00

Nuclear energy (TC 85)

ISO/DIS 19238, Radiological protection - Performance criteria for service laboratories performing biological dosimetry by cytogenetics - The dicentric assay - 9/24/2022, \$107.00

Paper, board and pulps (TC 6)

ISO/FDIS 12625-18, Tissue paper and tissue products - Part 18: Determination of surface friction - 7/16/2021, \$58.00

Photography (TC 42)

ISO/DIS 15739, Photography - Electronic still-picture imaging - Noise measurements - 9/25/2022, \$112.00

Plastics (TC 61)

ISO/DIS 8256, Plastics - Determination of tensile-impact strength - 9/25/2022, \$71.00

Road traffic safety management systems (TC 241)

ISO/DIS 39003, Road Traffic Safety (RTS) - Guidance on ethical considerations relating to safety for autonomous vehicles - 5/12/2022, \$112.00

Road vehicles (TC 22)

ISO/DIS 6519, Diesel engines - Fuel injection pumps - Tapers for shaft ends and hubs - 9/23/2022, \$40.00

ISO/DIS 11452-8, Road vehicles - Component test methods for electrical disturbances from narrowband radiated electromagnetic energy - Part 8: Immunity to magnetic fields - 5/12/2022, \$71.00

Rubber and rubber products (TC 45)

ISO/FDIS 23711, Elastomeric seals - Requirements for materials for pipe joint seals used in water and drainage applications - Thermoplastic elastomers - 5/2/2021, \$58.00

Safety of toys (TC 181)

ISO/DIS 8124-12, Safety of toys - Part 12: Microbiological Safety - 5/12/2022, \$46.00

Small craft (TC 188)

ISO/FDIS 10240, Small craft - Owners manual -, \$71.00

Steel (TC 17)

ISO/DIS 683-6, Heat-treatable steels, alloy steels and free-cutting steels - Part 6: Hot-rolled steels for quenched and tempered springs - 9/26/2022, \$98.00

ISO/DIS 683-7, Heat-treatable steels, alloy steels and free-cutting steels - Part 7: Bright products of non-alloy and alloy steels - 5/9/2022, \$119.00

ISO/DIS 10544, Cold-reduced steel wire for the reinforcement of concrete and the manufacture of welded fabric - 9/24/2022, \$62.00

ISO/DIS 6935-3, Steel for the reinforcement of concrete - Part 3: Welded fabric - 9/24/2022, \$53.00

ISO/DIS 16143-4, Stainless steels for general purposes - Part 4: Bright products - 5/9/2022, \$102.00

Sterilization of health care products (TC 198)

ISO/FDIS 13004, Sterilization of health care products - Radiation - Substantiation of selected sterilization dose: Method VdmaxSD - 8/20/2021, \$125.00

ISO/DIS 17665, Sterilization of health care products - Moist heat - Requirements for the development, validation and routine control of a sterilization process for medical devices - 9/25/2022, \$185.00

(TC 322)

ISO/FDIS 32210, Sustainable finance - Principles and guidance - 11/15/2021, \$88.00

Tourism and related services (TC 228)

ISO/DIS 24806, Recreational diving services - Requirements for rebreather diver training - Decompression diving to 60 m - 9/25/2022, \$77.00

ISO/DIS 24807, Recreational diving services - Requirements for rebreather diver training - Decompression diving to 100 m - 9/25/2022, \$88.00

Tractors and machinery for agriculture and forestry (TC 23)

ISO/DIS 9467, Manually portable (hand-held) powered lawn and garden equipment and forest machinery - Exhaust system - Test procedures and performance requirements for spark arrestors - 9/23/2022, \$58.00

Traditional Chinese medicine (TC 249)

ISO/DIS 4904, Traditional Chinese Medicine - Inner pack of decoction pieces - 9/26/2022, \$46.00

Valves (TC 153)

ISO/FDIS 10497, Testing of valves - Fire type-testing requirements - 4/10/2021, \$77.00

Welding and allied processes (TC 44)

ISO/DIS 14172, Welding consumables - Covered electrodes for manual metal arc welding of nickel and nickel alloys - Classification - 9/29/2022, \$82.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 10373-1:2020/DAmD 1, - Amendment 1: Cards and security devices for personal identification - Test methods - Part 1: General characteristics - Amendment 1: Clarification of peel strength test method to be used for ISO/IEC 7810 conformance testing - 9/22/2022, \$29.00

ISO/IEC DIS 27011, Information security, cybersecurity and privacy protection - Information security controls based on ISO/IEC 27002 for telecommunications organizations - 9/25/2022, \$98.00

ISO/IEC DIS 27032, Cybersecurity - Guidelines for Internet security - 5/12/2022, \$93.00

ISO/IEC DIS 27040, Information technology - Security techniques - Storage security - 5/12/2022, \$155.00

ISO/IEC FDIS 27556, Information security, cybersecurity and privacy protection - User-centric privacy preferences management framework - 11/6/2021, \$82.00

ISO/IEC DIS 11581-7, Information technology - User interface icons - Part 7: Icons for setting interaction modes - 9/25/2022, \$67.00

ISO/IEC/IEEE DIS 23026, Systems and software engineering - Engineering and management of websites for systems, software, and services information - 9/25/2022, \$125.00

IEC Standards

All-or-nothing electrical relays (TC 94)

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

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

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

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

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

94/738/CD, IEC 61810-7-18 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-18: Thermal resistance of the coil, 09/02/2022

94/739/CD, IEC 61810-7-22 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-22: Limiting continuous current, 09/02/2022

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

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

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

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

100/3797/FDIS, IEC 62980 ED1: Parasitic communication protocol for radio-frequency wireless power transmission, 08/19/2022

100/3798/FDIS, IEC 63207 ED1: Measurement methods of blue light characteristics and related optical performance for visual display terminals, 08/19/2022

100/3799/FDIS, IEC 63254 ED1: Management and interfaces for WPT - Device-to-device wireless charging (D2DWC) for mobile devices with wireless power TX/RX module, 08/19/2022

100/3795/CD, IEC TS 61966-13 ED1: Multimedia systems and equipment - Colour measurement and management - Part 13: Measurement method of Display Colour Properties Depending on Observers (TA 2), 09/30/2022

Automatic controls for household use (TC 72)

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

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

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

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

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

46C/1228/CDV, IEC 61156-7 ED2: Multicore and symmetrical pair/quad cables for digital communications - Part 7: Symmetrical pair cables with transmission characteristics up to 1 200 MHz - Sectional specification for digital and analog communication cables, 09/30/2022

46C/1229/CDV, IEC 61156-8 ED2: Multicore and symmetrical pair/quad cables for digital communications - Part 8: Symmetrical pair/quad cables with transmission characteristics up to 1 200 MHz - Work area wiring - Sectional specification, 09/30/2022

46A/1578(F)/FDIS, IEC 61196-1-124 ED1: Coaxial Communication Cables Part 1-124: Electrical test methods - Test for coupling loss of radiating cable, 07/22/2022

46A/1583/FDIS, IEC 61196-4 ED4: Coaxial communication cables - Part 4: Sectional specification for radiating cables, 08/19/2022

46A/1584/FDIS, IEC 61196-4-1 ED2: Coaxial communication cables - Part 4-1: Blank detail specification for radiating cables, 08/19/2022

Electric cables (TC 20)

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

Electric road vehicles and electric industrial trucks (TC 69)

69/847/FDIS, IEC 63119-2 ED1: Information exchange for electric vehicle charging roaming service - Part 2: Use cases, 08/19/2022

Electric traction equipment (TC 9)

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

Electrical accessories (TC 23)

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

Electrical Energy Storage (EES) Systems (TC 120)

120/279/CD, IEC 62933-5-2 ED2: Electrical energy storage (EES) systems - Part 5-2: Safety requirements for grid-integrated EES systems - Electrochemical-based systems, 09/02/2022

120/280/NP, PNW TS 120-280 ED1: Unit parameters and testing methods - Performance assessment test after site operation, 08/05/2022

Electrical equipment in medical practice (TC 62)

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

62B/1285(F)/FDIS, IEC 60601-2-54 ED2: Medical electrical equipment - Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy, 08/05/2022

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

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

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

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

112/573/CD, IEC 61857-33 ED1: Electrical insulation systems - Procedures for thermal evaluation - Part 33: Multifactor evaluation with increased ageing factors at elevated temperature, 09/02/2022

Fibre optics (TC 86)

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

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

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

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

86C/1801/CDV, IEC 61291-2 ED5: Optical amplifiers - Part 2: Single channel applications - Performance specification template, 09/23/2022

86C/1800/CDV, IEC 62149-4 ED3: Fibre optic active components and devices - Performance standards - Part 4: 1 300 nm fibre optic transceivers for Gigabit Ethernet application, 09/23/2022

86B/4636/CD, IEC 63267-2-1 ED1: Fibre optic interconnecting devices and passive components - Connector optical interfaces for enhanced macro bend multimode fibres - Part 2-1: Connection parameters of physically contacting 50 m core diameter fibres non-angled, 09/23/2022

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

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

86C/1804/CDV, IEC 62148-22 ED1: Fibre optic active components and devices - Package and interface standards - Part 22: 25 Gbit/s directly modulated laser packages with temperature control unit, 09/30/2022

86C/1803/CDV, IEC 62343 ED3: Dynamic modules - Generic specification, 09/30/2022

Flat Panel Display Devices (TC 110)

110/1442/CD, IEC 63211-2-21 ED1: Durability test methods for electronic displays - Part 2-21: Environmental tests - Test methods for heat and humidity, 09/02/2022

110/1441/NP, PNW 110-1441 ED1: Durability test methods for electronic displays - Part 2-23: Environmental tests - Outdoor weathering, 09/02/2022

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

115/303/CD, IEC TR 63463 ED1: Life extension guidelines for HVDC converter stations, 09/30/2022

High-voltage testing techniques (TC 42)

42/407/CD, IEC 61083-4 ED1: Instruments and software used for measurements in high-voltage and high-current tests - Part 4: Requirements for software for tests with alternating and direct currents and voltages "Proposed Horizontal Standard", 09/30/2022

Hydraulic turbines (TC 4)

4/442/CD, IEC 63461 ED1: Pelton hydraulic turbines - Model acceptance tests, 09/23/2022

Industrial-process measurement and control (TC 65)

65E/907(F)/FDIS, IEC 62453-309 ED3: Field device tool (FDT) interface specification - Part 309: Communication profile integration - IEC 61784 CPF 9, 07/29/2022

65E/928/NP, PNW 65E-928 ED1: IEC 6xxxx DB - Common data concepts for smart manufacturing, 09/23/2022

Lamps and related equipment (TC 34)

34D/1664/CD, IEC 60598-1/FRAG16 ED10: Fragment 16 - Luminaires - Part 1: General requirements and tests, 09/23/2022

Lightning protection (TC 81)

81/697A/CDV, IEC 62561-5 ED3: Lightning protection system components (LPSC) - Part 5: Requirements for earth electrode inspection housings and earth electrode seals, 08/19/2022

Magnetic components and ferrite materials (TC 51)

51/1415/CD, IEC 62024-1 ED4: High frequency inductive components - Electrical characteristics and measuring methods - Part 1: Nanohenry range chip inductor, 09/30/2022

Maritime navigation and radiocommunication equipment and systems (TC 80)

80/1043/CD, IEC 61108-7 ED1: Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 7: Satellite Based Augmentation System (SBAS) L1 - Receiver Equipment - Performance standards, methods of testing and required test results, 08/26/2022

80/1042/CDV, IEC 62287-1/AMD1 ED3: Amendment 1 - Maritime navigation and radiocommunication equipment and systems - Class B shipborne equipment of the automatic identification system (AIS) - Part 1: Carrier-sense time division multiple access (CSTDMA) techniques, 09/23/2022

Measuring equipment for electromagnetic quantities (TC 85)

85/834/CDV, IEC 61557-13 ED2: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 13: Hand-held and hand-manipulated current clamps and sensors for measurement of leakage currents in electrical distribution systems, 09/23/2022

Measuring relays and protection equipment (TC 95)

95/496/NP, PNW 95-496 ED1: Measuring relays and protection equipment - Part 216-3: Digital Interface - Test specification for protection data communication of Line Current Differential Protection, 09/23/2022

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

113/686/CD, IEC TS 62565-5-1 ED1: Nanomanufacturing - Material specification - Part 5-1: Nanoporous activated carbon - Blank detail specification: Electrochemical capacitors, 09/23/2022

113/687/CD, IEC TS 62565-5-3 ED1: Nanomanufacturing - Material specifications - Part 5-3: Nanosized silicon anode material - Blank detail specification, 09/30/2022

113/689/CD, IEC TS 62607-6-29 ED1: Nanomanufacturing - Key control characteristics - Part 6-29: Graphene-based materials - Defectiveness: Raman spectroscopy, 09/30/2022

Nuclear instrumentation (TC 45)

45A/1434/FDIS, IEC/IEEE 62582-2 ED2: Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 2: Indenter measurements, 08/19/2022

45A/1435/FDIS, IEC/IEEE 62582-4 ED2: Nuclear power plants - Instrumentation and control important to safety - Electrical equipment condition monitoring methods - Part 4: Oxidation induction techniques, 08/19/2022

45/944/NP, PNW 45-944 ED1: Mobile Remotely Controlled Systems (MRCS) for nuclear and radiological applications - Specific Requirements for MRCS used for surveillance, 09/30/2022

Performance of household electrical appliances (TC 59)

59D/486/CDV, IEC 60456/AMD1 ED5: Amendment 1 - Clothes washing machines for household use - Methods for measuring the performance, 09/23/2022

59K/351/CDV, IEC 60350-1 ED3: Household electric cooking appliances - Part 1: Ranges, ovens, steam ovens and grills - Methods for measuring performance, 09/30/2022

59K/355/CD, IEC 60704-2-13 ED4: Household and similar electrical appliances - Test code for the determination of airborne acoustical noise - Part 2-13: Particular requirements for cooking fume extractors, 09/30/2022

59K/352/CDV, IEC 61591 ED3: Cooking fume extractors - Methods for measuring performance, 09/30/2022

Power system control and associated communications (TC 57)

57/2505/DTS, IEC TS 62351-100-4 ED1: Power systems management and associated information exchange - Data and communication security - Part 100-4: Cybersecurity conformance testing for IEC 62351-4, 09/23/2022

Rotating machinery (TC 2)

2/2104/CD, IEC 60034-15 ED4: Rotating electrical machines - Part 15: Impulse voltage withstand levels of form-wound stator coils for rotating a.c. machines, 09/30/2022

Safety of household and similar electrical appliances (TC 61)

61/6656/CD, IEC 60335-2-122 ED1: Household and similar electrical appliances - Safety - Particular requirements for commercial electric washing machines, 09/02/2022

Solar photovoltaic energy systems (TC 82)

82/2053/CDV, IEC 60904-2 ED4: Photovoltaic devices - Part 2: Requirements for photovoltaic reference devices, 09/23/2022

82/2053(F)/CDV, IEC 60904-2 ED4: Photovoltaic devices - Part 2: Requirements for photovoltaic reference devices, 09/23/2022

Solar thermal electric plants (TC 117)

117/166/FDIS, IEC 62862-4-1 ED1: Solar thermal electric plants - Part 4-1: General requirements for the design of solar power tower plants, 08/19/2022

Standard voltages, current ratings and frequencies (TC 8)

8B/120/DTR, IEC TR 62898-4 ED1: Microgrids: Part 4 - Use cases, 08/26/2022

8A/109/DTR, IEC TR 63401-1 ED1: Interconnecting inverter-based resources to low short circuit ratio AC networks, 08/26/2022

8B/121/CD, IEC TS 62898-3-2 ED1: Microgrids - Part 3-2: Technical requirements - Energy management systems, 09/30/2022

8B/122/CD, IEC TS 62898-3-4 ED1: Microgrids - Technical requirements - Monitoring and Control systems, 09/30/2022

Surface mounting technology (TC 91)

91/1802/CD, IEC 62878-2-603 ED1: Device embedding assembly technology - Part 2-603: Guideline for stacked electronic module - Test method of intra-module electrical connectivity, 09/23/2022

Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)

121B/157/CDV, IEC 62208 ED3: Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements, 09/23/2022

Other

SyCSmartCities/259/NP, PNW TS SYCSMARTCITIES-259 ED1: Systems Reference Deliverable (SRD) Smart city system Ontology - Part 1: Gap Analysis, 09/23/2022

JTC1-SC25/3102/CD, ISO/IEC 11801-6/AMD1 ED1: Amendment 1 - Information technology - Generic cabling for customer premises - Part 6: Distributed building services, 09/02/2022

JTC1-SC41/294/CD, ISO/IEC 30177 ED1: Internet of Things (IoT) - Underwater network management system (U-NMS) interworking, 09/02/2022

JTC1-SC41/295/CD, ISO/IEC 30180 ED1: Internet of Things (IoT) - Functional requirements to determine the status of self-quarantine through Internet of Things data interfaces, 09/02/2022

SyCAAL/270/NP, PNW TS SYCAAL-270 ED1: (SRD) Active Assisted Living (AAL) Use Case Standards Inventory and Mapping, 09/30/2022

Tools for live working (TC 78)

78/1397/FDIS, IEC 62819 ED1: Live working - Eye, face and head protectors against the effects of electric arc - Performance requirements and test methods, 08/12/2022

Ultrasonics (TC 87)

87/802/CD, IEC 62359 ED3: Ultrasonics - Field characterization - Test methods for the determination of thermal and mechanical indices and acoustic intensities related to medical diagnostic ultrasonic fields, 09/30/2022



Newly Published ISO & IEC Standards

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

ISO Standards

Acoustics (TC 43)

[ISO/PAS 1996-3:2022](#), Acoustics - Description, measurement and assessment of environmental noise - Part 3: Objective method for the measurement of prominence of impulsive sounds and for adjustment of L Aeq, \$73.00

Bamboo and rattan (TC 296)

[ISO 23067:2022](#), Grading system for rattan: Requirements and classification, \$73.00

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

[ISO 23945-1:2022](#), Test methods for sprayed concrete - Part 1: Flash setting accelerating admixtures - Setting time, \$73.00

Ergonomics (TC 159)

[ISO 11228-2:2007/Amd 1:2022](#), - Amendment 1: Ergonomics - Manual handling - Part 2: Pushing and pulling - Amendment 1, \$20.00

Fine ceramics (TC 206)

[ISO 20507:2022](#), Fine ceramics (advanced ceramics, advanced technical ceramics) - Vocabulary, \$48.00

Foundry machinery (TC 306)

[ISO 23062:2022](#), Foundry machinery - Safety requirements for molding and coremaking machinery and associated equipment, \$200.00

Gas turbines (TC 192)

[ISO 21789:2022](#), Gas turbine applications - Safety, \$250.00

Geographic information/Geomatics (TC 211)

[ISO 19105:2022](#), Geographic information - Conformance and testing, \$175.00

Health Informatics (TC 215)

[ISO 4454:2022](#), Genomics informatics - Phenopackets: A format for phenotypic data exchange, \$250.00

Internal combustion engines (TC 70)

[ISO 7967-12:2022](#), Reciprocating internal combustion engines - Vocabulary of components and systems - Part 12: Exhaust emission control systems, \$48.00

Light metals and their alloys (TC 79)

[ISO 6362-5:2022](#), Wrought aluminium and aluminium alloys - Extruded rods/bars, tubes and profiles - Part 5: Tolerances on form and dimensions for round, square and hexagonal bars, \$73.00

Nuclear energy (TC 85)

[ISO 20041-1:2022](#), Tritium and carbon-14 activity in gaseous effluents and gas discharges of nuclear installations - Part 1: Sampling of tritium and carbon-14, \$200.00

Paints and varnishes (TC 35)

[ISO 11997-3:2022](#), Paints and varnishes - Determination of resistance to cyclic corrosion conditions - Part 3: Testing of coating systems on materials and components in automotive construction, \$149.00

Road vehicles (TC 22)

[ISO 13063-1:2022](#), Electrically propelled mopeds and motorcycles - Safety specifications - Part 1: On-board rechargeable energy storage system (RESS), \$73.00

[ISO 13063-2:2022](#), Electrically propelled mopeds and motorcycles - Safety specifications - Part 2: Vehicle operational safety, \$73.00

[ISO 13063-3:2022](#), Electrically propelled mopeds and motorcycles - Safety specifications - Part 3: Electrical safety, \$149.00

Ships and marine technology (TC 8)

[ISO 24316:2022](#), Ships and marine technology - Design and test requirements for steel doors using electrical trace heating, \$111.00

Terminology (principles and coordination) (TC 37)

[ISO 12620-1:2022](#), Management of terminology resources - Data categories - Part 1: Specifications, \$73.00

[ISO 12620-2:2022](#), Management of terminology resources - Data categories - Part 2: Repositories, \$73.00

Textiles (TC 38)

[ISO 4333:2022](#), Textiles - Determination of reduction activity of specific proteins derived from pollen, mite and other sources on textile products, \$149.00

Traditional Chinese medicine (TC 249)

[ISO 23963-1:2022](#), Traditional Chinese medicine - Requirements for process traceability systems in Chinese materia medica and decoction pieces - Part 1: Components, \$73.00

Water re-use (TC 282)

[ISO 20468-8:2022](#), Guidelines for performance evaluation of treatment technologies for water reuse systems - Part 8: Evaluation of treatment systems based on life cycle cost, \$111.00

ISO Technical Reports**Implants for surgery (TC 150)**

[ISO/TR 12417-2:2022](#), Cardiovascular implants and extracorporeal systems - Vascular device-drug combination products - Part 2: Local regulatory information, \$175.00

Sustainable development in communities (TC 268)

[ISO/TR 6030:2022](#), Smart community infrastructures - Disaster risk reduction - Survey results and gap analysis, \$200.00

ISO Technical Specifications**Equipment for fire protection and fire fighting (TC 21)**

[ISO/TS 7240-30:2022](#), Fire detection and alarm systems - Part 30: Design, installation, commissioning and service of video fire detector systems, \$111.00

Health Informatics (TC 215)

[ISO/TS 5118:2022](#), Health informatics - Categorical structure of representation for evaluation of clinical practice guidelines of traditional Chinese medicine, \$73.00

Solid Recovered Fuels (TC 300)

[ISO/TS 21911-2:2022](#), Solid recovered fuels - Determination of self-heating - Part 2: Basket heating tests, \$175.00

ISO/IEC JTC 1, Information Technology

[ISO/IEC 27099:2022](#), Information technology - Public key infrastructure - Practices and policy framework, \$250.00

[ISO/IEC/IEEE 8802-1CS:2022](#), Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Part 1CS: Link-local registration protocol, \$250.00

[ISO/IEC/IEEE 8802-3:2021/Amd 10:2022](#), - Amendment 10: Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Part 3: Standard for Ethernet - Amendment 10: Maintenance #14: Isolation, \$250.00

[ISO/IEC/IEEE 8802-3:2021/Amd 11:2022](#), - Amendment 11: Telecommunications and exchange between information technology systems - Requirements for local and metropolitan area networks - Part 3: Standard for Ethernet - Amendment 11: Physical layers and management parameters for 100 Gb/s and 400 Gb/s operation over single-mode fiber at 100 Gb/s per wavelength, \$225.00

[ISO/IEC TS 25052-1:2022](#), Systems and software engineering - Systems and software Quality Requirements and Evaluation (SQuaRE): cloud services - Part 1: Quality model, \$111.00

IEC Standards**Electric welding (TC 26)**

[IEC 60974-12 Ed. 4.0 b:2022](#), Arc welding equipment - Part 12: Coupling devices for welding cables, \$89.00

[S+ IEC 60974-12 Ed. 4.0 en:2022 \(Redline version\)](#), Arc welding equipment - Part 12: Coupling devices for welding cables, \$115.00

Electrostatics (TC 101)

[IEC 61340-2-1 Amd.1 Ed. 2.0 b:2022](#), Amendment 1 - Electrostatics - Part 2-1: Measurement methods - Ability of materials and products to dissipate static electric charge, \$25.00

[IEC 61340-2-1 Ed. 2.1 b:2022](#), Electrostatics - Part 2-1: Measurement methods - Ability of materials and products to dissipate static electric charge, \$266.00

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

[IEC 62604-1 Ed. 2.0 b:2022](#), Surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers of assessed quality - Part 1: Generic specification, \$259.00

[S+ IEC 62604-1 Ed. 2.0 en:2022 \(Redline version\)](#), Surface acoustic wave (SAW) and bulk acoustic wave (BAW) duplexers of assessed quality - Part 1: Generic specification, \$338.00

Solar photovoltaic energy systems (TC 82)

[IEC 62759-1 Ed. 2.0 b:2022](#), Photovoltaic (PV) modules - Transportation testing - Part 1: Transportation and shipping of module package units, \$133.00

[IEC 62759-1 Ed. 2.0 en:2022 CMV](#), Photovoltaic (PV) modules - Transportation testing - Part 1: Transportation and shipping of module package units, \$227.00

Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)

[IEC 61439-7 Ed. 2.0 b:2022](#), Low-voltage switchgear and controlgear assemblies - Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations, \$259.00

[S+ IEC 61439-7 Ed. 2.0 en:2022 \(Redline version\)](#), Low-voltage switchgear and controlgear assemblies - Part 7: Assemblies for specific applications such as marinas, camping sites, market squares, electric vehicle charging stations, \$338.00

IEC Technical Specifications

Power system control and associated communications (TC 57)

[IEC/TS 61850-1-2 Amd.1 Ed. 1.0 en:2022](#), Amendment 1 - Communication networks and systems for power utility automation - Part 1-2: Guideline on extending IEC 61850, \$51.00

[IEC/TS 61850-1-2 Ed. 1.1 en:2022](#), Communication networks and systems for power utility automation - Part 1-2: Guideline on extending IEC 61850, \$443.00

International Organization for Standardization (ISO)

Call for U.S. TAG Administrator

ISO/TC 324 - Sharing Economy

Comment Deadline: July 15, 2022

ANSI directly administers the U.S. TAG Administrator for ISO/TC 324 with the support of the Organization for the Advancement of Structured Information Standards (OASIS). OASIS has advised ANSI to relinquish its role as U.S. TAG Administrator for this committee.

ISO/TC 324 operates under the following scope:

Standardization in the field of sharing economy.

Excluded: Technical aspects of information security or risk management guidelines already covered by ISO/IEC JTC 1/SC27 and ISO/TC 262, respectively.

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

Establishment of ISO Technical Committee

ISO/IEC 341 - Heat Supply Network

Comment Deadline: July 15, 2022

A new ISO Technical Committee, ISO/TC 341 – *Heat supply network*, has been formed. The Secretariat has been assigned to China (SAC).

ISO/TC 341 operates under the following scope:

Standardization in the field of HSN including design, construction, integration, control and regulation based on heating and cooling supply pipeline system.

Exclude: Standardization of heat sources and space heating systems covered by ISO/TC 11 Boilers and pressure vessels, ISO/TC 86 Refrigeration and air-conditioning, ISO/TC 163 Thermal performance and energy use in the built environment, ISO/TC 138 Plastics pipes, fittings and valves for the transport of fluids, ISO/TC 205 Building environment design, ISO/TC 267 Facility management, ISO/TC 268 Sustainable cities and communities, ISO/TC 301 Energy management and energy savings, and IEC SyC Smart Cities, IEC SyC Smart Energy.

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

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, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations notified by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to notify proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat issues and makes available these notifications. The purpose of the notification requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

The USA Inquiry Point for the WTO TBT Agreement is located at the National Institute of Standards and Technology (NIST) in the Standards Coordination Office (SCO). The Inquiry Point distributes the notified proposed foreign technical regulations (notifications) and makes the associated full-texts available to U.S. stakeholders via its online service, Notify U.S. Interested U.S. parties can register with Notify U.S. to receive e-mail alerts when notifications are added from countries and industry sectors of interest to them. To register for Notify U.S., please visit: <http://www.nist.gov/notifyus/>.

The USA WTO TBT Inquiry Point is the official channel for distributing U.S. comments to the network of WTO TBT Enquiry Points around the world. U.S. business contacts interested in commenting on the notifications are asked to review the comment guidance available on Notify U.S. at: <https://tsapps.nist.gov/notifyus/data/guidance/guidance.cfm> prior to submitting comments.

For further information about the USA TBT Inquiry Point, please visit: <https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point> Contact the USA TBT Inquiry Point at (301) 975-2918; F: (301) 926-1559; E: usatbtep@nist.gov or notifyus@nist.gov.



**BSR/ASHRAE Addendum k
to ANSI/ASHRAE Standard 62.2-2019**

Public Review Draft

**Proposed Addendum k to
Standard 62.2-2019, Ventilation and
Acceptable Indoor Air Quality in
Residential Buildings**

**First Public Review (June 2022)
(Draft shows Proposed Changes to Current Standard)**

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

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

© 2022 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 180 Technology Parkway NW, Peachtree Corners, GA 30092. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

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

BSR/ASHRAE Addendum k to ANSI/ASHRAE Standard 62.2-2019, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*
 First Public Review Draft

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

FOREWORD

This proposed addendum revises the purpose and scope of the standard. Revision of the purpose clarifies that the standard may address any measure that affects acceptable indoor air quality in individual dwelling units. Confining the purpose to individual dwelling units provides better alignment with the existing scope. The scope has been modified to remove the reference to “residential occupancies,” which was believed to be redundant to the reference to dwelling units. Additionally, the scope has been revised to permit the standard to address filtration of outdoor air.

[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 k to 62.2-2019

Revise Sections 1 and 3 as shown below.

1. PURPOSE

This standard defines the roles and minimum requirements for mechanical and natural ventilation systems and ~~the building envelope~~ other measures intended to provide acceptable indoor air quality (IAQ) in individual dwelling units ~~residential buildings~~.

2. SCOPE

This standard applies to dwelling units in residential occupancies in which the occupants are nontransient.

2.1 This standard considers chemical, physical, and biological contaminants that can affect air quality. Thermal comfort requirements are not included in this standard.

Informative Note: See ANSI/ASHRAE Standard 55-~~2020~~2017, *Thermal Environmental Conditions for Human Occupancy*, for thermal comfort requirements.

2.2 While acceptable IAQ is the goal of this standard, it will not necessarily be achieved even if all requirements are met

- a. because of the diversity of sources and contaminants in indoor air and the range of susceptibility in the population;
- b. because of the many other factors that may affect occupant perception and acceptance of IAQ, such as air temperature, humidity, noise, lighting, and psychological stress;

BSR/ASHRAE Addendum k to ANSI/ASHRAE Standard 62.2-2019, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*

First Public Review Draft

- c. if the ~~ambient~~ ventilation air is unacceptable and this air is brought into the ~~building~~ dwelling unit without first being cleaned (~~ambient outdoor air cleaning is not required by this standard~~);
- d. if the system or systems are not operated and maintained as designed; or
- e. when high-polluting events occur.

Revise Informative Appendix D as shown below.

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

**INFORMATIVE APPENDIX D
INFORMATIVE REFERENCES**

Reference	Title	Section
ASHRAE 1791 Tullie Circle, N.E. Atlanta, GA 30329 <u>180 Technology Parkway NW Peachtree Corner, GA 30092</u> (800) 527-4723; www.ashrae.org		
ANSI/ASHRAE Standard 55 (2020 2017)	Thermal Environmental Conditions for Human Occupancy	2.1



**BSR/ASHRAE Addendum *h*
to ANSI/ASHRAE Standard 90.4-2019**

Public Review Draft

**Proposed Addendum *h* to
Standard 90.4-2019, *Energy Standard
for Data Centers***

**First Public Review (July, 2022)
(Draft Shows Proposed Changes to Current Standard)**

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

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

© June 2018 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 180 Technology Pkwy NW, Peachtree Corners, GA 30092. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

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

BSR/ASHRAE Addendum *h* to ANSI/ASHRAE Standard 90.4-2019, *Energy Standard for Data Centers* First Public Review Draft

© May 19, 2022 ASHRAE

This draft is covered under ASHRAE copyright. The appearance of any technical data or editorial material in this publication document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, design or the like and ASHRAE expressly disclaims such. Permission to republish or redistribute must be obtained from the MOS.

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

Foreword

UPSs have become more efficient since the 2016 publication of this standard and their efficiency curves have become flatter over the full load range. The Committee believes it is the responsibility of any Standard to encourage the use of equipment meeting the improved performance standards available from manufacturers today. This has resulted in increased efficiency requirements for the UPS segment of the ELC.

Transformers have also become more efficient as a result of the 2016 publication of Transformer Efficiency Standards by the US Department of Energy (DOE). These standards require compliance only at 35% loading, which is below the design levels of most data center Power Distribution Units (PDUs). PDU manufacturers have recognized this and provide transformers in their equipment that not only meet or exceed the DOE 35% load efficiency minimums, but are also more efficient than standard building transformers at higher load levels. The Committee believes it is our responsibility to encourage the use of equipment that not only meets legal mandates, but also performs well under relevant conditions beyond those that federal authorities prescribe. We have, therefore, adjusted the minimum efficiency (maximum loss) requirements for the ITE Distribution Segment of the ELC to correspond to the loading levels more common to Data Centers (80% for non-redundant, and 40% - 45% for redundant systems). The result is increased ITE Distribution Segment efficiency requirements at load levels above and below the Federally prescribed 35% level as well as adherence to the maximum loss values prescribed in Electrical Codes for Feeders and Branch Circuit Conductors.

The MLC has always required calculation of mechanical loads at 25%, 50%, 75%, and 100% of the ITE Design Load. The ELC required calculations at only 25%, 50%, and 100% which related to Fully Redundant, Non-redundant, or minimally redundant UPS designs. In order to parallel the MLC, the ELC has now been adjusted to require compliance at all four load levels. This also eliminates the need for distinctions among UPS redundancy configurations. The ELC Maximum Loss (Minimum Efficiency) tables have been revised to reflect these changes.

Section 8.2.2 has been removed because of more stringent electrical distribution efficiency requirements in data centers. As a result, the alternative method is no longer available in 90.4.

Lastly, the Incoming Service Segment of the ELC has been eliminated from the ELC calculation. A thorough examination of multiple incoming service designs has revealed that too many combinations of utility transformers (utility or privately owned), voltages, and feeder designs are now being used in data centers for tables to realistically cover all possibilities. Further, the two major elements of the Incoming Service Segment (transformers and feeders) are all covered by Federal transformer regulations and Electrical Code dictums. Therefore, the Standard now simply

BSR/ASHRAE Addendum *h* to ANSI/ASHRAE Standard 90.4-2019, *Energy Standard for Data Centers* First Public Review Draft

requires adherence to those standards and regulations and restricts the ELC calculation to the UPS and Distribution segments where the Standard can realistically require designs meeting efficiency levels that can be reasonably achieved with technologies available today.

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

Addendum *h* to Standard 90.4-2019

Revise Electrical Loss Component (ELC) to reflect current UPS types and efficiencies as well as DOE transformer efficiency standards, and update definitions to match.

3.2 Definitions

Design electrical loss component (design ELC): the *design electrical loss component* for the data center or data center addition shall be the combined losses (or the losses calculated from efficiencies) of ~~three~~ two segments of the electrical chain: ~~incoming electrical service segment~~, UPS segment and ITE distribution segment. The *design ELC* shall be calculated using the ~~worst case~~ highest loss (lowest efficiency) parts of each segment of the power chain in order to demonstrate a minimum level of electrically efficient design. The *design ELC* does not, and is not intended to, integrate all electrical losses in the facility.

Incoming electrical service segment: the *incoming electrical service segment* ~~of the design ELC~~ shall include all elements of the electrical power chain ~~delivering power~~ prior to the UPS segment, beginning with the load side of the *incoming electrical service point* supplying the building, continuing through all other intervening transformers, wiring, and switchgear, and ending at the *manufacturer-provided input terminals* of the UPS or its equivalent location in the circuit. ~~Although the mechanical equipment is normally powered from the same incoming electrical service point, its path and losses are not part of the ELC and, therefore, not part of the incoming electrical service segment calculation.~~

ITE distribution segment: the segment of the *design ELC* that includes all elements of the power chain, beginning at the *manufacturer-provided output-load terminals* of the UPS segment, extending through all transformers, wiring, and switchgear; and continuing to and including the receptacles to which ITE or power distribution strips for connection of multipole pieces of ITE to a circuit are intended to be connected. The *ITE distribution segment* shall not include the actual ITE, its power cords, or any accessory part of the ITE. In cases where power is to be hardwired into self-contained, *manufacturer configured cabinets*, the calculation path shall terminate at the power input terminals provided by the manufacture within that equipment. The *ITE distribution segment* used to calculate the *design ELC* shall be the highest loss (lowest efficiency) path. This is normally the longest path that also contains the largest numbers of loss-producing devices such as transformers, ~~switchgear and/or panelboards~~.

uninterruptible power supply (UPS): (also referred to as Uninterruptible Power System), a system primarily intended to continue delivering power to the critical load after a utility power interruption. It may also serve to deliver stable power ~~to the critical load~~ when anomalies occur in the incoming power source, which may be the utility or an alternate power source such as a generator. UPS systems are defined by three internationally recognized classifications:

BSR/ASHRAE Addendum *h* to ANSI/ASHRAE Standard 90.4-2019, *Energy Standard for Data Centers* First Public Review Draft

VFD: Voltage and Frequency Dependent systems, also known as “Off-Line” or “Standby” UPS systems which are off-line until a power interruption occurs and then rapidly switch into the circuit to maintain power to the critical load.

VI: Voltage Independent systems, also known as “Line Interactive” which are similar to VFD systems in that they rapidly switch backup power to the critical load when a power interruption occurs. However, a VI UPS continually passes incoming power to the output while also using the stored energy source to filter incoming power, suppress voltage spikes and provide a degree of voltage regulation.

VFI: Voltage and Frequency Independent systems, also known as “Double Conversion,” “Dual Conversion” or “Full Time” UPS which use incoming utility or generator power solely to drive an electronic or mechanical mechanism that re-generates power and delivers it to the critical load without the need to switch anything into or out of the circuit. This results in total isolation of the critical load from incoming power and no break of any duration in the delivered power.

The majority of modern UPS systems are of two fundamental types. Two physical types of UPS systems are in general usage:

(a) “static,” in which incoming alternating current (AC) power is rectified to direct current (DC) and then inverted back to AC, with batteries in the DC portion that assume the load when incoming power fails or anomalies occur, and Battery UPS, in which incoming AC power maintains battery charge and an AC to DC converter, known as an “inverter” delivers power to the critical load on either a continuous or non-continuous basis.

(b) “rotary,” Rotary UPS, in which incoming AC power drives a propulsion unit that turns a generating device, with a heavy flywheel storing kinetic energy that continues to turn the generating portion when incoming power fails or anomalies occur. Batteries are also sometimes used to supplement the kinetic energy storage to extend “ride-through” time. Rotary UPS systems may also include a driven engine for emergency backup (commonly referred to as a Diesel Rotary UPS or “DRUPS”, regardless of fuel type), which is decoupled from the rotary UPS components during normal operation and is not included in efficiency calculations.

Either type of UPS can be made up of one or more modules running in parallel to add capacity, *redundancy*, or both. DC UPS systems which eliminate the inverter and deliver DC power to the *ITE* are also used.

...

~~**8.2.2 Electrical Distribution systems Alternative for Section 8.4.** Electrical *distribution systems* shall comply either~~

8.4.1 Electrical Distribution Systems for Mechanical Loads. The electrical *distribution systems* serving mechanical loads shall be designed with ~~pathway~~ transformers complying with DOE (US Department of Energy) 2016 Efficiency Levels or comparative international standards, and conductor losses not exceeding ~~2%~~ 3%. However, these *losses* shall not be incorporated into the design ELC calculations set forth in Section 8 of this standard.

...

8.4.1.4 Incoming Electrical Service Segment. ~~A segment loss value shall be calculated for the incoming electrical service segment of the design ELC. This value shall be based on all equipment efficiencies and resulting losses in this segment at the design load for all down-stream equipment served. The Incoming Electrical Service Segment is not part of the ELC calculation. However, all components in the incoming power chain shall meet or exceed published US Department of Energy (DOE) minimum efficiencies for transformers or the equivalent international standards, and US National Electrical Code (NEC) maximum losses for service conductors or the equivalent International Electrical Codes.~~

BSR/ASHRAE Addendum *h* to ANSI/ASHRAE Standard 90.4-2019, *Energy Standard for Data Centers* First Public Review Draft

Exception to 8.4.1.4: Emergency or stand-by power systems are not considered a part of the *incoming electrical service segment*, with the exception of individual elements such as associated transfer switches, transformers, or other devices that are also included between the *design ELC demarcation* and the UPS. DRUPS systems shall be calculated as part of the *UPS Segment* with the engine element decoupled.

8.4.1.5 UPS Segment Efficiency. Efficiency and resulting loss through the UPS segment of the ELC shall be calculated at both full and partial loads, ~~depending on configuration,~~ as follows:

- a. ~~For N , $N+1$, or $N+n$ UPS configurations,~~ losses shall be based on the *manufacturer's stated efficiencies* at 100%, 75%, 50% and 25% of the *UPS operational design load*.
- b. For $2N$, $2N+1$, $2(N+1)$ or other dual-fed UPS configurations, ~~the systems are each intended to normally operate at no more than half capacity.. Therefore, the UPS losses shall be based on the manufacturer's started efficiencies at 50% and 25% of the UPS operational design load. Where UPS systems are identical, only one of the systems shall be used in the calculation. Where UPS systems are not identical, both systems shall be calculated, and the system with the lowest efficiency shall be used to compute the UPS segment of the design ELC.~~
- c. Where a UPS has more than one mode of operation (e.g., normal and UPS economy modes), the mode used in these calculations shall be the same as the mode used as the Basis of Design and shall be so designated on the approved *construction documents*.
- d. Where nonrated UPS systems are used, the *efficiencies* and *losses* shall be as published or otherwise provided in writing by the *manufacturer*.

...

8.4.1.7 Combined UPS and Pathway Loss Calculations ELC Calculation. The *design ELC* shall be calculated as the result of the calculated ~~*incoming electrical service segment loss*~~, the *UPS segment loss*, and the *ITE distribution segment losses* shall be separately reported at each of four (4) load levels: 100%, 75%, 50% and 25% of the *ITE Design Load*. The electrical system shall meet or exceed the ELC minimum requirements at each of the ITE Design Load levels.

Informative Note: If the ELC cannot be met at one or more load levels, see Chapter 11 "Tradeoff Method" for directions on meeting the Standard requirements by designing a more efficient mechanical system.

Informative Note: See Informative Appendix C, Section C1 "Examples – Design ELC Calculations," for method of combining ELC segment values.

8.4.1.8 Alternate Designs. In the event that a UPS is not used in the design, the incoming and distribution segments shall meet at the point(s) where a UPS would logically be inserted under normal operating conditions. Where another power conditioning device, such as a rectifier, voltage regulator, or harmonic neutralizing transformer, is used either in place of at the UPS or in combination with the UPS, or where a Diesel Rotary UPS (DRUPS) system is used, the *efficiency* and *loss* for that device shall be included in the UPS segment *efficiency* and *loss* calculation as if it is taking the place of, or is part of, the UPS used in the efficiency calculation in the same manner as that defined for a UPS. In the case of a DRUPS system, this calculation shall be performed with the engine decoupled. DRUPS operation under engine-generator power shall be considered a short-term emergency condition and is excluded from the requirements of the Standard in the same manner as are other on-site emergency of standby generators (See Exception under 8.4.1.4). Where no power conditioning device is utilized, the system shall meet the Distribution Component requirements of the ELC.

...

BSR/ASHRAE Addendum *h* to ANSI/ASHRAE Standard 90.4-2019, *Energy Standard for Data Centers* First Public Review Draft

Table 8.5 Maximum Design Electrical Loss Component (Design ELC) and ELC Segments Systems (IT Design Load <100 kW)^a

<i>UPS Redundancy Configuration</i>	Single-Feed UPS (<i>N, N+1</i>, etc.) or No UPS^b Active Dual-Feed UPS (<i>2N, 2N+1</i>, etc.)^e (See Informative Note “a”)			
Calculation Percentage	100% of IT design load segment ELC	50% <u>75%</u> of IT design load segment ELC	50% of IT design load segment ELC	25% of IT design load segment ELC
Segments of ELC and Overall ELC	<i>Loss / efficiency</i>	<i>Loss / efficiency</i>	<i>Loss / efficiency</i>	<i>Loss / efficiency</i>
<i>Incoming Electrical Service Segment</i>	15.0% / 85.0%	11.0% / 89.0%	11.0% / 89.0%	10.0% / 90.0%
<i>UPS Segment</i>	8.0% / 92.0%	10.0% / 90.0% <u>8.5% / 91.5%</u>	10.0% / 90.0% <u>8.5% / 91.5%</u>	13.5% / 86.5% <u>9.5% / 90.5%</u>
<i>ITE Distribution Segment</i>	6.0% / 94.0% <u>6.7% / 93.3%</u>	4.0% / 96.0% <u>5.0% / 95.0%</u>	4.0% / 96.0% <u>4.5% / 95.5%</u>	3.0% / 97.0% <u>2.9% / 97.1%</u>
Electrical Loss / Efficiency Total	26.5% / 73.5% <u>14.2% / 85.8%</u>	23.1% / 76.9% <u>13.1% / 86.9%</u>	23.1% / 76.9% <u>12.6% / 87.4%</u>	24.5% / 75.5% <u>12.1% / 87.9%</u>
ELC	0.265 <u>0.142</u>	0.231 <u>0.131</u>	0.231 <u>0.126</u>	0.245 <u>0.121</u>

- a. *Informative Note:* Example calculations are shown in Informative Appendix C.
- b. *Informative Note:* These columns apply to electrical configurations resulting in a single output feed from the UPS irrespective of the number of UPS modules that may be paralleled prior to the output feed or the number of branches or subfeeders into which that output feeder may be divided.
- c. *Informative Note:* These columns apply to electrical configurations made up of two distinct and electrically separated UPS systems resulting in two distinct and electrically separate output feeds, either of which is capable of independently supporting the total design load. Systems that meet these criteria may be made up of any number of UPS modules that are paralleled prior to each output feed. Crossties and/or transfer switches downstream of the independent feeds shall not continually tie the two output sections together.
- d.

Table 8.6 Maximum Design Electrical Loss Component (Design ELC) and ELC Segments Systems (IT Design Load ≥ 100 kW)^a

<i>UPS Redundancy Configuration</i>	Single-Feed UPS (<i>N, N+1</i>, etc.) or No UPS^b Active Dual-Feed UPS (<i>2N, 2N+1</i>, etc.)^e (See Informative Note “a”)			
Calculation Percentage	100% of IT design load segment ELC	50% <u>75%</u> of IT design load segment ELC	50% of IT design load segment ELC	25% of IT design load segment ELC
Segments of ELC and Overall ELC	<i>Loss / efficiency</i>	<i>Loss / efficiency</i>	<i>Loss / efficiency</i>	<i>Loss / efficiency</i>
<i>Incoming Electrical Service Segment</i>	15.0% / 85.0%	11.0% / 89.0%	11.0% / 89.0%	10.0% / 90.0%
<i>UPS Segment</i>	6.5% / 93.5% <u>5.5% / 94.5%</u>	8.0% / 92.0% <u>5.5% / 94.5%</u>	8.0% / 92.0% <u>6.0% / 94.0%</u>	11.0% / 89.0% <u>7.0% / 93.0%</u>
<i>ITE Distribution System</i>	5.0% / 95.0% <u>5.8% / 94.2%</u>	4.0% / 96.0% <u>4.6% / 95.4%</u>	4.0% / 96.0% <u>3.6% / 96.4%</u>	3.0% / 97.0% <u>2.5% / 97.5%</u>
Electrical Loss / Efficiency Total	24.5% / 75.5% <u>11.0% / 89.0%</u>	18.9% / 81.1% <u>9.8% / 90.2%</u>	18.9% / 81.1% <u>9.4% / 90.6%</u>	22.3% / 77.7% <u>9.3% / 90.7%</u>
ELC	0.245 <u>0.110</u>	0.189 <u>0.098</u>	0.189 <u>0.094</u>	0.223 <u>0.093</u>

- a. *Informative Note:* Example calculations are shown in Informative Appendix C.
- b. *Informative Note:* These columns apply to electrical configurations resulting in a single output feed from the UPS, irrespective of the number of UPS modules that may be paralleled prior to the output feed, or the number of branches or subfeeders into which that output feeder may be divided.
- c. *Informative Note:* These columns apply to electrical configurations made up of two distinct and electrically separated UPS systems resulting in two distinct and electrically separate output feeds, either of which is capable of independently supporting the total design load. Systems that meet these criteria may be made up of any number of UPS modules that are paralleled prior to each output feed. Crossties and/or transfer switches downstream of the independent feeds shall not continually tie the two output sections together.

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

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

NSF/ANSI Standard
for Plastics —

Plastics Piping System Components and Related Materials

-
-
-
-
-
-

5 Physical and performance requirements

5.7 Chlorine resistance – Oxidative equivalency requirements

For a material that already has a chlorine resistance classification (denoted original material), oxidative equivalency is required on pipe or material comprised of a different color from the original material or when the production site differs from that of the original material. When the pipe or material production site differs from that of the original material, a minimum of one color shall be selected from the production site being assessed.

This requirement does not apply to changes in color of an external, coextruded polymer layer which is separate and distinct from the pipe polymer matrix.

Qualified pipe shall meet the minimum requirements of Sections 5.7.1 and 5.7.2.

5.7.1 Solid wall pipe with optional inner or outer polymeric layer

- three data points at one hoop stress level at one of the temperature conditions as for the original data set;
- two data points at a second hoop stress level at least 80 psi lower than the first stress level and at the same temperature conditions as for the first stress level;
- the 95% lower prediction limit (LPL) shall be calculated for the original material data at these temperatures / stress conditions; and
- all five data points (failure times) shall meet or exceed the LPL for that condition.

Tracking number 14i119r2
© 2022 NSF

Revision to NSF/ANSI 14-2021
Issue 119, Revision 1 (June 2022)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

5.7.2 Pipe with middle polymeric layer

- five data points at one hoop stress level at the highest temperature conditions as for the original data set;
- the 95% LPL shall be calculated for the original material data at these temperatures / stress conditions; and
- all five data points (failure times) shall meet or exceed the LPL for that condition.

The hoop stress level shall be chosen so that there are no mixed mode failures. In the occurrence of such failures, the testing shall be repeated at a lower stress that would generate brittle failures.

5.7.3 Pipe with middle metal layer

- two data points at the highest pressure/temperature conditions (for example 115 °C/60 psi) as for the solid wall data set;
- two data points at a pressure condition higher than above but at the next lower temperature condition (for example 105 °C/80 psi) as for the solid wall data set. Pressures shall be separated by at least 20 psi; and
- all four data points shall meet or exceed the expected failure time (EFT) of the inner layer at each of the conditions.

-
-
-

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

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

NSF/ANSI Standard
For Wastewater Technology –

Residential Wastewater Treatment Systems

.
.
.

8.2 Testing and evaluation conditions, hydraulic loading, and schedules

8.2.1 Influent wastewater characteristics

~~The 30-d average BOD₅ concentration of the wastewater delivered to the system shall be between 100 mg/L and 300 mg/L.~~

~~The 30-d average TSS concentration of the wastewater delivered to the system shall be between 100 mg/L and 350 mg/L.~~

~~The average wastewater alkalinity of the wastewater delivered to the system over the course of the testing shall be greater than 175 mg/L as CaCO₃ (alkalinity may be adjusted if inadequate). Unless requested by the manufacturer, the raw influent shall be supplemented with sodium bicarbonate if the wastewater is found to be deficient in alkalinity.~~

The 30-d average wastewater characteristics delivered to the system over the course of the testing shall fall within:

- BOD₅: 100 to 300 mg/L;
- TSS: 100 to 350 mg/L;
- alkalinity: ≥ 175 mg/L as CaCO₃

The raw influent shall be supplemented with sodium bicarbonate to meet the required influent alkalinity.

.
.
.

8.3.2 Design loading

During periods of design loading, ~~daily composite effluent~~ samples shall be collected and analyzed ~~5-d/week~~ according to the following schedule:

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

Parameter	Collection frequency	Sample type	Influent	Effluent
CBOD ₅	5 days per week	24-hour composite	NA	x
BOD ₅	5 days per week	24-hour composite	x	NA
TSS	5 days per week	24-hour composite	x	x
pH	5 times per week	Grab	x	x
Alkalinity	1 day per week	24-hour composite	x	NA
Color, odor, oily film and foam	1 day first 16 weeks 1 day last 2.5 weeks	24-hour composite	NA	x

8.3.3 Stress loading

During stress loading, ~~influent and effluent 24-h composite~~ samples shall be collected on the day each stress condition is initiated. 24 h after the completion of wash day (WD), working-parent (WP), and vacation (V) stresses, ~~influent and effluent 24-h composite samples shall be collected for six consecutive days.~~ and 48 h after the completion of the power / equipment failure (PF) stress, ~~influent and effluent 24-h composite samples shall be collected for five consecutive days.~~ according to the following schedule:

Parameter	Collection frequency	Sample type	Influent	Effluent
CBOD ₅ (WD, WP, V)	6 consecutive days	24-hour composite	NA	x
CBOD ₅ (PF)	5 consecutive days	24-hour composite	NA	x
BOD ₅ (WD, WP, V)	6 consecutive days	24-hour composite	x	NA
BOD ₅ (PF)	5 consecutive days	24-hour composite	x	NA
TSS (WD, WP, V)	6 consecutive days	24-hour composite	x	x
TSS (PF)	5 consecutive days	24-hour composite	x	x
pH (WD, WP, V)	6 consecutive days	Grab	x	x
pH (PF)	5 day per week	Grab	x	x
Alkalinity	1 day per stress recovery	24-hour composite	x	NA
Color, odor, oily film and foam	1 day during stress sampling	24-hour composite	NA	x

Tracking #40i51r1 et al
© 2022 NSF

Revision to NSF/ANSI 40-2020
Draft 1, Issue 51 (June 2022)

Multiple revisions to NSF/ANSI 40 (40i51r1) NSF/ANSI 245 (245i32r1) and NSF/ANSI 350 (350i73r1)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

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

NSF/ANSI Standard
For Wastewater Technology –

Residential Wastewater Treatment Systems

1 General

1.1 Purpose

The purpose of this standard is to establish minimum materials, design and construction, and performance requirements for residential wastewater treatment systems. This standard also specifies the minimum literature that manufacturers shall supply to authorized representatives and owners, as well as the minimum service-related obligations that manufacturers shall extend to owners.

1.2 Scope

This standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1,514 LPD (400 GPD) and 5,678 LPD (1,500 GPD). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this standard.

System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

1.3 Alternate materials, design, and construction

While specific materials, designs, and constructions may be stipulated in this standard, systems that incorporate alternate materials, designs, or constructions may be acceptable when it is verified that such systems meet the applicable requirements.

1.4 Performance classification

For the purpose of this standard, systems are classified according to the chemical, biological, and physical characteristics of their effluents, as determined by the performance testing and evaluations described herein.

All systems within a manufacturer's model series may be classified according to the performance testing and evaluation of ~~the a system with the smallest hydraulic capacity~~ within the series. Performance testing and evaluation of **smaller or** larger systems within the series (having hydraulic treatment capacities within the scope of this standard) may not be necessary provided that the dimensions, hydraulics, mixing and

Tracking #40i51r1 et al
© 2022 NSF

Revision to NSF/ANSI 40-2020
Draft 1, Issue 51 (June 2022)

Multiple revisions to NSF/ANSI 40 (40i51r1) NSF/ANSI 245 (245i32r1) and NSF/ANSI 350 (350i73r1)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

filtering capabilities, and other applicable design characteristics are proportionately equivalent to the evaluated system.

.
.

.

Residential Wastewater Treatment Systems – Nitrogen Reduction

1 General

1.1 Purpose

The purpose of this Standard is to establish minimum materials, design and construction, and performance requirements for residential wastewater treatment systems providing for nitrogen reduction. This Standard also specifies the minimum literature that manufacturers shall supply to authorized representatives and owners, as well as the minimum service-related obligations that manufacturers shall extend to owners.

1.2 Scope

This Standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities of 1,514 L/d (400 gal/d) to 5,678 L/d (1500 gal/d) that are designed to provide reduction of nitrogen in residential wastewater. Management methods for the treated effluent discharged from these systems are not addressed by this Standard. A system, in the same configuration, must either be demonstrated to have met the Class I requirements of NSF/ANSI 40 *Residential Wastewater Treatment Systems*, or must meet the Class I requirements of NSF/ANSI 40 during concurrent testing for nutrient removal.

The water chemistry of a site for installation and use of these systems is critical to achieve expected water quality results. Before these systems are installed at a location, the water used within the residence must be analyzed to verify that there is sufficient alkalinity to achieve the system's performance. Refer to Annex I-1 for further explanation.

Natural systems involving features such as vegetation, wetlands, free-access or buried sand filters, and soil systems may be evaluated using this Standard as long as effluent samples are representative of all treated effluent discharged from the system, as sampled from a central point of collection of all treated effluent.

1.3 Alternate materials, design, and construction

While specific materials, designs, and constructions may be stipulated in this Standard, systems that incorporate alternate materials, designs, or constructions may be acceptable when it is verified that such systems meet the applicable requirements herein.

1.4 Performance classification

For the purpose of this Standard, systems are classified according to the chemical, biological, and physical characteristics of their effluents, as determined by the performance testing and evaluations described herein. All systems within a manufacturer's model series may be classified according to the performance testing and evaluation of the a system with the smallest hydraulic capacity within the series. Performance testing and evaluation of smaller or larger systems within the series (having hydraulic treatment capacities

Tracking #40i51r1 et al
© 2022 NSF

Revision to NSF/ANSI 40-2020
Draft 1, Issue 51 (June 2022)

Multiple revisions to NSF/ANSI 40 (40i51r1) NSF/ANSI 245 (245i32r1) and NSF/ANSI 350 (350i73r1)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

within the scope of this Standard) may not be necessary, provided that the dimensions, hydraulics, mixing, filtering, and biological treatment capabilities, and other applicable design characteristics are proportionately equivalent to the evaluated system.

.
. .
.

Onsite Residential and Commercial Water Reuse Treatment Systems

1 General

1.1 Purpose

The purpose of this Standard is to establish minimum material, design, and construction, and performance requirements for onsite residential and commercial water reuse treatment systems. This Standard also specifies the minimum literature that manufacturers shall supply to authorized representatives and owners as well as the minimum service-related obligations that a manufacturer shall extend to owners.

1.2 Scope

This Standard contains minimum requirements for onsite residential and commercial water reuse treatment systems. Systems include the following:

- greywater treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d). This applies to onsite residential and commercial treatment systems that treat greywater, those that treat laundry water from residential laundry facilities, and those that treat bathing water. See Section 8.1 for performance testing and evaluation;
- residential wastewater treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d). This applies to onsite residential treatment systems that treat combined wastewater generated by the occupants of residence(s). A reuse system treating 1,514 L/d (400 gal/d) to 5,678 L/d (1,500 gal/d) shall either be demonstrated to have met the Class I requirements of NSF/ANSI 40, or shall meet these requirements during concurrent testing to this Standard. A treatment system treating less than 1,514 L/d (400 gal/d) is not required to have met the Class I requirements of NSF/ANSI 40. See Section 8.2 for performance testing and evaluation; or
- commercial treatment systems. This applies to onsite commercial treatment systems that treat one or more of the following:
 - all wastewater from a commercial facility of any capacity;
 - laundry wastewater from a commercial facility of any capacity; or
 - greywater from commercial facilities with capacities exceeding 5,678 L/d (1,500 gal/d).

These systems shall be performance tested and evaluated at the location of the reuse system installation, using the wastewater generated onsite from the facility serving the treatment system. See Section 8.3 for performance testing and evaluation. The key elements of a field evaluation of a commercial treatment system are described in Annex N-1.

Tracking #40i51r1 et al
© 2022 NSF

Revision to NSF/ANSI 40-2020
Draft 1, Issue 51 (June 2022)

Multiple revisions to NSF/ANSI 40 (40i51r1) NSF/ANSI 245 (245i32r1) and NSF/ANSI 350 (350i73r1)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

Management methods and end uses appropriate for the treated effluent discharged from onsite residential and commercial treatment systems meeting Class R (single-family residential) or Class C (multi-family and commercial facilities) requirements of this Standard include indoor restricted urban water use, such as toilet and urinal flushing, and outdoor unrestricted urban water use, such as surface irrigation. Effluent quality criteria consistent with these uses are described in Section 8.6, Criteria. This Standard is intended to address public health and environmental issues. Actual performance for any site or system may vary, depending on variations in raw water supply (such as alkalinity and hardness), wastewater constituents, and patterns of use. The end use of the effluent is the responsibility of the owner, design professionals, and regulatory officials.

System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.

1.3 Alternate materials, design, and construction

While specific materials, designs, and constructions may be stipulated in this Standard, systems that incorporate alternate materials, designs, or constructions, may be acceptable when it is verified that such systems meet the applicable requirements of this Standard.

1.4 Performance classification

For the purpose of this Standard, systems are classified according to the chemical, biological, and physical characteristics of their effluents, as determined by the performance testing and evaluations described herein.

Greywater treatment systems within a manufacturer's model series may be classified according to the performance testing and evaluation of the system (Section 8.1) expected to produce the poorest effluent quality within the series based upon design characteristics.

Residential wastewater treatment systems within a manufacturer's model series may be classified according to the performance testing and evaluation of the a system (Section 8.2) with the smallest hydraulic capacity within the series. A series is limited to treatment capacities below 1,514 L/d (400 gal/d), and treatment capacities between 1,514 L/d (400 gal/d) and 5,678 L/d (1,500 gal/d).

Residential wastewater treatment systems having rated treatment capacities less than 378 L/d (100 gal/d) shall be within a manufacturer's model series having rated treated capacities at or above 378 L/d (100 gal/d).

Greywater treatment systems shall be capacity classified based on treated water output, not greywater input.

The manufacturer shall submit design drawings and specifications of the entire model series, which shall include critical design parameters for the systems. An engineering review of the design parameters may be completed in lieu of performance testing and evaluation of other systems within the series provided they are determined to be appropriately proportionate to the evaluated system based on sound engineering principles.

Commercial treatment systems that treat combined commercial facility wastewater and commercial facility laundry water of any capacity, and treatment systems that treat greywater from commercial facilities with capacities exceeding 5678 L/d (1500 gal/d) performance tested and evaluated in accordance with Section 8.3 and Annex N-1, may be similarly classified within a manufacturer's model series. However,

Tracking #40i51r1 et al

© 2022 NSF

Multiple revisions to NSF/ANSI 40 (40i51r1) NSF/ANSI 245 (245i32r1) and NSF/ANSI 350 (350i73r1)

Revision to NSF/ANSI 40-2020

Draft 1, Issue 51 (June 2022)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by a NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

consideration shall be given to the conditions of the field evaluation of the system, including the wastewater characteristics, treatment system loading conditions, and other variables affecting performance. These conditions shall become limitations for classifying other systems within a manufacturer's model series.

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

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

NSF/ANSI/CAN Standard for Drinking Water Treatment Units –

Drinking Water Treatment Units – Health Effects

·
·
·

8 Instruction and information

·
·
·

8.3 Replacement components

8.3.1 The packaging of components specifically for replacement purposes shall be labeled with the following information:

- model number or name of component;
- model number or series identification of system(s) in which the component is to be; and
- name and address of manufacturer.

8.3.2 Where applicable, the following information shall also be stated:

- rated capacity / rated service life in liters (gallons):
 - each unique model designation shall not claim a capacity or service life greater than the least reduction capacity or service life that has been verified through testing to NSF/ANSI 53.
- operating or exchange steps;
- statement noting that the system(s) conform(s) to NSF/ANSI 53 for the specific performance claims as verified and substantiated by test data;
- statement for systems claiming VOC reduction:

"Conforms to NSF/ANSI 53 for VOC reduction. See performance data sheet for individual contaminants and reduction performance."

- manufacturers may reference individual chemicals from Table 8.1 on labels, manuals, or promotional materials if such information conforms to the following:

- percent reductions, if specified, are either less than or equal those specified in Table 7.4 or additional testing is completed to justify the claim for a higher percent reduction; or

Tracking number 53i142r1
© 2022 NSF

Revision to NSF/ANSI 53-2021
Issue 142 Revision 1 (June 2022)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

- reference to individual chemicals from Table 8.1 shall not imply that specific testing for the chemical was conducted if only the surrogate test was completed.
- statement for systems claiming pentavalent arsenic reduction:

“Conforms to NSF/ANSI 53 for pentavalent arsenic reduction. See Performance Data Sheet and Arsenic Facts section for an explanation of reduction performance.”
- statement for activated carbon systems:

“Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.”
- additional statement for activated carbon systems claiming cyst reduction:

“Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.”
- where the physical size of the component does not permit affixing the caution statement to the component, the statement shall be prominently displayed in the literature accompanying the system component.

NOTE — Systems that are compliant with NSF/ANSI 55 Class A or other standards that cover technologies to treat microbiologically unsafe water (e.g., US EPA Guide *Standard and Protocol for Testing Microbiological Water Purifiers* or NSF P231) are examples of demonstrating adequate disinfection before or after the system.
- for systems used in bottled water plants, a statement noting the redundant filtration element sealing mechanism, such as 222 and 226 double O-ring seals;
- for systems claiming radon reduction, the manufacturer’s recommended replacement schedule for the carbon filter (to a maximum of one year);
- for systems claiming cyst reduction: The percentage of cyst reduction shall be included in the claim if the claim is described on the replacement element packaging as cyst removal;
- statement for systems claiming arsenic reduction:

“Conforms to NSF/ANSI 53 for arsenic (pentavalent and trivalent) reduction. See Performance Data Sheet and Arsenic Facts section for an explanation of reduction performance.”
- statement for systems claiming perchlorate reduction on waters containing nitrate:

“Do not use this system on water containing greater than 10 mg/L nitrate nitrogen without pretreatment to remove the nitrate. The water supply must be analyzed for nitrate nitrogen and nitrite nitrogen before the installation of the system.”

Failure to observe these instructions could produce water that exceeds drinking water standard for nitrate;
- statement for systems claiming perchlorate reduction that were tested with minimal hardness in the test water:

Tracking number 53i142r1
© 2022 NSF

Revision to NSF/ANSI 53-2021
Issue 142 Revision 1 (June 2022)

Not for publication. This document is part of the NSF standard development process. This draft text is for circulation for review and/or approval by an NSF Standards Committee and has not been published or otherwise officially adopted. All rights reserved. This document may be reproduced for informational purposes only.

“Do not use this system on water containing hardness greater than 50 mg/L (3 grains per gallon) without pretreatment to remove hardness”; and

— statement that spent adsorption media will not be regenerated and used.

— statement of intended use for microcystins:

“WARNING: This system is for use on water supplies that have been treated to public water systems standards. This system has been tested to demonstrate effective reduction of microcystins, however, in the event of a reported cyanotoxin event in your water supply, other cyanotoxins may be present in the drinking water which may not be effectively reduced by this system. In the event of a cyanotoxin notification, follow the recommendations of your drinking water authority.”

— where the physical size of the system component does not permit affixing the caution/warning statements to the component, the statements shall be prominently displayed in the literature accompanying the system component.

-
-
-

Rationale: To unify language across DWTU standards.

UL 347, Standard for Safety for Medium-Voltage AC Contactors, Controllers, and Control Centers

1. Restructuring of Scope

PROPOSAL

1.1 Scope

1.1.1 This standard is applicable to ac contactors applied at voltages in the range of 1 501V to 15kV, and metal-enclosed contactor-based controllers, control centers, and other control assemblies and associated equipment applied at voltages in the range of 751V to 15kV, designed for operation at frequencies of 50 or 60 Hz on three-phase systems. These requirements ~~cover~~ [apply to](#) equipment intended for use in ordinary (non-hazardous) locations and installed in accordance with the applicable local installation codes and standards (see Annex A, Item 1). These requirements, as modified by the applicable national standards for fire pump controllers, also ~~cover~~ [apply to](#) fire pump controllers (see Annex A, Item 2).

1.1.5 This standard does not ~~cover~~ [apply to](#):

- a) equipment for use in classified (hazardous) locations as defined in the applicable installation codes or standards;
- b) components contained in contactors and contactor-based controllers for which individual component standards exist;
- c) auxiliary low voltage control assemblies (see Annex A, Item 4)-;
- d) equipment consisting solely of electronic or solid-state devices, circuits, or systems;
- e) electronic variable speed motor controllers (power conversion equipment); and
- f) controllers using only solid-state devices in the main circuit.

2. Chiller Duty or OEM Defined Duty for Motor Starting Reduced Voltage Autotransformers

PROPOSAL

6.5.5.104 Temperature rise (during starting) of motor starting autotransformers and reactors

The current to the connected load shall be the tap ratio multiplied by six times the rated current of the controller. In the case of an autotransformer or reactor with several sets of taps, the test shall be made with the taps giving the highest power loss in the transformer or reactor. If the transformer or reactor is designed with constant current density, the losses shall be assumed to be equal. In order to facilitate this test, the tests may be run at reduced voltage with a star-connected impedance used in place of a motor.

The peak temperature rise shall not exceed the rated temperature rise of the device insulation class by more than 15°C. The temperature shall be measured by thermocouples, suitably insulated, and buried into the windings. The temperature shall be monitored throughout the test and until the winding temperatures are shown to be decreasing after the final test cycle.

Test shall be performed as follows:

- i. For medium starting duty the starter shall be tested for the following duty cycle: on 30 s, off 30 s, repeat two times for a total of three cycles. Rest 1 h, and then repeat an additional three cycles.
- ii. For heavy starting duty the starter shall be tested for the following duty cycle: on 1 min, off 1 min, repeat four times for a total of five cycles. Rest 2 h, and then repeat an additional five cycles.
- iii. For optional starting duty as described in 4.204.1.3, the starter shall be tested ~~as described in the above referenced~~ [in accordance with the optional](#) duty cycle [marked on the nameplate](#).

7. Addition of Earthing Switch to UL 347

PROPOSAL

3.4.104 **Grounding (Earthing) Switch:** A permanently installed mechanical three-pole open air switching device used to connect the load side of a de-energized medium voltage controller power circuit to ground (earth) for maintenance purposes. ~~Vacuum or any other sealed type switching devices are not suitable to be used as grounding switches.~~

4.206.1 Grounding switch operating

Grounding switches shall be manually operated. Power operated devices may be used, providing they have provisions to be operated by hand.

Grounding switches shall have provisions to be padlocked in the closed position or shall have provisions to padlock the access to the operating means for the grounding switch such that the switch cannot be opened.

If the grounding switch has provisions for electrical operation, padlocking in the closed position shall prevent the switch from opening when an attempt is made to electrically open the switch.

4.206.3.2 ~~If a~~ A grounding switch ~~is provided on a controller~~ that is intended to feed ground a load that may contain stored electrical energy, such as a capacitor bank, ~~it~~ shall have the following additional manufacturer defined ratings:

- a) Short time withstand current - The maximum symmetrical rms value of the prospective short-circuit current that the grounding switch can carry when in the closed position.
- b) Short time withstand duration - The time the grounding switch can carry the rated short time withstand current, when in the closed position.
- c) Peak closing current - The maximum value of prospective peak current, of a stored energy circuit, that the grounding switch could be closed into.
- d) Peak making voltage - The maximum peak voltage, of a stored energy circuit, that the grounding switch could be closed into.

Grounding switches provided with closing ratings shall be constructed such that the contact operating speeds and pressure are independent of the operating speed of the manual handle.

See Clause 6.209 for testing requirements for these ratings.

4.206.4 Grounding switch construction

Vacuum or any other type of sealed switching devices are not suitable to be used as grounding switches.

5.10.207 Marking for equipment with grounding switches

The ratings of the grounding switch shall be included on the controller rating label and on the switch. Grounding switches that do not have short time withstand current or peak closing current ratings shall have the ratings, listed in 4.206.3.2, marked as 0. The markings need not be on the grounding switch, if the switch is part of a controller.

Grounding switches that are not part of a controller and do not have integral shorting conductors shall also have the cross-sectional area or cable size of the shorting conductors with which they were tested marked on the switch.

5.12.203 Grounding switch - position indication

Grounding switches shall provide visual ~~evidence~~ [indication](#) of their position. If the contact position is not visible, the switch shall be provided with [mechanical](#) position indicators indicating the fully closed and fully open positions.

The contacts or indicators shall be visible through a viewing pane or by opening a door when the isolating means of the controller is open. If the indication is provided via a mechanical operator, the mechanical operator shall be actuated by the movement of the actual grounding switch assembly. The action of the mechanical indicator shall not be dependent on the movement of an operating handle or mechanism alone.

A grounding switch operator system shall provide indication of "Open" and "Grounded" (or "Earthed") position.

6.209.5 Evaluation

At the conclusion of the test, the switch shall be functional and in substantially the same mechanical condition as prior to testing. [The switch contacts shall not be welded.](#) The shorting conductors shall not be damaged.

With the grounding switch open, the load side of the controller (or the line terminals of the switch, if tested separately) shall pass the power frequency voltage withstand (repeated) test in Clause 6.2.202.4.

[With the grounding switch closed, each pole shall be tested to carry 30 A dc with a voltage drop of not more than 3 V to the grounding point provided.](#)

UL copyrighted material. Not authorized for further reproduction without permission from UL.

BSR/UL 705, Standard for Power Ventilators

1. Add new requirement for NEC Class 2 Marking

PROPOSAL

36.22 Connection points intended for Class 2 connections shall be marked "CLASS 2" or the equivalent.

UL copyrighted material. Not authorized for further reproduction without prior permission from UL.

BSR/UL 1769, Standard for Safety for *Cylinder Valves*

The following is being proposed:

1. Revision to tolerances in manufacturing and production test

PROPOSAL

MANUFACTURING AND PRODUCTION TESTS

29 General

29.4 Each production lot of valves provided with an overfilling prevention device shall be subjected to a quality-control program that shall include a test to verify that the shutoff mechanism activates within a range that corresponds to a level of liquid propane of 77.0 – 83.0 percent of the volume of the container for which the valve is designed. The manufacturer shall provide documentation that the established lower and upper limits of the range correspond to the above liquid levels.

UL copyrighted material. Not authorized for further reproduction without prior permission from UL.