ANSI STANDARDS ACTION

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CONTENTS

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Project Initiation Notification System (PINS)

ANSI Procedures require notification of ANSI by ANSI-accredited standards developers (ASD) of the initiation and scope of activities expected to result in new or revised American National Standards (ANS). Early notification of activity intended to reaffirm or withdraw an ANS and in some instances a PINS related to a national adoption is optional. The mechanism by which such notification is given is referred to as the PINS process. For additional information, see clause 2.4 of the ANSI Essential Requirements: Due Process Requirements for American National Standards.

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. 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 affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

AGMA (American Gear Manufacturers Association)

Contact: Amir Aboutaleb (703) 684-0211 tech@agma.org
1001 N Fairfax Street, 5th Floor, Alexandria, VA 22314-1587 www.agma.org

New National Adoption

BSR/AGMA ISO 6336-6-BXX-202x, Calculation Of Load Capacity Of Spur And Helical Gears - Part 6: Calculation Of Service Life Under Variable Load (identical national adoption of ISO 6336-6:2019)

Stakeholders: Users and manufacturers of cylindrical gears.
Project Need: To replace current adopted version
This document specifies the information and standardized conditions necessary for the calculation of the service life (or safety factors for a required life) of gears subject to variable loading for only pitting and tooth root bending strength.

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

Contact: Megan Bixler 571-289-7402 Bixlerm@apcointl.org
351 N. Williamson Boulevard, Daytona Beach, FL 32114 www.apcoIntl.org

New Standard

BSR/APCO 1.122.1-202x, Career Progression within the Public Safety ECC (new standard)

Stakeholders: Telecommunicators, public safety agencies, responders, involved individuals and the community will benefit from the standard.
Project Need: Today's ECC workforce already requires a unique set of core competencies, knowledge, skills, and abilities (KSAs) spanning technical, operational, and legal subject areas. The workforce in a broadband-enabled ECC will require the expertise needed to analyze, process, and transmit many new forms of communication, including text, video, photo, telemetry data, and more. This will entail an expanded set of knowledge, skills, and abilities as well as new staffing models to manage the heightened impacts of broadband technology, including critical incident exposure, workforce burnout, retention challenges, and generational cohort differences. Expected changes in job functions, organizational span of control, and employee training will require a comprehensive review of position classifications and benefits. Promotional and salary structures will also need to be reassessed to avoid losing personnel.
This standard sets forth guidance for all ECCs (primary, secondary, nontraditional, non-classified) of all sizes to provide opportunities for employee advancement or promotional levels, recognizing the changing roles which include an emphasis on the need to effectively manage resources with situational analysis and critical decision-making responsibilities.

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

Contact: Megan Bixler 571-289-7402 Bixlerm@apcointl.org
351 N. Williamson Boulevard, Daytona Beach, FL 32114 www.apcoIntl.org

New Standard

BSR/APCO 1.123.1-202x, Minimum Technical Requirements for Remote Support to Emergency Communication Center (ECC) Operations (new standard)

Stakeholders: Telecommunicators, public safety agencies, responders, involved individuals and the community will benefit from the standard.
Project Need: The current pandemic situation has caused the ECC to require social distancing to perform their critical functions away from normal workstations. There is a need to outline minimum requirements for connectivity, access to 9-1-1 network services, and utilization of cloud-based resources to ensure continuity of operations. In addition, this standard will identify minimum requirements at a remote work location that must be met, along with operational parameters, contingency plans for loss of connectivity, and any additional recommended safeguards for privacy, security, quality assurance, Quality of Service (QOS), Key Performance Indicators for Emergency Communications Center Personnel (APCO 1.1118.1-20XX) and coordinating an incident that would usually entail several people working together when they are not together, and CJIS and HIPAA compliance.
Outline the minimum operational support requirements for a remote work situation for Public Safety Telecommunicators (PSTs), Administrative Staff of an ECC, and 3-1-1 operators (where appropriate). The minimum requirements can be used in an emergency evacuation situation or a stay at home order where separated operation and administrative staff is required. This standard will also define the minimum technical requirements and training considerations for a PST workstation.

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351 N. Williamson Boulevard, Daytona Beach, FL 32114 www.apcoIntl.org

New Standard

BSR/APCO 3.113.1.20XX-202x, Core Competencies and Minimum Training Standards for Peer Critical Incident (or Crisis) Support Team (new standard)

Stakeholders: Telecommunicators, public safety agencies, responders, involved individuals and the community will benefit from the standard.
Project Need: Stress, both the everyday cumulative stress and that caused by singular critical incidents, is a known issue within public safety. As the 9-1-1 industry evolves, exposure to video and photos will increase the types and levels of stress for public safety telecommunicators. Providing Peer Support Teams within the emergency communications center (ECC) has become a successful and widely used method to assist employees in identifying, mitigating, and addressing the issues created by exposure to these stressful circumstances. There is a need to provide a training standard for those within the ECC that perform this function. There is currently no specific standard or certification program, focused on ECC personnel, that addresses the following objectives:
To provide a standard set of minimum requirements for the training of members of the Peer Critical Incident Support team so that they receive consistent, high quality training that provides them with all the skills and knowledge for the team's success.

- To provide minimum skills and requirements for Peer Support Team members on the recognition of signs and symptoms that indicate a person is being negatively impacted due to their exposure to the various types of stress in an ECC.
- To provide minimum skills and requirements for Peer Support Team members on the scope of responsibility and function of a Peer Support team member toward their coworkers in need.
- To provide minimum skills and requirements for Peer Support Team members on the required knowledge of local resources available to address needs greater than within the team members scope.
- To provide minimum skills and requirements for Peer Support Team members on the first line de-escalation for employees in need.

ASME (American Society of Mechanical Engineers)

Contact: Terrell Henry (212) 591-8489 ansibox@asme.org
Two Park Avenue, M/S 6-2B, New York, NY 10016-5990 www.asme.org

Revision

BSR/ASME Y14.35-202x, Revision of Engineering Product Definition and Associated Documents (revision of ANSI/ASME Y14.35-2014 (R2019))

Stakeholders: CAD developers, manufacturers for automotive, aerospace, medical industries, etc.
Project Need: This effort to revise the standard is for addressing user needs with new engineering drawing revision challenges and revisions made within CAD software.
This Standard defines the practices for revising engineering product definition and associated documents, and establishes methods for identification and recording revisions. These practices apply to any form of original product definition and associated documents.

ASTM (ASTM International)

Contact: Laura Klineburger (610) 832-9744 accreditation@astm.org
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 www.astm.org

New Standard

BSR/ASTM F1695-202x, Test Method for Performance of Underfired Broilers (new standard)

Stakeholders: Food Service Equipment Industries
Project Need: This test method covers the evaluation of the energy consumption and cooking performance of underfired broilers. The food service operator can use this evaluation to select an underfired broiler and understand its energy performance.
The energy input rate test is used to confirm that the underfired broiler is operating properly prior to further testing.

ASTM (ASTM International)

Contact: Laura Klineburger (610) 832-9744 accreditation@astm.org
100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 www.astm.org

New Standard

BSR/ASTM WK73697-202x, New Test Method for Assessing Physical Resistance in Turfgrass Equine Surfaces (new standard)

Stakeholders: Equestrian Surfaces Industry
Project Need: Traditional methods of going assessment are qualitative and susceptible to bias and error. This may consist of attempting to assess penetrative force and shear force by feel with a cane-like tool or simple visual assessment. This test method is intended to quantify going assessments by introducing the use of a strain-gauge apparatus that measures the applied vertical force and torque from the rotation of a probe under a given energy input level for a surface.
This test method specifies a procedure for determining the going of a turfgrass equine surface, measurements of the penetration and shear force of a defined probe are used to describe the firmness of the surface and the traction available.

AWS (American Welding Society)

Contact: Kevin Bulger (305) 443-9353 306 kbulger@aws.org
8669 Doral Blvd, Suite 130, Doral, FL 33166 www.aws.org

New Standard

BSR/AWS C3.15M/C3.15-202x, Standard Method for Evaluating the Strength of Solder Joints (new standard)

Stakeholders: This publication would guide the structural soldering applications, which are growing in number and reliability requirements. Also, this document would be applicable to the electronic industry as that sector continues to evolve new solder alloys to support miniaturization. The electronics industry does not have a comparable document.
Project Need: The testing of solder joints for strength can be performed in a variety of configurations and test parameters. Configurations and test parameters are selected, based upon the immediate application. However, this approach causes the data to be unique to that test regimen so that results cannot be compared across different test sites. Secondly, unlike braze alloys, the reduced strength of solder filler metals caused a variation in joint strengths due simply to the gap clearance geometry. These factors necessitate that standardized sample configurations and test procedures be established for structural solder joints.
This document will establish common methodologies for testing the strength of structural solder joints and the interpretation of strength data. The document will address (a) test sample configurations, (b) sample fabrication, (c) test methods, and (d) data interpretation.

CPLSO

Contact: Hugh Pratt (078) 796-2989 9 pratt.hugh@cplso.org
The Marchioness Building, Commercial Road, Bristol BS16TG, UK BS1 6TG

New National Adoption

BSR/CPLSO 60479-202x, Effects Of Electricity On Humans And Animals (national adoption with modifications of IEC 60479 parts 1, 2, 4 & 5)

Stakeholders: Designers of electrical products
Project Need: To provide an ANSI version of IEC documents
A comprehensive reference document for effects of currents on humans and animals covering all types of electrocution currents, charges, frequencies and voltages.

CSA (CSA America Standards Inc.)

Contact: David Zimmerman (216) 524-4990 ansi.contact@csagroup.org
8501 E. Pleasant Valley Road, Cleveland, OH 44131 www.csagroup.org

New Standard

BSR/CSA W209-202x, Biomass Supply Chain Risk (new standard)

Stakeholders: Owners, investors, lenders, capital market entities, insurers, contractors, customers, government departments, regulators
Project Need: Development of this Standard supports the goal of a viable, sustainable domestic biomass industry that produces renewable biofuels, biochemicals, bioproducts, and biopower by decreasing project stakeholder risks to investment in bio-economy projects and by increasing the number of projects that pass the crucial financing stage.
This Standard presents a standardized biomass feedstock risk assessment protocol designed to enable stakeholders (owners, investors, lenders, capital market entities, insurers, contractors, customers, government departments, regulators) to more accurately quantify bio-feedstock risk and reduce the level of uncertainty that is currently a significant driver of low bio-project credit ratings and high capital costs.

EMAP (Emergency Management Accreditation Program)

Contact: Nicole Ishmael (859) 351-2350 nishmael@emap.org
201 Park Washington Court, Falls Church, VA 22046-4527 www.emap.org

Revision

BSR/EMAP EMS 5-202x, Emergency Management Standard (revision of ANSI/EMAP EMS 5-2019)

Stakeholders: Emergency Management and Homeland Security Programs
Project Need: There is a need for comprehensive, programmatic standards to outline necessary components of emergency management and homeland security programs.
The Standard will outline programmatic areas with Standards underneath that outline the necessary components of a comprehensive emergency management and homeland security program. The Standards will include all phases of emergency management to include prevention, preparedness, mitigation, response and recovery activities. The programmatic areas will include such things as Program Management, Hazard Identification and Risk Assessment, Hazard Mitigation, Prevention, Planning, Incident Management, Resource Management, Communications, Facilities, Training and Exercise and Emergency Public Information and Education. The Standard will not be considered an ISO, IEC or ISO/IEC JTC-1 Standard.

ESTA (Entertainment Services and Technology Association)

Contact: Richard Nix (212) 244-1505 standards@esta.org
271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 www.esta.org

Revision

BSR E1.43-202x, Performer Flying Systems (revision of ANSI E1.43-2016)

Stakeholders: Flying system designers, performers, audience members, rigging technicians, manufacturers, producers, venue managers and owners
Project Need: This is a revision of a current ANSI standard
This standard establishes a minimum level of performance parameters for the design, manufacture, use, and maintenance of performer flying systems used in the production of entertainment events. It provides guidance on minimum required strength, reliability, and safety aspects of these systems, to ensure safety of the performer, other production personnel, and audiences under all circumstances associated with performer flying.

HPS (ASC N13) (Health Physics Society)

Contact: Nancy Johnson (703) 790-1745 nanjohns@verizon.net
1313 Dolley Madison Blvd #402, McLean, VA 22101 www.hps.org

New Standard

BSR N13.8-202x, Radiation Protection in Uranium Mines (new standard)

Stakeholders: The mining industry, government, and workers where exposure to radon and radon progeny may be enhanced by proximity or contact with uranium-bearing materials.
Project Need: This standard is necessary to protect the workers in uranium mines.
This standard provides guidance for preventing the overexposure of uranium miners and other workers to whole body external radiation and to ionizing radiation to the lining and respiratory system. The guidance in this standard is relevant to workers exposed to radon and radon progeny in any situation. (This is a revision of the withdrawn standard N13.8 last approved in 1989.)

IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)

Contact: Christopher White (708) 995-3017 chris@asse-plumbing.org
18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 www.asse-plumbing.org

Revision

BSR/ASSE 1022-202x, Backflow Preventer for Beverage Dispensing Equipment (revision of ANSI/ASSE 1022-2017)

Stakeholders: Plumbing Industry, Plumbers, Inspectors, Contractors
Project Need: Revise the requirements of certain applications to reflect practice and public need.
This standard covers a backflow prevention device designed to protect the potable water supply serving beverage dispensing equipment. These devices are intended for use under continuous or intermittent pressure conditions.

NEMA (ASC W1) (National Electrical Manufacturers Association)

Contact: Khaled Masri (703) 841-3278 Khaled.Masri@nema.org
1300 North 17th Street, Rosslyn, VA 22209 www.nema.org

New National Adoption

BSR/NEMA/IEC 60974-5-202x, Arc Welding Equipment Part 5: Wire Feeders (national adoption of IEC 60974-5, edition 4 with modifications and revision of ANSI/NEMA/IEC 60974-5-2008)

Stakeholders: Arc welding equipment manufacturers, users and others.
Project Need: Current standard needeeds to be maintained
This part of IEC 60974 specifies safety and performance requirements for industrial and professional equipment used in arc welding and allied processes to feed filler wire.

PDA (Parenteral Drug Association)

Contact: Christine Alston-Roberts (301) 656-5900 Ext 106 roberts@pda.org
Bethesda Towers, 4350 East-West Highway, Suite 600, Bethesda, MD 20814 www.pda.org

New Standard

BSR/PDA Standard 07-202x, Analytical Method Validation and other Lifecycle Control Steps for Quality Control Testing of Biologics (new standard)

Stakeholders: General Interest Users / industry, and agencies, Regulatory Interest
Project Need: To provide a standard implementation practice for ICH Q2(R1) and Q14 and additional analytical method lifecycle steps not sufficiently covered in existing regulatory guidance. This project would convert the concepts in PDA Technical Reports 57 and 57-2 into a consensus standard.
A standard, based off PDA Technical Report 57 and 57-2, used for completing analytical lifecycle steps to facilitate successful product development and regulatory submissions. This benefits stakeholders, industry, and agencies. Standardizing APT method qualification/validation/transfer methodology will provide risk-based studies and greatly reduce manufacturer's cost and resources. This should also reduce agency market authorization review time (for analytical methods). This document will provide a method-type specific study design, statistical tools, and the setting of acceptance criteria for the following analytical lifecycle steps:

- Analytical Method Qualification (AMQ)
- Analytical Method Validation (AMV)
- Analytical Method Transfer (AMT)
- Analytical Method Comparability (AMC) for replacing approved methods
- AMQ, AMV, AMT, for APT methods

With an increasing number of products being considered for accelerated development, building on TR 57, the use of analytical platform technology (APT) methods and the relevant standardized qualification/validation/transfer methodology will be included.

SCTE (Society of Cable Telecommunications Engineers)

Contact: Kim Cooney (800) 542-5040 kcooney@scte.org
140 Philips Rd, Exton, PA 19341 www.scte.org

Revision

BSR/SCTE 215-1-1-202x, Proposed Revision of SCTE 215-1-1 2020 HEVC Video Constraints for Cable Television Part 1 -1 HDR10 Coding (revision of ANSI/SCTE 215-1-1-2020)

Stakeholders: Cable Telecommunications Industry
Project Need: Update Current Technology
This document defines the additional coding constraints on SCTE 215-1 HDR video streams using an HDR10 format.

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: September 6, 2020

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

1791 Tullie Circle, NE, Atlanta, GA 30329 p: (678) 539-1214 w: www.ashrae.org

Addenda

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

This proposed addendum replaces the current definition of "readily accessible" with a new definition that is intended to be less ambiguous and more compatible with building codes. The replaced definition of "readily accessible" is directly from the 2020 National Electrical Code (NEC). It also creates a new definition for "accessible" and makes edits in the standard to refer to one of the two definitions, where needed.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 p: (404) 636-8400 w: www.ashrae.org

Addenda

BSR/ASHRAE Addendum a to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4 -2016)

Addendum a was written to clarify existing requirements in Section 6.5 as well as introduce new provisions to encourage heat recovery within data centers. Additional improvements were identified during the 1st public review, which have been included in this ISC.

Click here to view these changes in full
Send comments (with optional copy to psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

Comment Deadline: September 6, 2020

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Addenda

BSR/ASHRAE Addendum b to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4 -2016)

Addendum b was written to clarify existing requirements in Sections 6 and 11 and to provide guidance for taking credit for renewable energy systems. Additional improvements were identified during the 1st public review, which have been included in this ISC.

Click here to view these changes in full

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

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 p: (404) 636-8400 w: www.ashrae.org

Addenda

BSR/ASHRAE Addendum d to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4 -2016)

Addendum d provides clarifications about the use of Diesel-Rotary UPS Systems (DRUPS) and how they are accounted for in the Electrical Loss Component (ELC). Additional changes included updates to Sections 11 and 12 to include the latest values and references available. The subsequent ISC is being issued to make additional improvements in language as well as a correction to one of the references.

Click here to view these changes in full

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

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 p: (404) 636-8400 w: www.ashrae.org

Addenda

BSR/ASHRAE Addendum e to BSR/ASHRAE Standard 90.4-202x, Energy Standard for Data Centers (addenda to ANSI/ASHRAE Standard 90.4 -2016)

Addendum e adds language to Section 11 intended to clarify how compliance with Standard 90.4 can be achieved through the use of shared systems.

Click here to view these changes in full

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

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

1791 Tullie Circle NE, Atlanta, GA 30329 p: (678) 539-2114 w: www.ashrae.org

Addenda

BSR/ASHRAE Addendum d to BSR/ASHRAE Standard 188-202x, Legionellosis: Risk Management for Building Water Systems (addenda to ANSI/ASHRAE Standard 188-2018)

This addendum adds a definition of shall for use in this mandatory standard. It also includes changes to the commissioning section and to the associated references to remove references to documents that have been noted by the issuing organization (AWWA) not to apply to building water systems. The reference to ASHRAE Guideline 12 has been updated to include the new 2020 version of the guideline.

Click here to view these changes in full

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

Comment Deadline: September 6, 2020

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

1791 Tullie Circle, NE, Atlanta, GA 30329 p: (404) 636-8400 w: www.ashrae.org

Revision

BSR/ASHRAE Standard 64-202x, Methods of Laboratory Testing Remote Mechanical-Draft Evaporative Refrigerant Condensers (revision of ANSI/ASHRAE Standard 64-2011)

This revision of Standard 64 prescribes methods of laboratory testing remote mechanical-draft evaporative refrigerant condensers. Technical revisions have been incorporated as appropriate. Additional revisions have been implemented to bring this standard into compliance with ASHRAE's mandatory language requirements. References have been updated.

Click here to view these changes in full

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

AWWA (American Water Works Association)

6666 W. Quincy Ave., Denver, CO 80235 p: (303) 347-6178 w: www.awwa.org

Supplement

BSR/AWWA C210a-202x, Addendum to ANSI/AWWA C210-15 (supplement to ANSI/AWWA C210-2015)

This standard describes the material and application of shop- and field-applied liquid-epoxy coatings and linings used in the water-supply industry for steel water pipelines installed underground or underwater, under normal construction conditions.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: AWWA, Attn: Paul J. Olson

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-3817 w: www.nsf.org

Revision

BSR/NSF 49-202x (i151r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets (BSCs) that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor / blower performance.

Click here to view these changes in full

Send comments (with optional copy to psa@ansi.org) to: arose@nsf.org

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-3817 w: www.nsf.org

Revision

BSR/NSF 49-202x (i156r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)

This Standard applies to Class II (laminar flow) biosafety cabinetry designed to minimize hazards inherent in work with agents assigned to biosafety levels 1, 2, 3, or 4. It also defines the tests that shall be passed by such cabinetry to meet this Standard. This Standard includes basic requirements for the design, construction, and performance of biosafety cabinets (BSCs) that are intended to provide personnel, product, and environmental protection; reliable operation; durability and structural stability; cleanability; limitations on noise level; illumination; vibration; and motor / blower performance.

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Send comments (with optional copy to psa@ansi.org) to: arose@nsf.org

Comment Deadline: September 6, 2020

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-3817 w: www.nsf.org

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Send comments (with optional copy to psa@ansi.org) to: arose@nsf.org

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 418-6660 w: www.nsf.org

Revision

BSR/NSF 350-202x (i49r2), 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 (with optional copy to psa@ansi.org) to: jsnider@nsf.org

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 418-6660 w: www.nsf.org

Revision

BSR/NSF 350-202x (i53r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350-2019)

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 (with optional copy to psa@ansi.org) to: jsnider@nsf.org

Comment Deadline: September 21, 2020

AAMI (Association for the Advancement of Medical Instrumentation)

901 N. Glebe Road, Suite 300, Arlington, VA 22203 p: (703) 253-8268 w: www.aami.org

Reaffirmation

BSR/AAMI/IEC 62366-1-2015 (R202x), Medical devices - Part 1: Application of usability engineering to medical devices (reaffirmation of ANSI/AAMI/IEC 62366-1-2015)

Specifies a process for a manufacturer to analyze, specify, develop and evaluate the usability of a medical device as it relates to safety. This usability engineering (human factors engineering) process permits the manufacturer to assess and mitigates risks associated with correct use and use errors, i.e., normal use. It can be used to identify but does not assess or mitigate risks associated with abnormal use.

Single copy price: $228.00 for non-member/$130.00 for member
Obtain an electronic copy from: https://my.aami.org/store/SearchResults.aspx?searchterm=IEC+62366-1&searchoption=ALL
Order from: Hae Choe: (703) 253-8268; standards@aami.org
Send comments (with optional copy to psa@ansi.org) to: Same

Comment Deadline: September 21, 2020

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

1791 Tullie Circle, NE, Atlanta, GA 30329 p: (404) 636-8400 w: www.ashrae.org

New Standard

BSR/ASHRAE Standard 207-202x, Laboratory Method of Test of Fault Detection and Diagnosis for Air Economizers (new standard)

The purpose of ASHRAE Standard 207-202x is to provide methods for laboratory testing of Fault Detection and Diagnosis (FDD) systems to determine whether they perform as specified.

Single copy price: $35.00
Obtain an electronic copy from: http://www.ashrae.org/standards-research--technology/public-review-drafts
Order from: standards.section@ashrae.org
Send comments (with optional copy to psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts

ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM D1655-202x, Specification for Aviation Turbine Fuels (revision of ANSI/ASTM D1655-2020)

https://www.astm.org/ANSI_SA

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ASTM (ASTM International)

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Revision

BSR/ASTM D3241-202x, Test Method for Thermal Oxidation Stability of Aviation Turbine Fuels (revision of ANSI/ASTM D3241-2020)

https://www.astm.org/ANSI_SA

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ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM D4054-202x, Practice for Evaluation of New Aviation Turbine Fuels and Fuel Additives (revision of ANSI/ASTM D4054-2020)

https://www.astm.org/ANSI_SA

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ASTM (ASTM International)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM D4308-202x, Test Method for Electrical Conductivity of Liquid Hydrocarbons by Precision Meter (revision of ANSI/ASTM D4308 -2013)

https://www.astm.org/ANSI_SA

Single copy price: Free
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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM D5452-202x, Test Method for Particulate Contamination in Aviation Fuels by Laboratory Filtration (revision of ANSI/ASTM D5452 -2012)

https://www.astm.org/ANSI_SA

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Revision

BSR/ASTM D5452-202x, Test Method for Particulate Contamination in Aviation Fuels by Laboratory Filtration (revision of ANSI/ASTM D5452 -2012)

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM D6299-202x, Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance (revision of ANSI/ASTM D6299-2019)

https://www.astm.org/ANSI_SA

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Revision

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Revision

BSR/ASTM D6792-202x, Practice for Quality Management Systems in Petroleum Products, Liquid Fuels, and Lubricants Testing Laboratories (revision of ANSI/ASTM D6792-2017)

https://www.astm.org/ANSI_SA

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Revision

BSR/ASTM D7566-202x, Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons (revision of ANSI/ASTM D7566-2020)

https://www.astm.org/ANSI_SA

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM D7826-202x, Guide for Evaluation of New Aviation Gasolines and New Aviation Gasoline Additives (revision of ANSI/ASTM D7826-2019)

https://www.astm.org/ANSI_SA

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM F1361-202x, Test Method for Performance of Open Deep Fat Fryers (revision of ANSI/ASTM F1361-2017)

https://www.astm.org/ANSI_SA

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Revision

BSR/ASTM F1495-202x, Specification for Combination Oven Electric or Gas Fired (revision of ANSI/ASTM F1495-2014A)

https://www.astm.org/ANSI_SA

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM F1696-202x, Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines (revision of ANSI/ASTM F1696-2018)

https://www.astm.org/ANSI_SA

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM F1920-202x, Test Method for Performance of Rack Conveyor Commercial Dishwashing Machines (revision of ANSI/ASTM F1920 -2015)

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100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 p: (610) 832-9744 w: www.astm.org

Revision

BSR/ASTM F2238-202x, Test Method for Performance of Rapid Cook Ovens (revision of ANSI/ASTM F2238-2016)

https://www.astm.org/ANSI_SA

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Revision

BSR/ASTM F2861-202x, Test Method for Enhanced Performance of Combination Oven in Various Modes (revision of ANSI/ASTM F2861-2017)

https://www.astm.org/ANSI_SA

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AWC (American Wood Council)

222 Catoctin Circle , Suite 201, Leesburg, VA 20175 p: (202) 463-2770 w: www.awc.org

Revision

BSR/AWC PWF-202x, Permanent Wood Foundation Design Specification (revision and redesignation of ANSI/AWC PWF-2015)

Update Specification which covers the engineered design of Permanent Wood Foundations. This specification sets forth basic design and construction requirements for the Permanent Wood Foundation (PWF) system. Included are criteria for materials, preservative treatment, soil characteristics, environmental control, design loads, and structural design. Provisions need to be updated to latest reference standards including the 2018 NDS and 2021 SDPWS.

Single copy price: $25.00
Obtain an electronic copy from: bdouglas@awc.org
Order from: Bradford Douglas: (202) 463-2770; bdouglas@awc.org
Send comments (with optional copy to psa@ansi.org) to: Same

Comment Deadline: September 21, 2020

CSA (CSA America Standards Inc.)

8501 E. Pleasant Valley Road, Cleveland, OH 44131 p: (216) 524-4990 w: www.csagroup.org

Addenda

BSR Z21.54a-202x, Gas hose connectors for portable outdoor gas-fired appliances (addenda to ANSI Z21.54-2019)

This Standard applies to gas hose connectors (See Clause 3 Definitions), hereinafter referred to as connectors. They are conduits for conveying gas and depend for gas-tightness on the wall structure of the hose material. Such connectors are: a) newly produced and constructed entirely of new, unused parts and materials; and b) equipped with a fitting at each end provided with standard taper pipe threads. 1.2 Connectors covered by this Standard are intended for: a) connection of portable outdoor gas-fired appliances to the gas supply piping; b) use in unconcealed outdoor locations; c) use only in locations where they will not be likely to be subject to excessive temperatures [above 200F (93.5C) d) use with natural gas, manufactured gas, mixed gases, propane and LP gas-air mixtures; and e) use on gas piping systems having fuel gas pressures not in excess of 1/2 psi (3.45 kPa).

Single copy price: Free
Obtain an electronic copy from: ansi.contact@csagroup.org
Send comments (with optional copy to psa@ansi.org) to: ansi.contact@csagroup.org

CTA (Consumer Technology Association)

1919 South Eads Street, Arlington, VA 22202 p: (703) 907-7697 w: www.cta.tech

Revision

BSR/CTA 2042.1-C-202x, Wireless Power Glossary Terms (revision and redesignation of ANSI/CTA 2042.1-B-2015)

This document specifies terms and definitions for wireless power.

Single copy price: Free
Obtain an electronic copy from: standards@cta.tech
Order from: Veronica Lancaster: (703) 907-7697; vlancaster@cta.tech
Send comments (with optional copy to psa@ansi.org) to: Same

DSI (Dental Standards Institute, Inc.)

109 Bushaway Road, Suite 100, Wayzata, MN 55391 p: (763) 290-0004 w: https://dentalstandardsinstitute.com/

New Standard

BSR/DSI GSST1.1-202x, DSI GSST1.1:20XX Graphic Symbols - Pictograms For Information Regarding the Healthcare Patient (new standard)

This Standard defines graphic symbols, or pictograms representing crucial information regarding the healthcare patient. Categories of crucial information that are listed include; Allergies, Preexisting Conditions, Patient History and Medical Alerts.

Single copy price: $175.00
Obtain an electronic copy from: dentalstandards@gmail.com
Send comments (with optional copy to psa@ansi.org) to: dentalstandards@gmail.com

DSI (Dental Standards Institute, Inc.)

109 Bushaway Road, Suite 100, Wayzata, MN 55391 p: (763) 290-0004 w: https://dentalstandardsinstitute.com/

New Standard

BSR/DSI RCST1.1-202x, DSI RCST1.1:20XX Systemization of Notifications Regarding Dental Patient Recall (DPR) (new standard)

This Standard defines the information content and visualization necessary to be included in an Electronic Dental Record (EDR) when a dentist, or dental care professional writes the Dental Chart Notes (DCN) for purposes of documentation of the care of a dental patient. The format of how the information is transferred, authenticated and stored is also described.

Single copy price: $175.00
Obtain an electronic copy from: dentalstandards@gmail.com
Send comments (with optional copy to psa@ansi.org) to: dentalstandards@gmail.com

Comment Deadline: September 21, 2020

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 p: (571) 323-0294 w: www.ecianow.org

Revision

BSR/EIA 364-75B-202x, Lightning Strike Test Procedure for Electrical Connectors (revision and redesignation of ANSI/EIA 364-75A-2009 (R2015))

This standard establishes a test method to determine the capability of a connector pair to conduct the electrical current induced by a lightning strike.

Single copy price: $84.00
Obtain an electronic copy from: https://global.ihs.com/
Order from: Global Engineering Documents, (800) 854-7179, www.global.ihs.com
Send comments (with optional copy to psa@ansi.org) to: Ed Mikoski (emikoski@ecianow.org)

ECIA (Electronic Components Industry Association)

13873 Park Center Road, Suite 315, Herndon, VA 20171 p: (571) 323-0294 w: www.ecianow.org

Revision

BSR/EIA 364-80A-202x, Low Frequency Shielding Effectiveness Test Procedure for Electrical Connectors and Sockets (revision and redesignation of ANSI/EIA 364-80-2015)

This test procedure describes two methods to measure the shielding transfer impedance of mated cable connectors in the frequency range 10kHz to 100MHz, (method A), and a connector located between a bulkhead panel and a shielded cable from 30 MHz to 500 MHz, (method B).

Single copy price: $92.00
Obtain an electronic copy from: https://global.ihs.com/
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ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 p: (212) 244-1505 w: www.esta.org

New Standard

BSR E1.4-2-202x, Entertainment Technology - Statically Suspended Rigging Systems (new standard)

This standard establishes requirements for statically suspended rigging systems permanently installed in performances spaces, places of assembly, and other areas used for entertainment purposes where not covered by other ANSI Entertainment Technology standards. It is intended to establish minimum performance criteria, recommendations and guidelines that can be used for installation, use, maintenance and inspection purposes, in order to safeguard health, safety and general welfare.

Single copy price: Free
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Order from: Richard Nix: (212) 244-1505; standards@esta.org
Send comments (with optional copy to psa@ansi.org) to: standards@esta.org

ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 p: (212) 244-1505 w: www.esta.org

New Standard

BSR ES1.7-202x, Event Safety - Weather Preparedness (new standard)

The scope of this standard covers the consideration, development and use of event planning strategies that mitigate weather-related risks associated with live events, and with their associated temporary special event structures. Its scope includes both indoor and outdoor events, because each have considerations for the event participants. Its scope includes only public-access events, and private events where jurisdictional permits are required. The purpose of this document is to provide guidance on identifying weather-related hazards, monitoring technologies, and the basic requirements necessary to develop and implement risk mitigation actions associated with weather.

Single copy price: Free
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Order from: Richard Nix: (212) 244-1505; standards@esta.org
Send comments (with optional copy to psa@ansi.org) to: standards@esta.org

Comment Deadline: September 21, 2020

ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 p: (212) 244-1505 w: www.esta.org

New Standard

BSR E1.62-202x, Minimum specifications for mass-produced portable platforms, ramps, stairs, and choral risers for live performance events (new standard)

The standard is a product specification covering serially manufactured, portable platforms, stair units and ramps used with those platforms, and choral risers. It also would cover railings provided as fall protection accessories for these units. It would give minimum payload and sideways force handling specifications. It would not cover custom platforms or complete stage systems.

Single copy price: Free
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Order from: Karl Ruling: (212) 244-5703; standards@esta.org
Send comments (with optional copy to psa@ansi.org) to: Same

IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)

18927 Hickory Creek Drive, Suite 220, Mokena, IL 60448 p: (708) 995-3017 w: www.asse-plumbing.org

Revision

BSR/ASSE 1008-202x, Performance Requirements for Plumbing Aspects of Residential Food Waste Disposer Units (revision of ANSI/ASSE 1008-2019)

This standard applies to the plumbing aspects of residential food waste disposers intended primarily for installation in the residential kitchen sink outlet. When supplied with water from the sink supply faucet, these devices discharge into the sanitary drainage system. These devices shall be designed to reduce food waste particle sizes for discharging into the sanitary drainage system. Devices shall include a means of self-cleaning and means to protect against mechanical shock. When a dishwasher discharge connection(s) is incorporated in the device, the device shall be designed so that if the discharge connection becomes blocked, backflow into the dishwasher shall not occur.

Single copy price: Free
Obtain an electronic copy from: chris@asse-plumbing.org
Send comments (with optional copy to psa@ansi.org) to: chris@asse-plumbing.org

LIA (ASC Z136) (Laser Institute of America)

13501 Ingenuity Drive, Suite 128, Orlando, FL 32826 p: (407) 380-1553 w: www.laserinstitute.org

Revision

BSR Z136.1-202x, Standard for Safe Use of Lasers (revision of ANSI Z136.1-2014)

This standard provides recommendations for the safe use of lasers and laser systems that operate at wavelengths between 180 nm and 1 mm. This revision will be a new horizontal standard that supports ANSI Z136.2, Z136.3, Z136.5, Z136.6, Z136.7, Z136.8, Z136.9, and proposed Z136.10 standards, as well as the ANSI Z136.4

Single copy price: $30.00
Obtain an electronic copy from: https://www.lia.org/store/product/brsz1361-202x-draft-1-public-review
Send comments (with optional copy to psa@ansi.org) to: Liliana Caldero (lcaldero@lia.org)

NEMA (ASC C136) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 p: (703) 841-3234 w: www.nema.org

Revision

BSR C136.13-202X, Metal Brackets for Wood Poles (revision of ANSI C136.13-2014)

This standard covers metal pipe, tubing, and structural brackets for wood poles designed to support luminaries of generally spherical, ellipsoidal, or rectangular shapes used in roadway and area lighting.

Single copy price: $45.00
Obtain an electronic copy from: David.Richmond@nema.org
Order from: David Richmond: (703) 841-3234; David.Richmond@nema.org
Send comments (with optional copy to psa@ansi.org) to: Same

Comment Deadline: September 21, 2020

NEMA (ASC C136) (National Electrical Manufacturers Association)

1300 North 17th Street, Suite 900, Rosslyn, VA 22209 p: (703) 841-3234 w: www.nema.org

Revision

BSR C136.34-202X, For Roadway and Area Lighting Equipment - Vandal Shields for Roadway and Area Lighting Luminaires (revision of ANSI C136.34-2014)

This standard covers supplementary vandal shields used to protect luminaires and luminaire accessories used for roadway and area lighting.

Single copy price: $50.00
Obtain an electronic copy from: David.Richmond@nema.org
Order from: David Richmond: (703) 841-3234; David.Richmond@nema.org
Send comments (with optional copy to psa@ansi.org) to: Same

NEMA (ASC C18) (National Electrical Manufacturers Association)

1300 North 17th Street, Rosslyn, VA 22209 p: (703) 841-3278 w: www.nema.org

Revision

BSR C18.1M, Part 1-202x, Portable Primary Cells and Batteries With Aqueous Electrolyte - General and Specifications (revision of ANSI C18.1M, Part 1-2015)

This standard applies to portable primary cells and batteries with aqueous electrolyte and a zinc anode (non-lithium). This edition includes the following electrochemical systems: a) Carbon zinc (LeclanchÃ© and zinc chloride types) b) Alkaline manganese dioxide c) Silver oxide d) Zinc air e) Nickel oxyhydroxide

Single copy price: $120.00
Obtain an electronic copy from: KHALED.MASRI@NEMA.ORG
Order from: Khaled Masri: (703) 841-3278; Khaled.Masri@nema.org
Send comments (with optional copy to psa@ansi.org) to: Same

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

NFPA FIRE PROTECTION STANDARDS DOCUMENTATION
The National Fire Protection Association announces the availability of the NFPA Second Draft Report for concurrent review and comment by NFPA and ANSI. These Second Draft Reports contain the disposition of public comment that were received for standards in the 2020 Fall Revision Cycle (available for review on the next edition tab for each standard). All Notices of Intent to Make A Motion on the 2020 Fall Revision Cycle Second Draft Report must be received by the following date: August 27, 2020.
For more information on the rules and for up-to-date information on schedules and deadlines for processing NFPA Documents, check the NFPA website (www.nfpa.org) or contact Standards Administration at NFPA. Those who submit comments to NFPA's online submission system on the 2020 Fall Revision Cycle Standards are invited to copy ANSI's Board of Standards Review.

New Standard

BSR/NFPA 1802-202x, Standard on Two-Way, Portable RF Voice Communications Devices for Use by Emergency Services Personnel in the Hazard Zone (new standard)

This standard shall identify the operating environment parameters, as well as the minimum requirements for the design, performance, testing, and certification of portable RF voice communications devices (RF devices) and remote speaker microphones (RSMs) for use by emergency services personnel (ESP) within the hazard zone during emergency incident operations without compromising compatibility with field emergency services communications networks.

Obtain an electronic copy from: www.nfpa.org/1802Next
Send comments (with optional copy to psa@ansi.org) to: Same

Comment Deadline: September 21, 2020

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 11-202x, Standard for Low-, Medium-, and High-Expansion Foam (revision of ANSI/NFPA 11-2016)

Fire-fighting foam is an aggregate of air-filled bubbles formed from aqueous solutions and is lower in density than flammable liquids. It is used principally to form a cohesive floating blanket on flammable and combustible liquids and prevents or extinguishes fire by excluding air and cooling the fuel. It also prevents reignition by suppressing formation of flammable vapors. It has the property of adhering to surfaces, which provides a degree of exposure protection from adjacent fires. Foam can be used as a fire prevention, control, or extinguishing agent for flammable liquid hazards. Foam for these hazards can be supplied by fixed piped systems or portable foam-generating systems. Foam can be applied through foam discharge outlets, which allow it to fall gently on the surface of the burning fuel. Foam can also be applied by portable hose streams using foam nozzles or large-capacity monitor nozzles or subsurface injection systems. Foam can be supplied by overhead piped systems for protection of hazardous occupancies associated with potential flammable liquid spills in the proximity of high-value equipment or for protection of large areas. The foam used for flammable liquid spills is in the form of a spray or dense "snowstorm."...

Obtain an electronic copy from: www.nfpa.org/11Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/11Next

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 32-202x, Standard for Drycleaning Facilities (revision of ANSI/NFPA 32-2016)

This standard shall apply to establishments hereinafter defined as dry cleaning plants.

Obtain an electronic copy from: www.nfpa.org/32Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/32Next

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 37-202x, Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines (revision of ANSI/NFPA 37 -2018)

This standard establishes criteria for minimizing the hazards of fire during the installation and operation of stationary combustion engines and gas turbines.

Obtain an electronic copy from: www.nfpa.org/37Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/37Next

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 87-202x, Standard for Fluid Heaters (revision of ANSI/NFPA 87-2018)

Explosions and fires in fuel-fired and electric fluid heaters constitute a loss potential in life, property, and production. This recommended practice is a compilation of guidelines, rules, and methods applicable to the safe operation of this type of equipment. Conditions and regulations that are not covered in this standard — such as toxic vapors, hazardous materials, noise levels, heat stress, and local, state, and federal regulations (EPA and OSHA) — should be considered in the design and operation of fluid heaters. Most causes of failures can be traced to human error. The most significant failures include inadequate training of operators, lack of proper maintenance, and improper application of equipment. Users and designers must utilize engineering skill to bring together that proper combination of controls and training necessary for the safe operation of equipment. This recommended practice classifies fluid heaters as Class F fluid heaters. Class F fluid heaters operate at approximately atmospheric pressure and present a potential explosion or fire hazard that could be occasioned by the overheating and/or release of flammable or combustible fluids from the tubing that carries them through the heating chamber...

Obtain an electronic copy from: www.nfpa.org/87Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/87Next

Comment Deadline: September 21, 2020

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 92-202x, Standard for Smoke Control Systems (revision of ANSI/NFPA 92-2018)

This standard shall apply to the design, installation, acceptance testing, operation, and ongoing periodic testing of smoke control systems. This standard incorporates methods for applying engineering calculations and reference models to provide a designer with the tools to develop smoke control system designs. The designs are based on select design objectives presented in Section 4.1. This standard addresses the following topics: (1) Basic physics of smoke movement in indoor spaces (2) Methods of smoke control (3) Supporting data and technology (4) Building equipment and controls applicable to smoke control systems (5) Approaches to testing and maintenance methods This standard does not address the interaction of sprinklers and smoke control systems. The cooling effect of sprinklers can result in some of the smoke losing buoyancy and migrating downward below the design smoke layer interface. This standard also does not provide methodologies to assess the effects of smoke exposure on people, property, or mission continuity.

Obtain an electronic copy from: www.nfpa.org/92Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/92Next

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 225-202x, Model Manufactured Home Installation Standard (revision of ANSI/NFPA 225-2017)

This model standard shall cover the installation of manufactured homes wherever sited in the United States and its territories. The manufacturer's installation instructions shall apply under either of the following conditions: (1) To items not covered by this standard (2) Where the manufacturer's approved installation instructions provide a specific method of performing a specific operation or assembly. Utilization of this standard by the homeowner and installation crew and use of a registered professional engineer in those unusual circumstances as required by this standard will help ensure the homeowner of a well-built, safe, and affordable home. This standard contains instructions, including specifications and procedures, for installation of utility connections of a manufactured home. It has been written in an objective manner so that it can be understood by those who are trained in the installation of manufactured homes and who are properly licensed. It discusses the installation of the home from preparation of the site through final inspection. It includes many tables and figures giving important data for proper installation.

Obtain an electronic copy from: www.nfpa.org/225Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/225Next

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 501-202x, Standard on Manufactured Housing (revision of ANSI/NFPA 501-2017)

This standard shall cover all the equipment and installations used in the design, construction, transportation, fire safety, plumbing, heat-producing, and electrical systems of manufactured homes that are designed to be used as dwelling units. This standard shall, to the maximum extent possible, establish performance requirements. In certain instances, however, the use of specific requirements is necessary.

Obtain an electronic copy from: www.nfpa.org/501Next
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/501Next

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 p: (617) 984-7248 w: www.nfpa.org

Revision

BSR/NFPA 501A-202x, Standard for Fire Safety Criteria for Manufactured Home Installations, Sites, and Communities (revision of ANSI/NFPA 501A-2017)

This standard shall cover fire safety requirements for the installation of manufactured homes and manufactured home sites, including accessory buildings, structures, and communities.

Obtain an electronic copy from: www.nfpa.org/501aNext
Send comments (with optional copy to psa@ansi.org) to: www.nfpa.org/501aNext

Comment Deadline: September 21, 2020

NSAA (ASC B77) (National Ski Areas Association)

133 S Van Gordon Street, Suite 300, Lakewood, CO 80228 p: (720) 963-4210

Revision

BSR B77.2-202x, Standard for Funiculars - Safety Standard (revision of ANSI B77.2-2014)

This document establishes a standard for the design, manufacture, construction, operation, and maintenance of Funiculars.

Single copy price: $75.00
Obtain an electronic copy from: mlane@nsaa.org
Order from: Michael Lane: (720) 963-4210; mlane@nsaa.org
Send comments (with optional copy to psa@ansi.org) to: Same

NSF (NSF International)

789 N. Dixboro Road, Ann Arbor, MI 48105-9723 p: (734) 827-3817 w: www.nsf.org

Revision

BSR/NSF 25-202x (i10r4), Vending Machines for Food and Beverages (revision of ANSI/NSF 25-2017)

This Standard contains requirements for food and beverage vending machines, including those that vend packaged food and beverages and those that vend food and beverages in bulk.

Single copy price: Free
Obtain an electronic copy from: https://standards.nsf.org/apps/group_public/download.php/55001/25i10r4%20-%20Incorporating%20NAMA%20Language%20-%20JC%20Memo%20&%20Ballot.pdf
Send comments (with optional copy to psa@ansi.org) to: arose@nsf.org

OPEI (Outdoor Power Equipment Institute)

1605 King Street, Alexandria, VA 22314 p: (703) 678-2990 w: www.opei.org

New Standard

BSR/OPEI B71.6-202X, Powered Consumer Chipper / Shredders and Pedestrian-Controlled Chipper / Shredder Vacuums - Safety Specifications (new standard)

The safety specifications given in this standard are for powered consumer; (a) Chipper/Shredders, (b) Chipper/Shredder Baggers, (c) Chipper/Shredder Vacuums. Power may be supplied by an internal-combustion engine or an electric motor. These specifications are intended to provide safety requirements and to help ensure uniform operator environments. They are intended to apply to products specifically intended as consumer products for the personal use of a consumer around the home. This standard applies to all aftermarket parts, attachments, and accessories. Any manufacturer of aftermarket parts, attachments and accessories is responsible for ensuring compliance to this standard. Safety specifications in this standard apply only to a configuration of attachments/implements/accessories approved by their respective manufacturers. These specifications are not intended to apply to commercial products customarily used by hired operators or to products designed primarily for agricultural purposes such as defined in SAE J1116 or three-point hitch mounted power-takeoff (PTO) machines.

Single copy price: $180.00; $144.00 Full Member
Obtain an electronic copy from: dmustico@opei.org
Order from: dmustico@opei.org
Send comments (with optional copy to psa@ansi.org) to: Daniel J. Mustico; dmustico@opei.org

PDA (Parenteral Drug Association)

Bethesda Towers, 4350 East-West Highway, Suite 600, Bethesda, MD 20814 p: (301) 656-5900 Ext 106 w: www.pda.org

New Standard

BSR/PDA Standard 04-202x, Phage Retention Nomenclature Rating for Small and Large Virus-Retentive Filters (new standard)

This guide is intended to provide filter suppliers and end-users with an approach to standardizing methodology and nomenclature for large and small virus retentive filters using bacteriophage as a model. The objective is to assist users/manufacturers in selecting the most appropriate filter for their specific application needs. It is intended for virus retentive filters used where a virus clearance claim is made.

Single copy price: Free
Obtain an electronic copy from: standards@pda.org
Order from: PDA Website: www.pda.org
Send comments (with optional copy to psa@ansi.org) to: standards@pda.org

Comment Deadline: September 21, 2020

RVIA (Recreational Vehicle Industry Association)

1899 Preston White Drive, Reston, VA 20191-4326 p: (703) 620-6003 w: www.rvia.org

New Standard

BSR/RVIA RVEC-1-202x, Recommended Practice - Testing Requirements of Exterior Components for Recreational Vehicles (new standard)

This recommended practice provides uniform testing criteria for exterior components to enhance safety for users. The specific components that are covered are patio railings, patio doors, ramp doors and manual exterior entry steps that are installed on recreational vehicles (RVs) by recreational vehicular manufacturers on the production line. The primary purpose of this recommended practice, of laboratory test procedures, is to provide minimum safety criteria, through uniform testing, of the above-mentioned exterior components when installed and used on recreational vehicles. This recommended practice only applies to all new unused exterior components for recreational vehicles.

Single copy price: Free
Obtain an electronic copy from: kperkins@rvia.org
Order from: Kent Perkins, kperkins@rvia.org, or by mail: RVIA,1899 Preston White Drive, Reston VA 20191
Send comments (with optional copy to psa@ansi.org) to: Kent Perkins, kperkins@rvia.org

UL (Underwriters Laboratories)

47173 Benicia Street, Fremont, CA 94538 p: (510) 319-4271 w: https://ul.org/

Reaffirmation

BSR/UL 104-2016 (R202x), Standard for Safety for Elevator Door Locking Devices and Contacts (reaffirmation of ANSI/UL 104-2016)

This proposal covers the Reaffirmation and Continuance of the Eleventh Edition of the Standard for Elevator Door Locking Devices and Contacts, UL 104, as an American National Standard.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

47173 Benicia Street, Fremont, CA 94538 p: (510) 319-4271 w: https://ul.org/

Reaffirmation

BSR/UL 183-2016 (R202x), Standard for Safety for Manufactured Wiring Systems (reaffirmation of ANSI/UL 183-2016)

This proposal covers the Reaffirmation and Continuance of the Fourth Edition of the Standard for Manufactured Wiring Systems, UL 183, as an American National Standard.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to 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 21, 2020

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 p: (847) 664-3416 w: https://ul.org/

Revision

BSR/UL 142-202x, Standard for Safety for Steel Aboveground Tanks for Flammable and Combustible Liquids (revision of ANSI/UL 142-2019)

The following is being proposed:

1. Revising Section 35-38 requirements for revised OSHA references to correct current inaccuracies;
2. Adding Annex B to the standard for informational purposes;
3. Add requirements for double wall manways for aboveground tanks;
4. Revise Table 23.1 to reverse a change made in error;
5. Leakage Test revisions to differentiate between requirements for Performance and Production testing;
6. Addition of section for Alignment of Structural Members; and
7. Editorial corrections.

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

UL (Underwriters Laboratories)

333 Pfingsten Road, Northbrook, IL 60062-2096 p: (847) 664-3416 w: https://ul.org/

Revision

BSR/UL 142A-202x, Standard for Safety for Special Purpose Aboveground Tanks for Specific Flammable or Combustible Liquids (revision of ANSI/UL 142A-2018)

The following is being proposed:

1. Addition of Flange Top Process Tanks to the standard

Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: http://www.shopulstandards.com
Send comments (with optional copy to 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

VC (ASC Z80) (The Vision Council)

225 Reinekers Lane, Alexandria, VA 22314 p: 585-387-9913 w: www.z80asc.com

Reaffirmation

BSR Z80.29-2015 (R202x), Ophthalmics - Accomodative Intraocular Lenses (reaffirmation of ANSI Z80.29-2015)

This standard applies to any ocular implant whose primary indication is the correction of aphakia and is designed to provide vision over a continuous range of distances by affecting a change in the vergence power of the eye resulting from the implant design that changes eye optical power or implant position in response to a stimulus. For the purposes of this standard, these implants are referred to as accommodative intraocular lenses (AIOLs).

Single copy price: $75.00
Obtain an electronic copy from: https://www.z80asc.com/ or email: ascz80@thevisioncouncil.org
Order from: Michele Stolberg: 585-387-9913; ascz80@thevisioncouncil.org
Send comments (with optional copy to psa@ansi.org) to: Same

Comment Deadline: October 6, 2020

ANS (American Nuclear Society)

555 North Kensington Avenue, La Grange Park, IL 60526 p: (708) 579-8268 w: www.ans.org

Revision

Reaffirmations and withdrawals available electronically may be accessed at: webstore.ansi.org

BSR/ANS 51.10-202x, Auxiliary Feedwater System For Pressurized Water Reactors (revision of ANSI/ANS 51.10-1991 (R2018))

This standard specifies updated design requirements for the Auxiliary Feedwater System including system functions, performance requirements and system description.

Single copy price: $110.00
Obtain an electronic copy from: orders@ans.org
Order from: orders@ans.org
Send comments (with optional copy to psa@ansi.org) to: pschroeder@ans.org

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 the PSA Center, American National Standards Institute, 25 West 43rd Street, New York, NY 10036 or E-Mail to psa@ansi.org.

B11 (B11 Standards, Inc.)

PO Box 690905, Houston, TX 77269-0905 p: (832) 446-6999 w: https://www.b11standards.org/

B11.TR10-202x, Functional Safety of Artificial Intelligence for Machinery Applications (technical report)

This Technical Report provides guidance for the:
• implementation of functional safety principles in artificial intelligence (AI) programming when used as a means for machinery safety applications;
• effective communication between functional safety personnel (who provide the primary technical knowledge of machines system hazards and the application of risk reduction measures) and data scientists / programmers with no or limited machine system knowledge but who understand the capabilities and limitations of the AI system. These principles may include internal diagnostics such as component/system integrity during operation and external diagnostics such as environmental effects and communication networks.

Single copy price: $49.00
Order from: dfelinski@b11standards.org
Send comments (with optional copy to psa@ansi.org) to: David Felinski: (832) 446-6999; dfelinski@b11standards.org

30 Day Notice of Withdrawal: ANS 5 to 10 years past approval date

In accordance with clause 4.7.1 Periodic Maintenance of American National Standards of the ANSI Essential Requirements, the following American National Standards have not been reaffirmed or revised within the five-year period following approval as an ANS. Thus, they shall be withdrawn at the close of this 30-day public review notice in Standards Action.

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 400-2001, Addendum 2-2011, Liquid-to-Liquid Heat Exchangers

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

Notice of Withdrawal: ANS at least 10 years past approval date

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 270-2009, Sound Performance Rating of Outdoor Unitary Equipment

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 420-2009, Performance Rating of Forced-Circulation Free-Delivery Unit Coolers for Refrgeration

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 430-2010, Central Station Air-Handling Units

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 440-2009, Performance Rating of Room Fan-Coils

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 460-2009, Performance Rating of Remote Mechanical-Draft Air-Cooled Refrigerant Condensers

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 470-2006, Performance Rating of Desuperheater/Water Heaters

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

Notice of Withdrawal: ANS at least 10 years past approval date

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 495-2005, Performance Rating of Refrigerant Liquid Receivers

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 510-2006, Performance Rating of Positive Displacement Ammonia Compressors and Compressor Units

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 575-2009, Method of Measuring Sound Within an Equipment Space

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 640-2005, Performance Rating of Commercial and Industrial Humidifiers (formerly ANSI/AHRI 640-2005)

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 710 (I-P)-2010, Performance Rating of Liquid-Line Driers

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 711 (SI)-2010, Performance Rating of Liquid-Line Driers

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

Notice of Withdrawal: ANS at least 10 years past approval date

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 750-2007, Performance Rating of Thermostatic Refrigerant Expansion Valves

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 770-2007, Refrigerant Pressure Regulating Valves

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 870-2009, Performance Rating of Direct Geoexchange Heat Pumps

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 1060-2009, Performance Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

The following American National Standards have not been revised or reaffirmed within ten years from the date of their approval as American National Standards and accordingly are withdrawn:

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

2311 Wilson Boulevard, Suite 400, Arlington, VA 22201 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 1230-2010, Performance Rating of Variable Refrigerant Flow (VRF) Multi-Split Air-Conditioning and Heat Pump Equipment

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

Notice of Withdrawn ANS by an 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 p: 703-600-0327 w: www.ahrinet.org

ANSI/AHRI Standard 910-2011, Performance Rating of Indoor Pool Dehumidifiers

Kristin Carlson: 703-600-0327; kcarlson@ahrinet.org

Correction to ASD's URL Hyperlink

The URL provided in the July 31, 2020 Standards Action - Call for Comment notices for ASHRAE proposals misdirected readers to an incorrect web page upon clicking on the hyper link. While the URL address was correct, the hyper link was defective. Anyone interested in obtaining copies of ASHRAE call for comment draft standards or submitting comments may do so by either typing the full URL in their browser or may do so by clicking on the corrected URL hyper link provided below.

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

1791 Tullie Circle, NE, Atlanta, GA 30329-2305 p: (404) 636-8400 w: www.ashrae.org

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

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

Call for Members (ANS Consensus Bodies)

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

AAMI (Association for the Advancement of Medical Instrumentation)

Contact: Hae Choe
901 N. Glebe Road, Suite 300
Arlington, VA 22203
p: (703) 253-8268
e: standards@aami.org

BSR/AAMI/IEC 62366-1-2015 (R202x), Medical devices - Part 1: Application of usability engineering to medical devices (reaffirmation of ANSI/AAMI/IEC 62366-1-2015)

AGMA (American Gear Manufacturers Association)

Contact: Amir Aboutaleb
1001 N Fairfax Street, 5th Floor
Alexandria, VA 22314-1587
p: (703) 684-0211
e: tech@agma.org

BSR/AGMA ISO 6336-6-BXX-202x, Calculation Of Load Capacity Of Spur And Helical Gears - Part 6: Calculation Of Service Life Under Variable Load (identical national adoption of ISO 6336 -6:2019)

CPLSO

Contact: Hugh Pratt
The Marchioness Building, Commercial Road
Bristol BS16TG, UK BS1 6TG
p: (078) 796-2989 9
e: pratt.hugh@cplso.org

BSR/CPLSO 60479-202x, Effects Of Electricity On Humans And Animals (national adoption with modifications of IEC 60479 parts 1, 2, 4 & 5)

CTA (Consumer Technology Association)

Contact: Veronica Lancaster
1919 South Eads Street
Arlington, VA 22202
p: (703) 907-7697
e: vlancaster@cta.tech

BSR/CTA 2042.1-C-202x, Wireless Power Glossary Terms (revision and redesignation of ANSI/CTA 2042.1-B-2015)

ECIA (Electronic Components Industry Association)

Contact: Laura Donohoe
13873 Park Center Road, Suite 315
Herndon, VA 20171
p: (571) 323-0294
e: ldonohoe@ecianow.org

BSR/EIA 364-75B-202x, Lightning Strike Test Procedure for Electrical Connectors (revision and redesignation of ANSI/EIA 364-75A-2009 (R2015))

BSR/EIA 364-80A-202x, Low Frequency Shielding Effectiveness Test Procedure for Electrical Connectors and Sockets (revision and redesignation of ANSI/EIA 364-80-2015)

EMAP (Emergency Management Accreditation Program)

Contact: Nicole Ishmael
201 Park Washington Court
Falls Church, VA 22046-4527
p: (859) 351-2350
e: nishmael@emap.org

BSR/EMAP EMS 5-202x, Emergency Management Standard (revision of ANSI/EMAP EMS 5-2019)

NEMA (ASC C136) (National Electrical Manufacturers Association)

Contact: David Richmond
1300 North 17th Street, Suite 900
Rosslyn, VA 22209
p: (703) 841-3234
e: David.Richmond@nema.org

BSR C136.13-202X, Metal Brackets for Wood Poles (revision of ANSI C136.13-2014)

BSR C136.34-202X, For Roadway and Area Lighting Equipment - Vandal Shields for Roadway and Area Lighting Luminaires (revision of ANSI C136.34-2014)

Call for Members (ANS Consensus Bodies)

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

NEMA (ASC C18) (National Electrical Manufacturers Association)

Contact: Khaled Masri
1300 North 17th Street
Rosslyn, VA 22209
p: (703) 841-3278
e: Khaled.Masri@nema.org

BSR C18.1M, Part 1-202x, Portable Primary Cells and Batteries With Aqueous Electrolyte - General and Specifications (revision of ANSI C18.1M, Part 1-2015)

NSF (NSF International)

Contact: Allan Rose
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
p: (734) 827-3817
e: arose@nsf.org

BSR/NSF 25-202x (i10r4), Vending Machines for Food and Beverages (revision of ANSI/NSF 25-2017)

BSR/NSF 49-202x (i151r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)

BSR/NSF 49-202x (i156r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)

BSR/NSF 49-202x (i157r1), Biosafety Cabinetry: Design, Construction, Performance, and Field Certification (revision of ANSI/NSF 49-2019)

Contact: Jason Snider
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
p: (734) 418-6660
e: jsnider@nsf.org

BSR/NSF 350-202x (i49r2), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350 -2020)

BSR/NSF 350-202x (i53r1), Onsite Residential and Commercial Water Reuse Treatment Systems (revision of ANSI/NSF 350 -2019)

PDA (Parenteral Drug Association)

Contact: Christine Alston-Roberts
Bethesda Towers, 4350 East-West Highway, Suite 600
Bethesda, MD 20814
p: (301) 656-5900 Ext 106
e: roberts@pda.org

BSR/PDA Standard 07-202x, Analytical Method Validation and other Lifecycle Control Steps for Quality Control Testing of Biologics (new standard)

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.

AAMI (Association for the Advancement of Medical Instrumentation)

New National Adoption

ANSI/AAMI/IEC 80601-2-77-2020, Medical electrical equipment - Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment (identical national adoption of IEC 80601-2-77 ED1): 8/3/2020

ANSI/AAMI/IEC 80601-2-78-2020, Medical electrical equipment - Part 2-78: Particular requirements for the basic safety and essential performance of medical robots for rehabilitation, assessment, compensation or alleviation (identical national adoption of IEC 80601-2-78): 8/3/2020

ANS (American Nuclear Society)

Reaffirmation

ANSI/ANS 6.3.1-1987 (R2020), Program for Testing Radiation Shields in Light Water Reactors (LWR) (reaffirmation of ANSI/ANS 6.3.1-1987 (R2015)): 7/28/2020

ASA (ASC S1) (Acoustical Society of America)

New Standard

ANSI/ASA S1.13-2020, Measurement of Sound Pressure Levels in the Air (new standard): 7/28/2020

ASA (ASC S12) (Acoustical Society of America)

New Standard

ANSI/ASA S12.61-2020, Declaration and Verification of Noise Emission Values of Machinery, Equipment, and Products (new standard): 7/31/2020

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

Addenda

ANSI/ASHRAE Addendum 55c-2017, Thermal Environmental Conditions for Human Occupancy (addenda to ANSI/ASHRAE Standard 55-2017): 7/31/2020

ANSI/ASHRAE Addendum 55d-2017, Thermal Environmental Conditions for Human Occupancy (addenda to ANSI/ASHRAE Standard 55-2017): 7/31/2020

ANSI/ASHRAE Addendum b to ASHRAE Standard 52.2-2017, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size (addenda to ANSI/ASHRAE Standard 52.2-2012): 7/31/2020

ANSI/ASHRAE Addendum i to ANSI/ASHRAE Standard 15-2019, Safety Standard for Refrigeration Systems (addenda to ANSI/ASHRAE Standard 15-2019): 7/31/2020

ANSI/ASHRAE/ASHE Addendum 170k-2017, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Addendum 170k-2016): 7/31/2020

ANSI/ASHRAE/ASHE Addendum 170m-2017, Ventilation of Health Care Facilities (addenda to ANSI/ASHRAE/ASHE Addendum 170M-2012): 7/31/2020

ANSI/ASHRAE/ICC/USGBC/IES Addendum aa to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 7/31/2020

ANSI/ASHRAE/ICC/USGBC/IES Addendum ah to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 7/31/2020

ANSI/ASHRAE/ICC/USGBC/IES Addendum m to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 7/31/2020

ANSI/ASHRAE/ICC/USGBC/IES Addendum t to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017): 7/31/2020

ANSI/ASHRAE/ICC/USGBC/IES Addendum z to ANSI/ASRHAE/ICC/USGBC/IES Standard 189.1-2017, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017): 7/31/2020

ANSI/ASHRAE/IES Addendum by to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IES Standard 90.1-2016): 7/31/2020

ANSI/ASHRAE/IES Addendum ck to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 7/31/2020

ANSI/ASHRAE/IES Addendum cp to ANSI/ASHRAE/IES Standard 90.1-2019, Energy Standard for Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/IESNA Standard 90.1-2016): 7/31/2020

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

New Standard

ANSI/ASHRAE Standard 221-2020, Test Method to Field-Measure and Score the Cooling and Heating Performance of an Installed Unitary HVAC System (new standard): 7/31/2020

Revision

ANSI/ASHRAE Standard 190-2020, Method of Testing for Rating Indoor Pool Dehumidifiers (revision of ANSI/ASHRAE Standard 190-2013): 7/31/2020

ASME (American Society of Mechanical Engineers)

Revision

ANSI/ASME A17.2-2020, Guide for Inspection of Elevators, Escalators, and Moving Walks (revision of ANSI/ASME A17.2-2017): 7/31/2020

ASTM (ASTM International)

Reaffirmation

ANSI/ASTM C559-2016 (R2020), Test Method for Bulk Density by Physical Measurements of Manufactured Carbon and Graphite Articles (reaffirmation of ANSI/ASTM C559-2016): 5/23/2020

ANSI/ASTM C695-2015 (R2020), Test Method for Compressive Strength of Carbon and Graphite (reaffirmation of ANSI/ASTM C695-2015): 5/23/2020

ANSI/ASTM C749-2015 (R2020), Test Method for Tensile Stress-Strain of Carbon and Graphite (reaffirmation of ANSI/ASTM C749-2015): 5/23/2020

ANSI/ASTM C783-2010 (R2020), Practice for Core Sampling of Graphite Electrodes (reaffirmation of ANSI/ASTM C783-2010 (R2015)): 5/23/2020

ANSI/ASTM C1025-2015 (R2020), Test Method for Modulus of Rupture in Bending of Electrode Graphite (reaffirmation of ANSI/ASTM C1025-2015): 5/23/2020

ANSI/ASTM D6986-2010 (R2020), Test Method for Free Water, Particulate and Other Contamination in Aviation Fuels (Visual Inspection Procedures) (reaffirmation of ANSI/ASTM D6986-2010 (R2016)): 5/23/2020

ANSI/ASTM D7972-2014 (R2020), Test Method for Flexural Strength of Manufactured Carbon and Graphite Articles Using Three-Point Loading at Room Temperature (reaffirmation of ANSI/ASTM D7972-2014): 5/23/2020

ANSI/ASTM F1749-2015 (R2020), Specification for Fitness Equipment and Fitness Facility Safety Signage and Labels (reaffirmation of ANSI/ASTM F1749-2015): 5/23/2020

Revision

ANSI/ASTM C560-2020, Test Methods for Chemical Analysis of Graphite (revision of ANSI/ASTM C560-2015): 5/23/2020

ANSI/ASTM C651-2020, Test Method for Flexural Strength of Manufactured Carbon and Graphite Articles Using Four-Point Loading at Room Temperature (revision of ANSI/ASTM C651-2015): 5/23/2020

ASTM (ASTM International)

Revision

ANSI/ASTM C748-2020, Test Method for Rockwell Hardness of Graphite Materials (revision of ANSI/ASTM C748-2010 (R2015)): 5/23/2020

ANSI/ASTM D3244-2020, Practice for Utilization of Test Data to Determine Conformance with Specifications (revision of ANSI/ASTM D3244-2018): 5/23/2020

ANSI/ASTM D3948-2020, Test Method for Determining Water Separation Characteristics of Aviation Turbine Fuels by Portable Separometer (revision of ANSI/ASTM D3948-2014 (R2018)): 5/23/2020

ANSI/ASTM D4306-2020, Practice for Aviation Fuel Sample Containers for Tests Affected by Trace Contamination (revision of ANSI/ASTM D4306 -2015): 5/23/2020

ANSI/ASTM D6299-2020, Practice for Applying Statistical Quality Assurance and Control Charting Techniques to Evaluate Analytical Measurement System Performance (revision of ANSI/ASTM D6299-2019): 5/23/2020

ANSI/ASTM D7224-2020, Test Method for Determining Water Separation Characteristics of Kerosine-Type Aviation Turbine Fuels Containing Additives by Portable Separometer (revision of ANSI/ASTM D7224-2014 (R2018)): 5/23/2020

ANSI/ASTM D7566-2020, Specification for Aviation Turbine Fuel Containing Synthesized Hydrocarbons (revision of ANSI/ASTM D7566-2020): 5/23/2020

ANSI/ASTM D8289-2020, Test Method for Tensile Strength Estimate by Disc Compression of Manufactured Graphite (revision of ANSI/ASTM D8289 -2019): 5/23/2020

ANSI/ASTM E119-2020, Test Methods for Fire Tests of Building Construction and Materials (revision of ANSI/ASTM E119-2019): 5/23/2020

CTA (Consumer Technology Association)

Revision

* ANSI/CTA 774-D-2020, TV Receiving Antenna Performance Presentation and Measurement (revision and redesignation of ANSI/CTA 774-C-2014): 7/28/2020

Stabilized Maintenance

* ANSI/CTA 762-B-2008 (S2020), DTV Remodulator Specification (stabilized maintenance of ANSI/CTA 762-B-2008 (R2015)): 7/31/2020

ECIA (Electronic Components Industry Association)

Revision

ANSI/EIA 364-21F-2020, Insulation Resistance Test Procedure for Electrical Connectors, Sockets and Coaxial Contacts (revision and redesignation of ANSI/EIA 364-21E-2014): 7/28/2020

HL7 (Health Level Seven)

New Standard

ANSI/HL7 V26 IG CCHD, R1-2020, HL7 Version 2.6 Implementation Guide: Newborn Screening for Critical Congenital Heart Defects (CCHD), Release 1 (new standard): 8/3/2020

ANSI/HL7 V3 PSAF, R1-2020, HL7 Version 3 Standard: Privacy and Security Architecture Framework, Release 1 (new standard): 7/28/2020

IAPMO (ASSE Chapter) (ASSE International Chapter of IAPMO)

Revision

ANSI/ASSE 1035-2020, Performance Requirements for Laboratory Faucet Backflow Preventers (revision of ANSI/ASSE 1035-2008): 7/31/2020

LIA (ASC Z136) (Laser Institute of America)

New Standard

ANSI Z136.7-2020, Standard for Testing and Labeling of Laser Protective Equipment (new standard): 7/28/2020

RESCIND APPROVAL

NSF (NSF International)

Revision

ANSI/NSF 14-2020 (i108r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14-2019): 7/27/2020

ANSI/NSF/CAN 60-2020 (i92r1), NSF 60 - Drinking Water Treatment Chemicals - Health Effects (revision of ANSI/NSF/CAN 60-2019): 7/31/2020

UL (Underwriters Laboratories)

New National Adoption

ANSI/UL 15027-2-2020, Standard for Immersion suits - Part 2: Abandonment suits, requirements including safety (national adoption with modifications of ISO 15027-2): 7/27/2020

Reaffirmation

ANSI/UL 213C-2015 (R2020), Standard for Grooved and Plain End Fittings (reaffirmation of ANSI/UL 213C-2015): 7/29/2020

ANSI/UL 60079-5-2016 (R2020), Standard for Safety for Explosive Atmospheres - Part 5: Equipment Protection by Powder Filling q (reaffirm a national adoption ANSI/UL 60079-5-2016): 7/31/2020

ANSI/UL 60079-6-2016 (R2020), Standard for Safety for Explosive Atmospheres - Part 6: Equipment Protection by Liquid Immersion o (reaffirm a national adoption ANSI/UL 60079-6-2016): 7/31/2020

Revision

ANSI/UL 405-2020, Standard for Safety for Fire Department Connection Devices (revision of ANSI/UL 405-2018): 7/29/2020

ANSI/UL 1203-2020a, Standard for Safety for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations (revision of ANSI/UL 1203-2020): 7/31/2020

UL (Underwriters Laboratories)

Revision

ANSI/UL 1472-2020, Standard for Safety for Solid-State Dimming Controls (revision of ANSI/UL 1472-2017): 7/31/2020

ANSI/UL 1996-2020, Standard for Electric Duct Heaters (revision of ANSI/UL 1996-2016): 7/28/2020

ANSI/UL 2079-2020, Standard for Safety for Tests for Fire Resistance of Building Joint Systems (revision of ANSI/UL 2079-2015): 7/29/2020

ANSI/UL 2218-2020, Standard for Impact Resistance of Prepared Roof Covering Materials (revision of ANSI/UL 2218-2012 (R2018)): 7/31/2020

Correction

NSF hereby retracts the Approval notice published in Final Action of Standards Action, April 24, 2020. NSF 455-4-202x (i14r1), had unresolved negative votes.

NSF (NSF International)

NSF 455-4-202x (i14r1), Good Manufacturing Practices for Over-the-Counter Drugs:

Designation Correction

The Designation of the approval of ANSI/RESNET/ACCA 310-2020, has been revised to include ICC. The new designation is ANSI/RESNET/ACCA/ICC 310-2020.

RESNET (Residential Energy Services Network, Inc.)

ANSI/RESNET/ACCA/ICC 310-2020, Standard for Grading the Installation of HVAC Systems: 6/23/2020

American National Standards Maintained 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)**
- **IES (Illuminating Engineering Society)**
- **ITI (InterNational Committee for Information Technology Standards)**
- **MHI (Material Handling Industry)**
- **NAHBRC (NAHB Research Center, Inc.)**
- **NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)**
- **NCPDP (National Council for Prescription Drug Programs)**
- **NEMA (National Electrical Manufacturers Association)**
- **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)**
- **UL (Underwriters Laboratories)**

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 Contact Information

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment 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 Standards Action Editor at standact@ansi.org.

AAMI
Association for the Advancement of Medical Instrumentation
901 N. Glebe Road, Suite 300
Arlington, VA 22203
p: (703) 253-8268
www.aami.org

AGMA
American Gear Manufacturers Association
1001 N Fairfax Street
5th Floor
Alexandria, VA 22314-1587
p: (703) 684-0211
www.agma.org

ANS
American Nuclear Society
555 North Kensington Avenue
La Grange Park, IL 60526
p: (708) 579-8268
www.ans.org

APCO
Association of Public-Safety Communications Officials-International
351 N. Williamson Boulevard
Daytona Beach, FL 32114
p: 571-289-7402
www.apcoIntl.org

ASA (ASC S1)
Acoustical Society of America
1305 Walt Whitman Road
Suite 300
Melville, NY 11747
p: (516) 576-2341
www.acousticalsociety.org

ASA (ASC S12)
Acoustical Society of America
1305 Walt Whitman Road
Suite 300
Melville, NY 11747
p: (516) 576-2341
www.acousticalsociety.org

ASHRAE
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
1791 Tullie Circle, NE
Atlanta, GA 30329
p: (678) 539-1214
www.ashrae.org

ASME
American Society of Mechanical Engineers
Two Park Avenue
M/S 6-2B
New York, NY 10016-5990
p: (212) 591-8489
www.asme.org

ASTM
ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
p: (610) 832-9744
www.astm.org

AWC
American Wood Council
222 Catoctin Circle
Suite 201
Leesburg, VA 20175
p: (202) 463-2770
www.awc.org

AWS
American Welding Society
8669 Doral Blvd
Suite 130
Doral, FL 33166
p: (305) 443-9353 306
www.aws.org

AWWA
American Water Works Association
6666 W. Quincy Ave.
Denver, CO 80235
p: (303) 347-6178
www.awwa.org

B11
B11 Standards, Inc.
PO Box 690905
Houston, TX 77269-0905
p: (832) 446-6999
https://www.b11standards.org/

CPLSO
CPLSO
The Marchioness Building, Commercial Road
Bristol BS16TG, UK BS1 6TG
p: (078) 796-2989 9

CSA
CSA America Standards Inc.
8501 E. Pleasant Valley Road
Cleveland, OH 44131
p: (216) 524-4990
www.csagroup.org

CTA
Consumer Technology Association
1919 South Eads Street
Arlington, VA 22202
p: (703) 907-7697
www.cta.tech

DSI
Dental Standards Institute, Inc.
109 Bushaway Road
Suite 100
Wayzata, MN 55391
p: (763) 290-0004
https://dentalstandardsinstitute.com/

ECIA
Electronic Components Industry Association
13873 Park Center Road
Suite 315
Herndon, VA 20171
p: (571) 323-0294
www.ecianow.org

EMAP
Emergency Management Accreditation Program
201 Park Washington Court
Falls Church, VA 22046-4527
p: (859) 351-2350
www.emap.org

ESTA
Entertainment Services and Technology Association
271 Cadman Plaza
P.O. Box 23200
Brooklyn, NY 11202-3200
p: (212) 244-1505
www.esta.org

HL7
Health Level Seven
3300 Washtenaw Avenue
Suite 227
Ann Arbor, MI 48104
p: (313) 550-2073 104
www.hl7.org

HPS (ASC N13)
Health Physics Society
1313 Dolley Madison Blvd #402
McLean, VA 22101
p: (703) 790-1745
www.hps.org

IAPMO (ASSE Chapter)
ASSE International Chapter of IAPMO
18927 Hickory Creek Drive
Suite 220
Mokena, IL 60448
p: (708) 995-3017
www.asse-plumbing.org

IICRC
The Institute of Inspection, Cleaning and Restoration Certification
4043 South Eastern Avenue
Las Vegas, NV 89119
p: (702) 430-9829
www.thecleantrust.org

LIA (ASC Z136)
Laser Institute of America
13501 Ingenuity Drive, Suite 128
Orlando, FL 32826
p: (407) 380-1553
www.laserinstitute.org

NEMA (ASC C136)
National Electrical Manufacturers Association
1300 North 17th Street
Suite 900
Rosslyn, VA 22209
p: (703) 841-3234
www.nema.org

NEMA (ASC C8)
National Electrical Manufacturers Association
1300 North 17th Street
Rosslyn, VA 22209
p: (703) 841-3278
www.nema.org

NEMA (ASC W1)
National Electrical Manufacturers Association
1300 North 17th Street
Rosslyn, VA 22209
p: (703) 841-3278
www.nema.org

NFPA
National Fire Protection Association
One Batterymarch Park
Quincy, MA 02269-9101
p: (617) 984-7248
www.nfpa.org

NSAA (ASC B77)
National Ski Areas Association
133 S Van Gordon Street
Suite 300
Lakewood, CO 80228
p: (720) 963-4210

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
p: (734) 827-3817
www.nsf.org

OPEI
Outdoor Power Equipment Institute
1605 King Street
Alexandria, VA 22314
p: (703) 678-2990
www.opei.org

PDA
Parenteral Drug Association
Bethesda Towers, 4350 East-West Highway
Suite 600
Bethesda, MD 20814
p: (301) 656-5900 Ext 106
www.pda.org

RVIA
Recreational Vehicle Industry Association
1899 Preston White Drive
Reston, VA 20191-4326
p: (703) 620-6003
www.rvia.org

SCTE
Society of Cable
Telecommunications Engineers
140 Philips Rd
Exton, PA 19341
p: (800) 542-5040
www.scte.org

UL
Underwriters Laboratories
47173 Benicia Street
Fremont, CA 94538
p: (510) 319-4271
https://ul.org/

VC (ASC Z80)
The Vision Council
225 Reinekers Lane
Alexandria, VA 22314
p: 585-387-9913
www.z80asc.com

ISO Draft International Standards

This section lists proposed standards that the International Organization for Standardization (ISO) is 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 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. The final date for offering comments is listed after each draft.

ORDERING INSTRUCTIONS

ISO Drafts can be made available by contacting ANSI's Customer Service department. Please e-mail your request for an ISO 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.

CRANES (TC 96)

ISO/DIS 9374-5, Cranes - Information to be provided - Part 5: Overhead travelling cranes and portal bridge cranes - 10/15/2020, $77.00

DOCUMENT IMAGING APPLICATIONS (TC 171)

ISO/DIS 19475, Document management - Minimum requirements for the storage of documents - 10/17/2020, $67.00

FIRE SAFETY (TC 92)

ISO/DIS 20710-1, Fire safety engineering - Active fire protection systems - Part 1: General principles - 10/18/2020, $62.00

INDUSTRIAL TRUCKS (TC 110)

ISO/DIS 23434-1, Industrial trucks - Sustainability - Part 1: Vocabulary - 10/17/2020, $40.00

ISO/DIS 23434-2, Industrial trucks - Sustainability - Part 2: Factors and reporting - 10/17/2020, $46.00

NUCLEAR ENERGY (TC 85)

ISO/DIS 24459, Determination of Uranium content in samples coming from the Nuclear Fuel cycle by L-absorption Edge Spectrometry - 10/22/2020, $58.00

PAINTS AND VARNISHES (TC 35)

ISO/DIS 8130-2, Coating powders - Part 2: Determination of density by gas comparison pyknometer (referee method) - 10/16/2020, $40.00

ISO/DIS 8130-3, Coating powders - Part 3: Determination of density by liquid displacement pyknometer - 10/16/2020, $33.00

ISO/DIS 8130-5, Coating powders - Part 5: Determination of flow properties of a powder/air mixture - 10/16/2020, $40.00

ISO/DIS 8130-6, Coating powders - Part 6: Determination of gel time of thermosetting coating powders at a given temperature - 10/16/2020, $33.00

ISO/DIS 8130-8, Coating powders - Part 8: Assessment of the storage stability of thermosetting powders - 10/16/2020, $40.00

ISO/DIS 8130-10, Coating powders - Part 10: Determination of deposition efficiency - 10/16/2020, $40.00

PLASTICS PIPES, FITTINGS AND VALVES FOR THE TRANSPORT OF FLUIDS (TC 138)

ISO/DIS 10466, Glass-reinforced thermosetting plastics (GRP) pipes - Test method to prove the resistance to initial ring deflection - 10/15/2020, $40.00

RAILWAY APPLICATIONS (TC 269)

ISO/DIS 22749-1, Railway applications - Suspension components - Part 1: Characteristics and test methods for elastomer-mechanical parts - 10/15/2020, $119.00

ISO/DIS 22749-2, Railway applications - Suspension components - Part 2: Approval procedure and quality monitoring for elastomer-mechanical parts - 10/15/2020, $40.00

ROAD VEHICLES (TC 22)

ISO 16505/DAmd1, - Amendment 1 - 10/23/2020, FREE

SCREW THREADS (TC 1)

ISO 965-1/DAmd1, - Amendment 1 - 10/16/2020, $29.00

ISO 965-2/DAmd1, - Amendment 1 - 10/16/2020, $29.00

ISO 965-5/DAmd1, - Amendment 1 - 10/16/2020, $29.00

ISO/DIS 965-3, ISO general purpose metric screw threads - Tolerances - Part 3: Limit deviations for screw threads - 10/16/2020, FREE

ISO/DIS 965-4, ISO general purpose metric screw threads - Tolerances - Part 4: Limits of sizes for hot-dip galvanized external screw threads to mate with internal screw threads tapped with tolerance position H or G after galvanizing - 10/16/2020, $33.00

SHIPS AND MARINE TECHNOLOGY (TC 8)

ISO/DIS 23323, Ships and marine technology - Guidelines for software based planned maintenance system - 10/22/2020, $40.00

SUSTAINABLE DEVELOPMENT IN COMMUNITIES (TC 268)

ISO/DIS 37169, Smart community infrastructures - Smart transportation by run-through train/bus operation in/between cities - 10/15/2020, $62.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)

ISO/DIS 10315, Cigarettes - Determination of nicotine in total particulate matter from the mainstream smoke - Gas-chromatographic method - 10/16/2020, $53.00

TRANSPORT INFORMATION AND CONTROL SYSTEMS (TC 204)

ISO/DIS 15638-24, Intelligent transport systems - Framework for collaborative telematics applications for regulated commercial freight vehicles (TARV) - Part 24: Safety information provisioning - 10/18/2020, $93.00

TYRES, RIMS AND VALVES (TC 31)

ISO/DIS 10191, Passenger car tyres - Verifying tyre capabilities - Laboratory test methods - 11/11/2013, $67.00

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

BUILDING CONSTRUCTION (TC 59)

ISO 19650-3:2020, Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM) - Information management using building information modelling - Part 3: Operational phase of the assets, $162.00

ENVIRONMENTAL MANAGEMENT (TC 207)

ISO 14050:2020, Environmental management - Vocabulary, $45.00

ESSENTIAL OILS (TC 54)

ISO 3044:2020, Essential oil of Corymbia citriodora (Hook.) K.D. Hill and L.A.S. Johnson (syn. Eucalyptus citriodora Hook.), $68.00

GEARS (TC 60)

ISO 4468:2020, Gear hobs - Accuracy requirements, $185.00

INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

ISO 23952:2020, Automation systems and integration - Quality information framework (QIF) - An integrated model for manufacturing quality information, $232.00

OTHER

ISO 13365-1:2020, Leather - Chemical determination of the preservative (TCMTB, PCMC, OPP, OIT) content in leather by liquid chromatography - Part 1: Acetonitrile extraction method, $45.00

SMALL CRAFT (TC 188)

ISO 11812:2020, Small craft - Watertight or quick-draining recesses and cockpits, $162.00

ISO 12216:2020, Small craft - Windows, portlights, hatches, deadlights and doors - Strength and watertightness requirements, $209.00

ISO 12402-2:2020, Personal flotation devices - Part 2: Lifejackets, performance level 275 - Safety requirements, $138.00

ISO 12402-3:2020, Personal flotation devices - Part 3: Lifejackets, performance level 150 - Safety requirements, $138.00

ISO 12402-4:2020, Personal flotation devices - Part 4: Lifejackets, performance level 100 - Safety requirements, $138.00

ISO 12402-5:2020, Personal flotation devices - Part 5: Buoyancy aids (level 50) - Safety requirements, $138.00

ISO 12402-6:2020, Personal flotation devices - Part 6: Special application lifejackets and buoyancy aids - Safety requirements and additional test methods, $138.00

ISO 12402-7:2020, Personal flotation devices - Part 7: Materials and components - Safety requirements and test methods, $209.00

ISO 12402-8:2020, Personal flotation devices - Part 8: Accessories - Safety requirements and test methods, $103.00

ISO 12402-9:2020, Personal flotation devices - Part 9: Evaluation, $232.00

ISO 12402-10:2020, Personal flotation devices - Part 10: Selection and application of personal flotation devices and other relevant devices, $138.00

SMALL TOOLS (TC 29)

ISO 21982:2020, Assembly tools for screws and nuts - Ratcheting wrenches - Technical requirements, $68.00

TERMINOLOGY (PRINCIPLES AND COORDINATION) (TC 37)

ISO 24613-2:2020, Language resource management - Lexical markup framework (LMF) - Part 2: Machine-readable dictionary (MRD) model, $138.00

TRADITIONAL CHINESE MEDICINE (TC 249)

ISO 22217:2020, Traditional Chinese medicine -Storage requirements for raw materials and decoction pieces, $209.00

ISO 23191:2020, Traditional Chinese medicine - Determination of selected Aconitum alkaloids by high-performance liquid chromatography (HPLC), $103.00

WATER QUALITY (TC 147)

ISO 13161:2020, Water quality - Polonium 210 - Test method using alpha spectrometry, $138.00

ISO Technical Specifications

AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO/TS 20224-1:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 1: Bovine DNA detection method, $103.00

ISO/TS 20224-2:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 2: Ovine DNA detection method, $103.00

ISO/TS 20224-3:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 3: Porcine DNA detection method, $103.00

ISO/TS 20224-4:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 4: Chicken DNA detection method, $103.00

ISO/TS 20224-5:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 5: Goat DNA detection method, $103.00

ISO/TS 20224-6:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 6: Horse DNA detection method, $103.00

ISO/TS 20224-7:2020, Molecular biomarker analysis - Detection of animal-derived materials in foodstuffs and feedstuffs by real-time PCR - Part 7: Donkey DNA detection method, $103.00

IEC Standards

ELECTROMECHANICAL COMPONENTS AND MECHANICAL STRUCTURES FOR ELECTRONIC EQUIPMENTS (TC 48)

IEC 61076-3-104 Ed. 3.0 b:2017, Connectors for electrical and electronic equipment - Product requirements - Part 3-104: Detail specification for 8-way, shielded free and fixed connectors for data transmissions with frequencies up to 2 000 MHz, $352.00

FIBRE OPTICS (TC 86)

IEC 61757-4-3 Ed. 1.0 b:2020, Fibre optic sensors - Part 4-3: Electric current measurement - Polarimetric method, $281.00

OTHER

IEC 61000-6-3 Ed. 3.0 b:2020, Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for equipment in residential environments, $199.00

IEC 61000-6-8 Ed. 1.0 b:2020, Electromagnetic compatibility (EMC) - Part 6-8: Generic standards - Emission standard for professional equipment in commercial and light-industrial locations, $235.00

ROTATING MACHINERY (TC 2)

IEC 60034-5 Ed. 5.0 b:2020, Rotating electrical machines - Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) - Classification, $164.00

WIND TURBINE GENERATOR SYSTEMS (TC 88)

IEC 61400-24 Ed. 2.0 b:2019, Wind energy generation systems - Part 24: Lightning protection, $375.00

IEC 61400-27-1 Ed. 2.0 en:2020, Wind energy generation systems - Part 27-1: Electrical simulation models - Generic models, $375.00

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.

The following is a list of alphanumeric organization names that have been submitted to ANSI for registration. 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; Fax: (301) 926-1559; E-mail: usatbtep@nist.gov or notifyus@nist.gov.

BSR/ASHRAE Addendum d
to ANSI/ASHRAE Standard 62.2-2019

Public Review Draft

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

First Public Review (July 2020)
(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.

ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

(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 replaces the current definition of "readily accessible" with a new definition that is intended to be less ambiguous and more compatible with building codes. The replaced definition of "readily accessible" is directly from the 2020 National Electrical Code (NEC). It also creates a new definition for "accessible" and makes edits in the standard to refer to one of the two definitions, where needed.

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

Addendum d to 62.2-2019

Revise Section 3 Definitions as shown below. The remainder of Section 3 is unchanged.

~~***readily accessible:*** capable of being quickly and easily reached for operation, maintenance, and inspection.~~

accessible: capable of being reached for operation, renewal, inspection, removal, and exposure without damaging the building structure or finish.

accessible, readily: capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to take actions such as to use tools (other than keys), to climb over or under, to remove obstacles, or to resort to portable ladders.

Add a new Section A2.1 as shown below.

A2.1 Control. The control required by Section 4.4.1 shall be accessible to the dwelling-unit occupant but shall not be required to be readily accessible to the dwelling-unit occupant.

Revise Section A5 Dwelling-Unit Air Sealing as shown below. The remainder of Section A5 is unchanged.

A5. DWELLING-UNIT AIR SEALING
[…]

A5.1 The spaces around ~~readily~~ accessible penetrations through the dwelling-unit air barrier, including but not limited to the following, shall be sealed:

a. Vent and pipe penetrations, including those from water piping, drain waste and vent piping, HVAC piping, and sprinkler heads
b. Electrical penetrations, including those for receptacles, lighting, communications wiring, and smoke alarms
c. HVAC penetrations, including those for fans and for exhaust, supply, transfer, and return air ducts

A5.2 ~~Readily a~~Accessible leaks and gaps in the dwelling-unit air barrier shall be sealed, including but not limited to the intersections of baseboard trim and floor, the intersections of walls and ceilings, around window trim and dwelling-unit doors, and the termination points of internal chases in attics and crawlspaces.

A5.3 Where previously inaccessible locations are made ~~readily~~ accessible during renovation activities, those areas shall be air sealed as prescribed in Sections A5.1 and A5.2.

[…]

BSR/ASHRAE Addendum a
to ANSI/ASHRAE Standard 90.4-2019

Public Review Draft

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

Second Public Review (August 2020)
(Draft Shows Proposed Independent Substantive Changes to Previous Public Review Draft)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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.

ASHRAE, 1791 Tullie Circle, NE, Atlanta GA 30329-2305

BSR/ASHRAE Addendum a to ANSI/ASHRAE Standard 90.4, *Energy Standard for Data Centers* Second Public Review Draft - Independent Substantive Changes.

(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

Addendum a was written to clarify existing requirements in Section 6.5 as well as introduce new provisions to encourage heat recovery within data centers. Additional improvements were identified during the 1st public review, which have been included in the draft below.

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

Addendum a to 90.4-2019

Modify Section 6.5 as follows:

6.5 Maximum *Annualized Mechanical Load Component (Annualized MLC)*. *Annualized MLC* shall be calculated using Equation 6.5. The resulting value shall be less than or equal to the value in Table 6.5, "Maximum *Annualized Mechanical Load Component (Annualized MLC)*".

…

Annual *energy* for shared *systems* and for heat recovery shall ~~must~~ be calculated using an 8760 hour TMY3 file and accurate heating/cooling load profiles.

Data CenterITE_N (kWh) = total annual *energy* consumed by the *ITE* at a constant *ITE* load of *N%* of the design *ITE* load. For example, Data$CenterITE_{50}$ for a design ITE load of 1,000 *kW* = 1,000 *kW* * 8760 hrs * 0.5 = 4,380,000 kWh. *ITE energy* does not include *UPS losses* ~~energy~~, but does include server fan *energy*.

Calculations/simulations shall ~~must~~ be made using the *control* sequences and setpoints in the Compliance Documentation. ***Informative Note***: As an ~~For~~ example, if a *data center* includes redundant air handlers but all air handlers will operate in unison at reduced ~~partial~~ speed during normal operation, ~~when the load is at design capacity~~ then calculations will reflect *equipment* part load performance at those simulated conditions as ~~shall be made accordingly, and the *design conditions* so~~ noted on the design documents.

Mechanical *equipment energy* not provided by electricity shall be converted to kWh using ~~either actual utility rates for that site or state average energy prices published by USDOE's Energy Information Administration (EIA) for~~

~~commercial *building* customers, but rates from different sources may not be mixed in the same project.~~ the following formula:

3,412 Btu = 1.0 kWh

Exception: *Energy* from Shared *Systems* shall be calculated in accordance with Section 11.3

***Informative Notes*:**

1. As an example, if a *data center* receives chilled water from a central chilled water plant that serves the *data center* and other *spaces* (i.e., *spaces* that do or do not meet the definition of a *data center*), the total shared *system* input *energy* is multiplied by the *data center*'s fraction of total *system* capacity for each hour to determine the *data center*'s input *energy* in accordance with Section 11.3.
2. As an example, if a natural gas appliance uses 1 therm gas input, 1 therm = 100,000 Btu. Using the formula 100,000 Btu / (3,412 Btu / 1.0 kWh) = 29.3 kWh equivalent.

BSR/ASHRAE Addendum b
to ANSI/ASHRAE Standard 90.4-2019

Public Review Draft

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

Second Public Review (August 2020)
(Draft Shows Proposed Independent Substantive Changes to Previous Public Review Draft)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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BSR/ASHRAE Addendum b to ANSI/ASHRAE Standard 90.4, *Energy Standard for Data Centers* Second Public Review Draft - Independent Substantive Changes.

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Foreword

Addendum b was written to clarify existing requirements in Sections 6 and 11 and to provide guidance for taking credit for renewable energy systems. Additional improvements were identified during the 1st public review, which have been included in the draft below.

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

Addendum b to 90.4-2019

Delete from Section 6.5 as this note is no longer required due to Section 11 updates:

~~*Informative Note:* An annual *energy* credit may be taken for on-site renewable generation included in the *data center* design.~~

Modify Section 11.2 as follows:

11.2 Compliance. Compliance with Section 11 shall be demonstrated by complying with all of the following conditions:

…

d. The sum of the calculated values of the *annualized MLC* value and the *design ELC* minus the OR-Credit shall be equal to or less than the maximum overall *systems* design value. (The sum of the *annualized MLC* value and the *design ELC* value create an overall *systems* design value.)

OR-Credit = lesser of 0.05 or

$$\frac{\sum_{N=25,50,75,100} OnsiteRenewables_N}{\sum_{N=25,50,75,100} DataCenterITE_N}$$

$OnsiteRenewables_N$ (kWh) = total annual *energy* that is produced onsite by renewable *energy systems* and that is consumed onsite, modeled at a constant *ITE* load of *N*% of the design *ITE* load. Onsite renewables can only be included in the *Annualized MLC* calculation if the *data center* owner owns the onsite renewable *energy system* or has signed a contractual agreement to purchase *energy* generated by the onsite renewable *energy system* for at least 10 years. Existing

onsite renewables shall not be credited for 90.4 compliance if they have previously received credit under 90.4 or any other energy standard. ~~Onsite renewable credit shall be limited to incremental addition of renewable capacity concurrent with *data center* approval/*construction*. It shall not be permissible to assign existing renewable capacity to this credit.~~

Data CenterITE_N (kWh) = total annual *energy* consumed by the *ITE* at a constant *ITE* load of *N*% of the design *ITE* load. For example, DataCenterITE50 for a design *ITE* load of 1,000 *kW* = 1,000 *kW* * 8760 hrs * 0.5 = 4,380,000 kWh. *ITE. energy* does not include *UPS losses* ~~*energy*~~, but does include server fan *energy*.

BSR/ASHRAE Addendum d
to ANSI/ASHRAE Standard 90.4-2019

Public Review Draft

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

Second Public Review (August 2020)
(Draft Shows Proposed Independent Substantive Changes to Previous Public Review Draft)

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BSR/ASHRAE Addendum d to ANSI/ASHRAE Standard 90.4, *Energy Standard for Data Centers* Second Public Review Draft - Independent Substantive Changes.

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Foreword

Interpretation IC 90.4-2016-1-OF of ANSI/ASHRAE Standard 90.4-2016 Energy Standard for Data Centers was approved on 1/8/2020. This IC was a response to a Request for Interpretation on the 90.4 consideration of Diesel-Rotary UPS Systems (DRUPS) and the corresponding accounting of these systems in the Electrical Loss Component (ELC). In crafting the IC, the committee also identified several marginal changes to 90.4 definitions and passages in Section 8 that would add further clarity to the issue. This addendum contains the proposed changes for that aim as well as other minor changes to correct spelling or text errors, incorporate the latest ELC values into Section 11, and to refresh information in the Normative Reference section of the Standard.

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

Addendum d to 90.4-2019

Modify the definition of Uninterruptable Power Supply (UPS) as follows:

Uninterruptible Power Supply (UPS): (also referred to as Uninterruptible Power *System*) a *system* intended to deliver continuous, stable power to the critical load. and (b) "rotary", 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. It may also include a driven engine for emergency backup (commonly referred to as a Diesel Rotary *UPS* or "DRUPS", regardless of fuel~~*fuel*~~ type), which is decoupled from the rotary *UPS* components during normal operation and is not included in *efficiency* calculations. Either type can be made up of one or more modules . . . .

Modify the language in 8.4.1.8 as follows:

8.4.1.8 Alternate Designs. In the event that a ~~conventional~~ *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 device, such as, but not limited to, a rectifier, voltage regulator or harmonic neutralizing *transformer*, is used in place of a ~~conventional~~ UPS, or where a Diesel Rotary UPS (DRUPS) *system* is used, the *efficiency* and *loss* for that device shall be 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 this Standard in the same manner as are other on-site emergency or standby generators. (See Exception under 8.4.1.4.)

Update the Normative References as shown below to reflect that ASHRAE 169-2013 covers the climate classifications used in this standard.

NORMATIVE REFERENCES

Reference	Title
ASHRAE **1791 Tullie Circle NE** **Atlanta, GA 30329-2305, United States** **1-404-636-8400; www.ashrae.org**	
…	**…**
ANSI/ASHRAE Standard 169 (2013~~6~~)	Climatic Data for Building Design Standards

BSR/ASHRAE Addendum e
to ANSI/ASHRAE Standard 90.4-2019

Public Review Draft

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

First Public Review (August 2020)
(Draft Shows Proposed Changes to Previous Standard)

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Foreword

Addendum e adds language to Section 11 intended to clarify how compliance with Standard 90.4 can be achieved through the use of shared systems.

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

Addendum e to 90.4-2019

Modify Section 11.3 as follows:

11.3 Use of Shared *Systems*. Where~~When~~ existing or proposed mechanical and/or electrical *systems* are intended to routinely support the *data center* and other *spaces* (i.e., *spaces* that do or do not meet the definition of a *data center*), the *data center* or *data center addition* may document its compliance using the Annualized *Energy* Performance Method (as described in Sections 6.5 and 8.3). The shared *systems'* future total hourly loads must be determined for a typical year (using TMY3 weather data) to determine what fraction of the total shared *systems'* capacity (for each hour of the typical year) will be used by the *data center* or *data center addition*. The total shared *system* input *energy* is multiplied by the *data center* or *data center addition's* fraction of total *system* capacity for each hour to determine the *data center* or *data center addition's* input *energy* used to show compliance. ~~When spaces covered by ANSI/ASHRAE/IES Standard 90.1 jointly share *systems* with *data centers*, compliance can be demonstrated through the use of the modeling rules in ANSI/ASHRAE/IES Standard 90.1, Section 11, "Energy Cost Budget Method."~~

Informative Notes:

1. Shared mechanical *systems* serving *data centers* and other *spaces* (within the scope of ANSI/ASHRAE/IES Standard 90.1) may or may not be required to provide economizer savings to the non-*data center spaces*. ANSI/ASHRAE Standard 90.4 will not affect that requirement or require that economizer capacity be provided for the portion of a shared *system* serving a *data center* or *data center addition* that otherwise meets ANSI/ASHRAE Standard 90.4 annual *energy* performance targets when calculated as described above.
2. Recovered heat from a *data center* that routinely shares a mechanical *system* with non-*data center spaces* can reduce the *energy* use of non-*data center spaces* that are designed to accept the recovered heat. If the heat required by the non-*data center spaces* is significant, such a relationship can provide *energy* savings far beyond the savings that would be brought by applying an economizer to the *data center addition*.

3. Where *spaces* covered by ANSI/ASHRAE/IES Standard 90.1 jointly share *systems* with a *data center* or *data center addition*, compliance can be demonstrated through the use of the modeling rules in ANSI/ ASHRAE/IES Standard 90.1, Section 11, "Energy Cost Budget Method."

BSR/ASHRAE Addendum d
to ANSI/ASHRAE Standard 188-2018

Public Review Draft

Proposed Addendum d to Standard 188-2018, Legionellosis: Risk Management for Building Water Systems

First Public Review (August 2020)
(Draft shows Proposed Changes to Current Standard)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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FOREWORD

This addendum adds a definition of shall for use in this mandatory standard. It also includes changes to the commissioning section and to the associated references to remove references to documents that have been noted by the issuing organization (AWWA) not to apply to building water systems. The reference to ASHRAE Guideline 12 has been updated to include the new 2020 version of the guideline.

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

Modify Section 3 as shown. The remainder of Section 3 is unchanged.

3. DEFINITIONS

[…]

shall: is/are required to, and must.

Modify Section 8 as shown. The remainder of Section 8 is unchanged.

8. REQUIREMENTS FOR DESIGNING BUILDING WATER SYSTEMS

[…]

8.4 Commissioning. Instructions for commissioning of all building water systems shall be provided to the building owner or designee. Commissioning shall include the following:

a. Procedures for flushing and disinfection

1. Procedures shall ~~meet the requirements of AWWA C651[2] or AWWA C652[3] or~~ comply with all applicable national, regional, and local regulations.

Modify Section 9 as shown. The remainder of Section 9 is unchanged.

9. REFERENCES

1. ASME. 2012. ASME/ANSI A112.1.2, *Air Gaps in Plumbing Systems (for Plumbing Fixtures and Water-Connected Receptors).* New York: The American Society of Mechanical Engineers.

2. ASHRAE. 2020. ASHRAE Guideline 12, *Managing the Risk of Legionellosis Associated with Building Water Systems*. Atlanta, GA: ASHRAE.

~~2. AWWA. 2014. AWWA/ANSI C651, *Disinfecting Water Mains*. Denver, CO: American Water Works Association.~~

~~3. AWWA. 2011. AWWA/ANSI C652, *Disinfecting of Water Storage Facilities*. Denver, CO: American Water Works Association.~~

BSR/ASHRAE Standard 64-2011R

Public Review Draft

Methods of Laboratory Testing Remote Mechanical-Draft Evaporative Refrigerant Condensers

Second Public Review (August 2020)
(Draft shows proposed Independent Substantive Changes to previous Public Review Draft)

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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This is a review of Independent Substantive Changes that were made since the last (second) Public Review. Text that was removed from the previous Public Review is provided for reference but is shown in ~~strikeout~~, and text that has been added is shown with underlines.

Only these changes are open to comment at this time. All other material is provided for context only and is not open for Public Review comment except as it relates to the proposed changes.

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FOREWORD

This revision addresses changes made as a result of the previous public review.

4.1 Test Setup. Informative Annex A describes known workable systems. This standard does not specify an exclusive list of required components or specific configurations. Noncondensables can be detrimental to the quality of the test results. Consult Informative Annexes A and B for information on removal of noncondensables.

Table 1. Instrumentation Accuracy

Measurement	Medium	Minimum Accuracy		Instrument Examples
		SI	I-P	
Temperature	Air dry-bulb	± 0.06 °C	± 0.1 °F	Resistance Temperature Detector (RTD) or Thermistor
	Air wet-bulb			
	Refrigerant liquid			
	Refrigerant vapor	± 0.06 °C	± 0.1 °F	
	Makeup Water	± 0.06 °C	± 0.1 °F	
	Recirculating Water	± 0.06 °C	± 0.1 °F	
	Others	± 0.6 °C	± 1.0 °F	Liquid-in-glass
Pressure	Refrigerant	Pressure corresponding to ± 0.1 °C of saturation temperature	Pressure corresponding to ± 0.2 °F of saturation temperature	Transducer
	Air	± 169.3 Pa	± 0.050in. Hg	Barometer
	Recirculating Water	± 2%		Manometer
Flow	Refrigerant	±1 %		Mass flowmeter, volumetric flowmeter
	Makeup Water	±1%		Mass flowmeter, volumetric flowmeter
Electrical		±1 %		True RMS power meter
				True RMS amp probe

	Motor kilowatts /			True RMS multimeter
Speed	Motor / fan	±1 %		Tachometer
Weight	Oil / refrigerant solution	±0.5 %		Gravimeter (scale or analytical balance)
Time	Hours / minutes / seconds	±0.5 %		Electronic clock
Wind Speed	Air	±0.5 m/s	±1.0 mph	Vane anemometer

4.2 Duration of Test. After establishment of steady-state test conditions, all required readings, a test set, shall be recorded as detailed in Section 7.3~~, shall be recorded at a maximum of 30 second intervals~~. The test period, a test run, shall be defined as a minimum of ~~twenty~~ thirty (3~~2~~0) minutes of consecutive readings that are within the specified limits.

5.2 Measurements from the instruments shall be traceable to primary or secondary standards calibrated by National Institute of Standards and Technology (NIST) or to the Bureau International des Poids et Mesures (BIPM) if a National Metrology Institute (NMI) other than NIST is used. ~~The indicated corrections shall be applied to meet the required error limits given in subsequent sections.~~ Instruments shall be recalibrated on a regular schedule that is appropriate for each instrument, and calibration records shall be maintained. The indicated corrections shall be applied to meet the required error limits given in subsequent sections.

5.4 The current version of *NIST Thermodynamic Properties of Refrigerants and Refrigerant Mixtures Software*[7] or a reference that provides compliant properties per ISO 17584:2005[8] shall be the source for ~~thermodynamic~~ thermophysical properties. Refrigerant manufacturer's refrigerant property data shall be used if properties are not in the NIST reference.

6. METHOD OF TESTING

6.1 ~~Heat Rejection Measurements.~~ Refrigerant Flow and Enthalpy Measurements. Refrigerant flow through the condenser shall be measured. Entering and leaving refrigerant enthalpies shall be determined from the corresponding pressure and temperature measurements.

6.1.1.1 Temperature and pressure-measuring instruments shall be installed upstream of the vapor line flowmeter and at the entrance to the heat exchanger. The degree of superheat at the inlet of the heat exchanger shall be calculated and recorded for each test set.

6.1.1.4 Temperature and pressure-measuring instruments shall be installed at the exit of the heat exchanger and upstream of the liquid line flowmeter. The degree~~s~~ of subcooling at the entrance of the liquid line flowmeter shall be calculated and recorded for each test set.

6.1.1.5 For liquid refrigerant flow measurements, the refrigerant after the heat exchanger outlet must be subcooled a minimum of 3.0°C (5.4°F).

6.1.2 Condenser Refrigerant Enthalpy Difference. Dual refrigerant temperature and pressure instruments shall be installed at both the entering and leaving connections to the condenser. The measurements shall be made no more than 91.4 cm (36.0 in.) from the test unit connection interface(s). The average of the dual

temperature and dual pressure measurements at each location shall be used to determine the entering and leaving enthalpies.

6.2.1 Entering-Air Wet-Bulb Temperature. The number of entering-air temperature measurement stations shall be based on the total net free inlet area at the point of measurement. The inlet area of concern applies to each individual air inlet area rather than the total air inlet area of the test unit. Evaporative cooled condensers shall use the number of wet-bulb measuring stations defined by ~~Part III~~ Appendix F in *CTI ATC-106*[9]. This standard is referenced for minimum quantity of measuring stations per air inlet area as shown in the equation below.

6.3 Test runs conducted with the condenser positioned outdoors shall be invalid when average wind velocity exceeds 4.5 ~~mps~~ m/s (10 mph) or when wind velocity exceeds 7 ~~mps~~ m/s (15 mph) over a 1 minute duration. An informative reference for this aspect of testing is *CTI ATC-106.*

6.4 Test Condition Stability Requirements

6.4.1 See Table 2 for maximum/minimum stability criteria for test conditions.

Table 2 Test Condition Stability Requirement

Variable Description	Test Condition Stability Over Test Run Duration	
	°C	°F
Dry bulb Temperature	**NA**	**NA**
Condenser Temperature Difference*	**+/-0.3**	**+/-0.5**
Average Refrigerant Flow Rate	**+/- ~~3~~ 2.5%**	
Inlet Refrigerant Temperature	**+/-1.0**	**+/-1.8**
Inlet Refrigerant Dew Point Temperature	**+/-1.0**	**+/-1.8**
Outlet Refrigerant Temperature	**+/-0.5**	**+/-0.9**
Outlet Refrigerant Dew Point Temperature	**+/-0.5**	**+/-0.9**
Makeup Water Temperature	**+/-1.0**	**+/-1.8**
Recirculating Water Pressure (at inlet centerline)**	**+/-10%**	**+/-10%**

*The Wet-bulb temperature tolerance is set by the Condenser Temperature Difference. The minimum Condenser Temperature Difference shall be 5.6°C (10°F).
**Only required for recirculating water pump by others.

6.4.2 Data points shall be collected during the test period at the time intervals indicated in Section 7.3.

6.4.3 Using the least-squares method, the best-fit line shall be calculated for the data collected for each measurement in Table 2, over the test period, and the slope shall be calculated. The absolute value of the slope shall be less than 1% of the measurement value

6.6 Condenser Operation

6.6.1 The power supply voltage shall be ±10% of the nameplate ratings on the condenser fan motor(s) and spray pump motor(s) or the condenser nameplate, whichever states lower values. 50/60 hertz motors shall be operated at 60 hertz unless otherwise specified. Dual-voltage motors shall be operated at the nameplate value for the voltage selected. Variable frequency drives are not covered in this standard.

7.3 Test Data ~~(Taken at Each Reading Interval)~~

7.3.1 Condenser Data (Taken at Each 30 Second Reading Interval During Test Period)

a. Dry-bulb temperatures of air entering the condenser, °C (°F)
b. Wet-bulb temperatures of air entering the condenser, °C (°F)
c. Pressure of refrigerant vapor entering the condenser, kPa (psia)
d. Temperature of the refrigerant vapor entering the condenser, °C (°F)
e. Pressure of refrigerant liquid leaving the condenser, kPa (psia)
f. Temperature of the refrigerant liquid leaving the condenser, °C (°F)
g. Vapor refrigerant mass flow rate, kg/s (lb/h) or volumetric flow rate, l/s (ft^3/min)
h. Liquid refrigerant mass flow rate, kg/s (lb/h) or volumetric flow rate, l/s (ft^3/min)
i. Pressure of refrigerant entering vapor flow meter, kPa (psia)
j. Temperature of refrigerant entering vapor flow meter, ^oC (^oF)
k. Pressure of refrigerant entering liquid flow meter, kPa (psia)
l. Temperature of refrigerant entering liquid flow meter, ^oC (^oF)
m. Temperature of makeup water entering basin, ^oC (^oF)
n. Temperature of recirculating water at the discharge of the recirculating pump, ^oC (^oF)

7.3.2 Condenser Data (Taken at Least Once During Test Period)

a. Barometric pressure, kPa (in. Hg)
b. Electric power input to fan motors(s), kW_{rms}
c. Voltage at fan motor terminals, V_{rms}
d. Amperage at fan motor terminals, A_{rms}
e. Fan speed, rpm
f. Electric power input to integral spray pump motor(s), kW_{rms}
g. Voltage at integral spray pump motor terminals, V_{rms}
h. Amperage at integral spray pump motor terminals, A_{rms}
i. Liquid head in receiver, mm (in.)
j. Flow rate of makeup water entering basin, l/s (gal/min)
k. Static pressure at centerline of recirculating water inlet connection (spray pump by others), kPa (psia)

INFORMATIVE ANNEX B

METHOD FOR REMOVING NONCONDENSABLES IN REMOTE MECHANICAL-DRAFT REFRIGERANT CONDENSERS

After leak testing the refrigeration system and prior to charging with refrigerant, connect a vacuum pump capable of attaining 100 microns or less when blanked off to the system. Operate the vacuum pump until the system reaches a pressure of 500 microns. Isolate the vacuum pump from the system and observe the vacuum gauge. If the pressure rises, check for leaks in the system or at the vacuum line connections. Repeat the evacuation until the system will hold a pressure of 500 microns for 1 hour after the vacuum pump has been disconnected. Break the vacuum with refrigerant and charge the system. Noncondensables can be purged from the top of the liquid outlets during operation.

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Addendum to
ANSI/AWWA C210-15,

Liquid-Epoxy Coatings and Linings for Steel Water Pipe and Fittings

May 2020

Replace the current Sec. 5.5.3 *Dry film thickness* with the proposed wording shown below.

Current

5.5.3 *Dry film thickness.* Dry film thickness shall be tested in accordance with SSPC-PA 2, Level 1. Epoxy thickness below that stated in Table 2 shall constitute failure of the coating or lining to meet the requirements. Dry film thickness on the inside diameter (ID) of small-diameter pipe shall be tested as reasonably accessible.

Proposed Revision

5.5.3 *Total dry film thickness.* Total dry film thickness shall be tested in accordance with SSPC-PA 2, Level 2. Total epoxy thickness below that stated in Table 2 shall constitute failure of the coating or lining to meet the requirements. Maximum total dry film thickness is determined by the manufacturer's recommendation. When applicable, certification as required in Sec. 4.2.3 may further limit the maximum total dry film thickness. Total dry film thickness on the inside diameter (ID) of small-diameter pipe shall be tested as reasonably accessible.

Reason for Change

As currently stated in C210-15, the dry film thickness is to be tested in accordance with SSPC-PA 2 Level 1. This is the most restrictive level for determining thickness and does not allow for any deviation of spot or area measurement from the specified minimum or maximum thickness. This is unrealistic, unattainable and unachievable commercially for application of epoxy on a consistent basis using

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customary industry means and methods using good painting application practices and techniques utilizing standard application spray equipment. This addendum changes the acceptance criteria to Level 2 which allows no deviation on the minimum thickness but allows 120 percent of the maximum thickness. AWWA C210 is a minimum standard and a specifier may require criteria more or less stringent. Additional language is included that alerts the user to check NSF certification for limitation on maximum thickness of epoxy.

[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 *red italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard
for Biosafety Cabinetry

Biosafety Cabinetry: Design, Construction, Performance, and Field Certification

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Normative Annex 1
(formerly Annex A)

Performance tests

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N-1.6 Personnel, product, and cross-contamination protection (biological) tests

A.6.5.1.3 Side wall test

a) Position the horizontal spray axis of the nebulizer containing 55 mL of 5×10^4 to 8×10^4 spores/mL 3 to 5 inches (76 to 130 mm) above the work surface, with the back of the nebulizer located against the midpoint of the interior side wall selected in Section A.6.5.1.2. The spray axis shall be parallel to the work surface and directed toward the opposite sidewall.

b) Place open agar settling plates (100 × 15 mm) on the work surface in the following manner (see Figure 20):

— two rows of control plates with the centerline under the outlet of the nebulizer. A smoke test may be performed to determine where the test organism will be best captured in these two rows, allowing unnecessary control plates to be eliminated;

— one row of plates with their centers on a line drawn front to back 14 inches (360 mm) from the side wall being tested; and

— at least one more row of plates nested beyond the 14 inches (360 mm) row; two rows when there is room.

c) Start the nebulizer. After 5 minutes, stop the nebulizer.

d) After 5 minutes, place the covers on the open agar plates. Incubate the plates at 97 ± 2 °F (36.1 ± 1 °C) and read at 44 to 48 hours. If plates are overgrown with a contaminant other than the challenge organism, the test shall be considered invalid and retested.

e) For cabinets with a BSC nominal width of 3 feet or less, perform the same procedure (steps a to e), but place the nebulizer against the midpoint of the right interior wall.

A.6.5.1.4 Center test

a) The center test is completed only on cabinets with a BSC nominal width of greater than 3 feet. Reposition the nebulizer used in Section A.6.5.1.3 such that the axis of the reservoir is positioned over the geometric center of the work surface with the nebulizer facing the left side wall. The center of the nebulizer barrel shall be positioned at the same height as the top of the cabinet access opening. Either start with fresh suspension or top off the nebulizer used in Section A.6.5.1.3. Top off by adding approximately 5 mL of additional suspension and uniformly mix the suspension in the reservoir. After moving and topping off the nebulizer, perform a thorough surface decontamination of the entire work surface and side wall used for the side wall test. The axis of a 2.5 inch (63 mm) outside diameter cylinder, with closed ends, shall be centered side to side in the work area with the axis of the cylinder 2.75 inches (70 mm) above the work surface. One end shall butt against the back wall of the work area and the other end shall extend at least 6 inches (150 mm) into the room through the front opening of the cabinet.

b) Place open agar settling plates (100 × 15 mm) on the work surface in rows. Center one row under the nebulizer along the cabinet front to rear center line. Place two rows to the left side of the center row of plates. The stand for the nebulizer may interfere with plates in the middle. It is acceptable to leave plates out in the middle where this happens since these are control plates used to demonstrate recovery only. If the manufacturer or test agency is aware that adequate control recovery cannot be demonstrated from these three rows of plates alone, additional plates may be added, as instructed by the manufacturer. Placement of additional positive control plates shall be limited to the area directly above the three rows of control plates and the area under the front intake grille near the center of the cabinet (similar to personnel and product protection control plate placement). Apparatus used to suspend plates higher within this zone shall be installed in a manner that minimizes any disturbances to airflow. A smoke test may be performed to determine where the test organism will be best captured in the areas described above, allowing unnecessary control plates to be eliminated. Place a row of plates with the edge of the plates 14 inches (360 mm) from the cabinet center line. Place additional rows of plates behind these, as cabinet size will allow, up to a maximum of four rows total. When the size of the cabinet does not allow for four rows on each side, place as many rows as will fit. Each row of plates shall be centered from front to rear on the work surface. Rows of plates shall touch each other but not be nested, as they are for the side wall cross contamination test.

c) Start the nebulizer. After 5 minutes, stop the nebulizer.

d) After 5 minutes, place the covers on the open agar plates. Incubate the plates at 98.6 °F (37 °C) and examine them at 44 to 48 hours.

e) Three replicate tests shall be completed.

Repeat steps a through e but with the nebulizer facing the right sidewall of the cabinet and plates positioned on the right side of the cabinet. After repositioning, top off the nebulizer as in step a and then perform a thorough surface decontamination of the entire work surface before placing any fresh plates.

***Rationale**: As pointed out by the proponent, the majority of the plates produce nothing and understanding the best location to place these prior to the test will help to greatly reduce biological waste.*

[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 *red italics* and only used to add clarity; these statements will NOT be in the finished publication.]

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Normative Annex 1
(formerly Annex A)

Performance tests

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N-1.6.3 Personnel protection test (system challenged with 1×10^8 to 8×10^8 *B. subtilis* spores in 5 minutes).

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N-1.6.3.2 Acceptance

The number of *B. subtilis* CFU recovered from the 6 AGI-30 samplers shall not exceed 10 CFU per test. Total slit-type air sampler plate counts shall not exceed five *B. subtilis* CFU for a 30 minute sampling period. Three replicate tests shall be performed. The control plate shall ~~be positive. A plate is "positive" when it contains greater than 300 CFU~~ show recovery of *B. subtilis*.

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N-1.6.4 Product protection test (system challenged by 1×10^6 to 8×10^6 *B. subtilis* spores in 5 minutes.)

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N-1.6.4.2 Acceptance

The number of *B. subtilis* CFU on agar settling plates shall not exceed 5 CFU for each test. Three replicates shall be performed. The control plates shall ~~be positive. A plate is "positive" when it contains more than 300 CFU~~ show recovery of *B. subtilis*.

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N-1.6.5 Cross-contamination test (system challenged by 1×10^4 to 8×10^4 *B. subtilis* spores for 5 minutes.)

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N-1.6.5.2 Acceptance

N-1.6.5.2.1 Side wall test

Some agar plates, from the challenge sidewall to 14 inches (360 mm) from the sidewall, will recover *B. subtilis* CFU and shall be used as positive controls. Some of the control plates shall show recovery of *B. subtilis*. The total number of CFU recovered on agar plates with centers greater than 14 inches (360 mm) shall not exceed 2 CFU per test.

The standard recognizes that factors outside of the control of the manufacturer may impact the results of this test. These factors can include plate handling errors, air currents in the test lab, lab contamination with the test organism, or problems with the test equipment. It is not always possible for the test agency to find these factors following a failing test. When the results of a test exceed the maximum allowed recovery for *B. subtilis*, a confirming test may be completed. When the maximum allowed recovery for *B. subtilis* was from a single replicate, the replicate may be replaced with two passing replicates with the nebulizer positioned on the same side of the cabinet where the failure occurred. When the maximum allowed recovery for *B. subtilis* was from two or three replicates on the same side of the cabinet, the test may be replaced with three additional replicates completed from that side of the cabinet.

N-1.6.5.2.2 Center test

Some agar plates, from the three rows positioned under the nebulizer, will recover *B. subtilis* CFU and shall be used as positive controls. Some of the control plates shall show recovery of *B. subtilis*. The total number of CFU recovered on agar plates greater than 14 inches (360 mm) from the cabinet center line shall not exceed 5 CFU per test.

***Rationale**: As pointed out by the proponent, technicians have observed positive control recovery for both Personnel and Product Protection depends very much on where the plate is placed. This sometimes forces technicians to place more than one control plate in different positions, increasing the odds of accidentally contaminating test plates when controls are installed and removed. This revision provides language for minimizing this contamination risk.*

[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 *red italics* and only used to add clarity; these statements will NOT be in the finished publication.]

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Biosafety Cabinetry: Design, Construction, Performance, and Field Certification

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Normative Annex 1
(formerly Annex A)

Performance tests

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N-1.6 Personnel, product, and cross-contamination protection (biological) tests

N-1.6.1 Purpose

These tests determine whether aerosols will be contained within the cabinet, outside contaminants will not enter the cabinet work area, and aerosol contamination of other equipment in the cabinet will be minimized. The cabinet shall be operated at the airflow velocities indicated in the specific test methods with removable equipment installed. The cabinet shall be turned on at least 30 minutes before the start of any test and operated continuously throughout all test methods. ~~Cabinets meeting these test requirements shall then meet airflow characteristics as measured in Sections N-1.8 and N-1.9.~~

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N-1.6.3 Personnel protection test (system challenged with 1×10^8 to 8×10^8 *B. subtilis* spores in 5 minutes).

N-1.6.3.1 Method

a) ~~Set the cabinet at the nominal set point airflow velocities.~~ The cabinet shall be operated at the nominal set point velocities within ± 3 ft/min (± 0.015 m/s).

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N-1.6.4 Product protection test (system challenged by 1×10^6 to 8×10^6 *B. subtilis* spores in 5 minutes.)

N-1.6.4.1 Method

a) ~~Set the cabinet at the nominal set point airflow velocities.~~ The cabinet shall be operated at the nominal set point velocities within ± 3 ft/min (± 0.015 m/s).

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N-1.6.5 Cross-contamination test (system challenged by 1×10^4 to 8×10^4 *B. subtilis* spores for 5 minutes.)

N-1.6.5.1 Method

N.1.6.5.1.1 ~~Set the cabinet at the nominal set point airflow velocities.~~ The cabinet shall be operated at the nominal set point velocities within ± 3 ft/min (± 0.015 m/s). Tests are completed from one side wall and the center or from both side walls, depending on BSC nominal width. The center test is completed on cabinets with a BSC nominal width greater than 3 feet. Both side walls are tested on cabinets with a BSC nominal width of 3 feet or less.

***Rationale**: Proposed language makes the requirements to balance the cabinet consistent with the language in the noise and vibration sections, most importantly, adding in the 3 fpm tolerance.*

[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
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Onsite residential and commercial water reuse treatment systems

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8 Performance testing and evaluation

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8.1 Greywater treatment systems with capacities up to 5,678 L/day (1,500 gal/day)

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8.1.2.1.1 Greywater challenge water – Systems treating bathing source water

Prepare the challenge water according to the following formula:

Wastewater components[1]	**Amount/100 L**
body wash with moisturizer	30 g
toothpaste	3 g
deodorant	2 g
shampoo	19 g
conditioner	21 g
lactic acid	3 g
secondary effluent	2 L
raw influent screened to ≤ 1 mm	1 L
bath cleaner	10 g
liquid hand soap	23 g
A2 – Fine Test dust, meeting ISO 12103-1	10 g
urea	as needed to bring influent TKN within the specified range
NaOH	as needed to adjust pH
HCl	as needed to adjust pH

[1] See Annex I-2 for example products.

The amount of individual wastewater components are recommendations. If the required range for the 30-d average concentration of individual parameters are not met using the recommended volumes, then the volume of wastewater components can be adjusted to achieve the required 30-d average concentrations. All necessary adjustments to the ingredient volumes shall be reported in the final report.

The bathing water delivered to the system shall be as follows:

Parameter	Required range	Individual sample maximum
TSS	50 to 100 mg/L	—
BOD_5	100 to 200 mg/L	—
temperature	25 to 35 °C	—
pH	6.0 to 8.5	—
turbidity	30 to 70 NTU	—
total phosphorous – P	1.0 to 4.0 mg/L	—
total Kjeldahl nitrogen – N	3.0 to 5.0 mg/L	—
COD	200 to 400 mg/L	—
total coliforms[1] (30-d geometric mean)	10^3 to 10^7 cfu/100 mL or 10^3 to 10^7 MPN/ 100 mL	10^9 cfu/100 mL or 10^9 MPN/ 100 mL
E. coli[1] (30-d geometric mean)	10^2 to 10^6 cfu/100 mL or 10^2 to 10^6 MPN/100 mL	10^7 cfu/100 mL or 10^7 MPN/100 mL

[1] See Section 8.6.1.2.

8.1.2.1.2 Greywater challenge water – Systems treating laundry source water

Prepare the challenge water according to the following formula:

Wastewater components[1]	Amount/100 L
liquid laundry detergent (2×)	40 mL
A2 – fine test dust, meeting ISO 12103-1	10 g
secondary effluent	2 L
raw influent screened to ≤ 1mm	1 L
liquid laundry fabric softener	21 mL
Na_2SO_4	4 g
$NaHCO_3$	2 g
Na_3PO_4	4 g
urea	as needed to bring influent TKN within the specified range
NaOH	as needed to adjust pH

HCl	as needed to adjust pH
[1] See Annex I-2 for example products.	

The amount of individual wastewater components are recommendations. If the required range for the 30-d average concentration of individual parameters are not met using the recommended volumes, then the volume of wastewater components can be adjusted to achieve the required 30-d average concentrations. All necessary adjustments to the ingredient volumes shall be reported in the final report.

The laundry water delivered to the system shall be as follows:

Parameter	Required range	Individual sample maximum
TSS	50 to 100 mg/L	—
BOD_5	220 to 370 mg/L	—
temperature	25 to 35 °C	—
pH	6.0 to 8.5	—
turbidity	50 to 90 NTU	—
total phosphorous – P	< 2 mg/L	—
total Kjeldahl nitrogen – N	4.0 to 6.0 mg/L	—
COD	300 to 740 mg/L	—
total coliforms[1] (30-d geometric mean)	10^3 to 10^7 cfu/100 mL or 10^3 to 10^7 MPN/100 mL	10^9 cfu/100 mL or 10^9 MPN/100 mL
E. coli[1] (30-d geometric mean)	10^2 to 10^6 cfu/100 mL or 10^2 to 10^6 MPN/100 mL	10^7 cfu/100 mL or 10^7 MPN/100 mL
[1] See Section 8.6.1.2.		

8.1.2.1.3 Greywater challenge water: Systems treating bathing and laundry source waters combined

Each 100 L challenge water shall be prepared using 53 L of Section 8.1.2.1.1 and 47 L of Section 8.1.2.1.2. The greywater delivered to the system shall be as follows:

Parameter	Required range	Individual sample maximum
TSS	50 to 160 mg/L	—
BOD_5	130 to 210 mg/L	—
temperature	25 to 35 °C	—
pH	6.0 to 8.5	—
turbidity	30 to 100 NTU	—
total phosphorous – P	1.0 to 3.0 mg/L	—
total Kjeldahl nitrogen – N	3.0 to 5.0 mg/L	—
COD	250 to 420 mg/L	—
total coliforms[1] (30-d geometric mean)	10^3 to 10^7 cfu/100 mL or 10^3 to 10^7 MPN/100 mL	10^9 cfu/100 mL or 10^9 MPN/100 mL

E. coli[1] (30-d geometric mean)	10^2 to 10^6 cfu/100 mL or 10^2 to 10^6 MPN/100 mL	10^7 cfu/100 mL or 10^7 MPN/100 mL
[1] See Section 8.6.1.2.		

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Normative Annex 1

(formerly Annex A)

Key elements for a field evaluation of a commercial (C) onsite treatment system

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Table N-1.1
Summary of analytical accuracy and precision limit goals

Analyses	Units	Reference methods	Accuracy percent recovery	Precision relative percent difference
BOD_5	mg/L	SM 5210 B	75 to 125	0 to 20
$CBOD_5$	mg/L	SM 5210 B	75 to 125	0 to 20
total suspended solids	mg/L	SM 2540 D	NA[1]	0 to 10
pH	SU	SM 4500-H^+-B	NA[1]	0 to 10
temperature	°C	SM 2550 B[2]	NA[1]	0 to 10
E. coli	MPN/100 mL	SM 9221	—	—
		SM 9223-B by Colilert	—	—
turbidity	NTU	EPA 180.1	89 to 102	0 to 7
total chlorine residual	mg/L	SM 4500-Cl-B-I	98 to 111	0 to 10
TKN	mg/L as N	EPA 351.2	80 to 120	0 to 10
NO_3/NO_2	mg/L as N	EPA 353.2	80 to 120	0 to 10
total phosphorous	mg/L	SM 4500-P-E	89 to 123	0 to 10
COD	mg/L	SM 5220 B	—	—
total coliform	MPN/100 mL or cfu/100mL	SM 9221	—	—
		SM 9222-B	—	—
TOC	mg/L	SM 5310 C	79 to 129	0 to 5
alkalinity	mg/L as $CaCO_3$	EPA 310.1	80 to 120%	0 to 10
hardness	mg/L as $CaCO_3$	EPA 200.7	88 to 119	0 to 17

[1] NA: Not applicable.

[2] *Standard Methods.*

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NSF/ANSI Standard
For Wastewater Technology –

Onsite Residential and Commercial Water Reuse Treatment Systems

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5 Design and construction

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5.11 Alternate air delivery components

To ensure stabilized air flow conditions are met, proposed alternate air delivery components – either air compressors or blowers – that create air pressure shall be run for a minimum of 4 h at the system pressure recorded at the outset of the evaluation of the system as outlined in Section ~~8.1.8~~ 8.1.1.8. The alternate air delivery components must deliver flow in the range of 90% to 130% of the flow produced by the original air delivery component. Justification for qualifying air delivery components with flows higher than 130% may be considered by the certification body based on sound engineering principles. Air delivery components with flows lower, or higher, than the stated range of 90% to 130% may be considered for qualification by the certification body based on system performance testing.