ANSI STANDARDS ACTION

PUBLISHED WEEKLY BY THE AMERICAN NATIONAL STANDARDS INSTITUTE 25 W43RD STREET NY, NY 10036

VOL. 53, NO. 45 NOVEMBER 11, 2022

CONTENTS

ISSN 0038-9633

Project Initiation Notification System (PINS)

Section 2.5.1 of the *ANSI Essential Requirements* (www.ansi.org/essentialrequirements) describes the Project Initiation Notification System (PINS) and includes requirements associated with a PINS Deliberation. Following is a list of PINS notices submitted for publication in this issue of ANSI Standards Action by ANSI-Accredited Standards Developers (ASDs). Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for information about American National Standards (ANS) maintained under the continuous maintenance option, as a PINS to initiate a revision of such standards is not required. Use the following Public Document Library url to access PDF & EXCEL reports of approved & proposed ANS: List of Approved and Proposed ANS. Directly and materially interested parties wishing to receive more information or to submit comments are to contact the sponsoring ANSI-Accredited Standards Developer directly **within 30 calendar days** of the publication of this PINS announcement.

ANS (American Nuclear Society)

Kathryn Murdoch; kmurdoch@ans.org | 555 North Kensington Avenue | La Grange Park, IL 60526 www.ans.org

Revision

BSR/ANS 2.3-202x, Estimating Tornado, Hurricane, and Extreme Straight Line Wind Characteristics at Nuclear Facility Sites (revision of ANSI/ANS 2.3-2011 (R2021))

Stakeholders: National and international owners of nuclear facilities including nuclear power plants, and other high-risk and critical facilities, Department of Energy reactor and non-reactor nuclear facility operators, regulators, government organizations and their contractors, designers, and support analysis subcontractors.

Project Need: This project needs to review and revise the existing standard to include new information that has become available since the previous major revision to the standard. In particular, the comprehensive 6-year NIST/ASCE tornado study that was completed in 2021.

Interest Categories: Government Agency, National Laboratory/Government Facility, Owner, Consultant, Individual, Architect-Engineer, University

Scope: This standard establishes guidelines to estimate the frequency of occurrence and the magnitude of parameters associated with rare extreme meteorological wind events such as tornadoes, hurricanes, derechos, and straight-line winds at nuclear facility sites within the continental United States. This standard does not address the forces on structures that result from these physical phenomena but does account for extreme-wind generated missiles on structures.

ANS (American Nuclear Society)

Kathryn Murdoch; kmurdoch@ans.org | 555 North Kensington Avenue | La Grange Park, IL 60526 www.ans.org

Revision

BSR/ANS 2.15-202x, Criteria for Modeling Atmospheric Dispersion of Radiological Releases from Nuclear Facilities (revision of ANSI/ANS 2.15-2013 (R2021))
Stakeholders: Nuclear facility owners, Department of Energy (DOE) reactor and non-reactor nuclear facilities, national laboratories, National Nuclear Security Administration (NNSA), Department of Homeland Security, state and local environmental and health departments, Nuclear Regulatory Commission, engineering and design professionals and consultants.

Project Need: The previous ANS-2.15 standard was limited to the application of modeling routine atmospheric releases. This upgrade includes applications of atmospheric dispersion modeling for design basis and real-time emergency response.

Interest Categories: Government Agency, National Laboratory/Government Facility, Owner, Consultant, Individual, Architect-Engineer, University

Scope: This Standard establishes parameter selection criteria (meteorological and other data collected at nuclear facilities) for modeling the atmospheric effects on radioactive and toxic chemical releases, inclusive of dilution, diffusion, transport, plume rise, plume meander, aerodynamic effects of buildings, dry deposition, wet deposition (e.g., precipitation scavenging), and resuspension.

ASC X9 (Accredited Standards Committee X9, Incorporated)

Ambria Frazier; admin@x9.org | 275 West Street, Suite 107 | Annapolis, MD 21401 www.x9.org

Revision

BSR X9.100-181-202x, TIFF Image Format for Image Exchange (revision of ANSI X9.100-181-2014 (R2021))
Stakeholders: Financial Institutions, Check Manufacturers, Software Vendors, Service Providers, Auditors.

Project Need: This standard supports interoperability for check image exchange processing between financial institutions without the need of special agreement.

Interest Categories: Consumer, General Interest, Producer

Scope: The scope of this standard is to define specific TIFF fields and parameters for check image exchange and the allowable values for those parameters. This standard will only address the use of G4 bilevel image (black/white) compressions within the TIFF 6.0 structure.

ASME (American Society of Mechanical Engineers)

Maria Acevedo; ansibox@asme.org | Two Park Avenue, 6th Floor | New York, NY 10016-5990 www.asme.org

New Standard

BSR/ASME A17.10/CSA B44.10-202x, Escalator and moving walk braking systems (new standard)
Stakeholders: Manufacturers, owners, and users of escalators and moving walks.

Project Need: To create North American harmonized requirements that promote safe design of escalator and moving walk braking systems in order to reduce the risk of injury; To provide a uniform set of requirements for manufacturers to demonstrate conformity; To facilitate adoption of uniform requirements by Canadian and US jurisdictions.

Interest Categories: (1) Manufacturers of the major portion of a complete (elevator, escalator, etc.) system; (2) Purchasers or owners of the equipment; (3) Employees affected by the safety code or standard; (4) Governmental bodies having regulatory power or influence over the field in question; (5) Specialists having expert knowledge in the field of the Committee's work who are not otherwise covered by another category of interest, or representatives of independent laboratories, (6) Insurance/Inspection interests...

Scope: This Standard provides requirements for the design, construction, materials, and testing of escalator and moving walk braking systems. This Standard covers escalator and moving walk driving-machine brakes as described in ASME A17.1/CSA B44, Safety Code for Elevators and Escalators.

AVIXA (Audiovisual and Integrated Experience Association)

Loanna Overcash; lovercash@avixa.org | 11242 Waples Mill Road, Suite 200 | Fairfax, VA 22030 www.avixa.org

Revision

BSR/AVIXA V202.01-202X, Display Image Size in 2D Audiovisual Systems (revision and redesignation of ANSI/INFOCOMM V202.01:2016)
Stakeholders: Entertainment venues, houses of worship, educational institutions, commercial buildings, retail facilities, judicial facilities, indoor sports venues.

Project Need: This Standard provides measurement and reporting methodologies for the assessment, documentation, and categorization of new and existing audiovisual systems. The Standard will assist professionals engaged in the design of audiovisual systems determine appropriate displayed image sizes. The Standard provides a calculation/assessment tool for determining proper display image size, based upon viewer needs as defined under two main categories. When planning a display, audiovisual designers often encounter limitations with dimensions and layout in relation to optimal displayed image size. This Standard provides formulas to design and display suitable content.

Interest Categories: Consultant/Programmer; Manufacturer/Independent Manufacturer's Reps/Distributor; Technology Manager/Presentations Professional/Student/End-User; Systems Integrator/ Live Events Professional

Scope: This Standard determines required display image size and relative viewing positions according to two defined viewing needs: Basic Decision Making and Analytical Decision Making. The Standard can be used to design a new space or to assess/modify an existing space, from either drawings or the space itself. It applies to both permanently installed systems and temporary systems. The Standard applies to the overall system and not the performance or efficiency of any component.

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

George Istefan; standards@iapmostandards.org | 18927 Hickory Creek Drive, Suite 220 | Mokena, IL 60448 www.asse-plumbing.org

New Standard

BSR/ASSE Series 24000-202x, Professional Qualifications Standard for CIPP (Cured in Place Pipe) Pipe Rehabilitation Personnel (new standard)
Stakeholders: Manufacturers, Installers, Maintainers, Trainers, and Users.

Project Need: This standard is needed to provide the industry with minimum qualifications for professionals installing, maintaining, or inspecting cured in place pipe (CIPP) for plumbing pipe rehabilitation, and for providing certification to the qualified personnel.

Interest Categories: (a) Manufacturer: a representative of a maker or marketer of a product, assembly or system, or portion thereof, that is affected by the standard (e.g., manufactures of particular products and association of manufacturers). (b) User: a representative of an entity that is subject to the provisions of the standard or that voluntarily uses the standard (e.g., educator, skill-trade trainer, skill trades person and academia). (c) Installer/Maintainer: a representative of an entity that is in the business of installing or maintaining a product, assembly or system affected by the standard (e.g., contractors, subcontractor, and construction labor organization). (d) Research/Standards/Testing Laboratory: a representative of an independent research organization; an organization that develops codes, standards or other similar documents; or an independent testing laboratory (e.g., code development organizations, certification agency, testing laboratory). (e) *Enforcing:* a representative or an agency or an organization that promulgates and/or enforces standards (e.g., regulatory agency, inspectors and enforcers). (f) Consumer: a person who is, or represents, the ultimate purchaser of a product, system, or service (e.g., end user of a product and distributor). (g) General Interest: A person or organization interested in the products or standard addressed by the Committee, who is qualified to serve on the committee, and who does not fall under the other categories (e.g., consultants, special experts, or engineers).

Scope: This standard provides general knowledge of cured in place pipe (CIPP) for plumbing pipe rehabilitation applications. The purpose of this standard is to provide minimum criteria, identified by industry consensus, for installation, inspection, and maintenance personnel.

IIAR (International Institute of Ammonia Refrigeration)

Tony Lundell; tony_lundell@iiar.org | 1001 North Fairfax Street | Alexandria, VA 22314 www.iiar.org

Revision

BSR/IIAR 5-202x, Startup of Closed-Circuit Ammonia Refrigeration Systems (revision of ANSI/IIAR 5-2019)
Stakeholders: Contractors, Manufacturer, Operator/Owner, and General Interest stakeholders pertaining to closed-circuit ammonia refrigeration systems. Contractors will be the updated Interest Category term in our 2022 revision of our Procedures for the Development of IIAR Standards for ANSI Approval replacing the Designer/Installer/Servicer Interest Category term.

Project Need: This standard is open for full review and revision as needed by consensus for periodic maintenance essential requirements.

Interest Categories: Contractors, Manufacturer, Operator/Owner, and General Interest. Contractors will be the updated Interest Category term in our 2022 revision of our Procedures for the Development of IIAR Standards for ANSI Approval replacing the Designer/Installer/Servicer Interest Category term.

Scope: This standard provides basic minimum requirements for the safe startup of completed closed-circuit ammonia refrigeration systems and to additions and modifications made to such systems. The specific requirements for a particular system shall be considered when applying the general requirements expressed in this standard.

IIAR (International Institute of Ammonia Refrigeration)

Tony Lundell; tony_lundell@iiar.org | 1001 North Fairfax Street | Alexandria, VA 22314 www.iiar.org

Revision

BSR/IIAR 6-202x, Inspection, Testing, and Maintenance of Closed-Circuit Ammonia Refrigeration Systems (revision of ANSI/IIAR 6-2019)
Stakeholders: Contractors, Manufacturer, Operator/Owner, and General Interest stakeholders pertaining to closed-circuit ammonia refrigeration systems. Contractors will be the updated Interest Category term in our 2022 revision of our Procedures for the Development of IIAR Standards for ANSI Approval replacing the Designer/Installer/Servicer Interest Category term.

Project Need: This standard is open for full review and revision as needed by consensus for periodic maintenance essential requirements.

Interest Categories: Contractors, Manufacturer, Operator/Owner, and General Interest. Contractors will be the updated Interest Category term in our 2022 revision of our Procedures for the Development of IIAR Standards for ANSI Approval replacing the Designer/Installer/Servicer Interest Category term.

Scope: This standard provides the minimum requirements for inspection, testing, and maintenance of closed-circuit ammonia refrigeration systems. Including record keeping, the inspection, testing, and maintenance tasks (ITM Tasks) required are to reduce the probability of an ammonia release. This standard addresses equipment that is common to stationary closed-circuit ammonia refrigeration systems and the minimum ITM Tasks comply with manufacturer recommendations and/or equipment and system operating and maintenance history.

IIAR (International Institute of Ammonia Refrigeration)

Tony Lundell; tony_lundell@iiar.org | 1001 North Fairfax Street | Alexandria, VA 22314 www.iiar.org

Revision

BSR/IIAR 7-202x, Developing Operating Procedures for Closed-Circuit Ammonia Refrigeration Systems (revision of ANSI/IIAR 7-2019)
Stakeholders: Contractors, Manufacturer, Operator/Owner, and General Interest stakeholders pertaining to closed-circuit ammonia refrigeration systems. Contractors will be the updated Interest Category term in our 2022 revision of our Procedures for the Development of IIAR Standards for ANSI Approval replacing the Designer/Installer/Servicer Interest Category term.

Project Need: This standard is open for full review and revision as needed by consensus for periodic maintenance essential requirements.

Interest Categories: Contractors, Manufacturer, Operator/Owner, and General Interest. Contractors will be the updated Interest Category term in our 2022 revision of our Procedures for the Development of IIAR Standards for ANSI Approval replacing the Designer/Installer/Servicer Interest Category term.

Scope: The purpose of this standard is to define the minimum requirements for developing operating procedures for closed-circuit ammonia refrigeration systems. It is intended for those who develop, define, or review operating procedures, or a combination thereof, for closed-circuit ammonia refrigeration systems.

IICRC (The Institute of Inspection, Cleaning and Restoration Certification)

Mili Washington; mwashington@iicrcnet.org | 4043 South Eastern Avenue | Las Vegas, NV 89119 https://www.iicrc.org

New Standard

BSR/IICRC S250-202x, Standard for Professional Cleaning and Maintenance of Commercial Resilient Floor Coverings (new standard)
Stakeholders: Flooring manufacturers, chemistry manufacturers, maintenance equipment manufacturers, commercial maintenance service providers, professional maintenance technicians, flooring inspectors, sales and support professionals, architectural specifiers, building managers, distributors, and end users.

Project Need: Currently, Standards related to the proper cleaning and maintenance of commercial resilient floor coverings do not exist. While a service provider can identify the type of flooring that will be maintained, often the manufacturer of that flooring cannot be identified. This Standard, as a cooperative effort between manufacturers, service providers, technicians, and users will provide the proper cleaning and maintenance practices and procedures to the industry.

Interest Categories: General Interest, Producer, User.

Scope: This Standard describes the procedures to be followed when performing professional cleaning and maintenance of commercial resilient flooring. It is the purpose of this Standard to define the methodology to be used by professional floor care providers for inspection of resilient flooring for the purposes of identifying and applying appropriate cleaning and maintenance processes. Further, this Standard describes methods to be used for cleaning and maintenance of common commercial resilient flooring materials.

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

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

National Adoption

INCITS/ISO/IEC 27001:2022 [202x], Information security, cybersecurity and privacy protection - Information security management systems - Requirements (identical national adoption of ISO/IEC 27001:2022 and revision of INCITS/ISO/IEC 27001:2013 [R2019]
INCITS/ISO/IEC 27001:2013/COR 1:2014 [2019]
INCITS/ISO/IEC 27001:2013/COR 2:2015 [2018])
Stakeholders: ICT Industry.

Project Need: Adoption of this International Standard is beneficial to the ICT Industry.

Interest Categories: Producer-Hardware, Producer-Software, Producer-General, Distributor, Service Provider, User, Consultants, Government, SDO and Consortia, Academic Institution, General Interest

Scope: Specifies the requirements for establishing, implementing, maintaining, and continually improving an information security management system within the context of the organization. This document also includes requirements for the assessment and treatment of information security risks tailored to the needs of the organization. The requirements set out in this document are generic and are intended to be applicable to all organizations, regardless of type, size, or nature. Excluding any of the requirements specified in Clauses 4 to 10 is not acceptable when an organization claims conformity to this document.

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: December 11, 2022

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

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

Addenda

BSR/ASHRAE/ICC/IES/USGBC Addendum v to BSR/ASHRAE/ICC/IES/USGBC Standard 189.1-202x, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020)
This ISC modifies Addendum v to further clarify how Lmax is measured. The new section 8.3.3.2.2 uses the values of Maximum Sound Pressure Level (Lmax) in Table 8.3.3.2 but measured or calculated using a fast-rating (125 msec interval) whereas all other sections referring to Lmax in Table 8.3.3.2 Lmax is measured or calculated based on a slow time rating (1 second interval). Currently in the heading of Table 8.3.3.2, Lmax is described as being valued in terms of slow time rating. With the addition of 8.3.3.2.2, this is no longer true for all references to Table 8.3.3.2. Thus, this notation in the heading of Table 8.3.3.2 is deleted editorially and language added to the body of the text in Section 8.3.3.2. These changes do not add cost or scope to the existing language of the standard.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

Comment Deadline: December 11, 2022

NSF (NSF International)

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

Revision

BSR/NSF 42-202x (i121r1), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2021)
The point-of-use (POU) and point-of-entry (POE) systems addressed by this Standard are designed to be used for the reduction of specific substances that may be present in drinking water (public or private) considered to be microbiologically safe and of known quality. Systems covered under this Standard are intended to address one or more of the following: reduce substances affecting the aesthetic quality of the water, add chemicals for scale control, or limit microbial growth in the system (bacteriostatic). Substances may be soluble or particulate in nature. It is recognized that a system may be effective in controlling one or more of these substances but is not required to control all. Systems with manufacturer claims that include components or functions covered under other NSF or NSF/ANSI Standards or Criteria shall conform to the applicable requirements therein. Filter systems covered by this Standard are not intended to be used with drinking water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: mmilla@nsf.org

NSF (NSF International)

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

Revision

BSR/NSF 173-202x (i66r1), Dietary Supplements (revision of ANSI/NSF 173-2021)
The purpose of NSF/ANSI 173 is to serve as an evaluation tool for analyzing dietary supplements. Certification to this Standard serves as a communication tool between manufacturers of ingredients and finished product, retailers, healthcare practitioners, and consumers. This Standard provides test methods and evaluation criteria to allow for the determination that a dietary supplement contains the ingredients claimed on the label, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients. In such cases, new methods will be added to this Standard as they become available.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: rbrooker@nsf.org

Comment Deadline: December 11, 2022

NSF (NSF International)

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

Revision

BSR/NSF 173-202x (i99r1), Dietary Supplements (revision of ANSI/NSF 173-2021)
The purpose of NSF/ANSI 173 is to serve as an evaluation tool for analyzing dietary supplements. Certification to this Standard serves as a communication tool between manufacturers of ingredients and finished product, retailers, healthcare practitioners, and consumers. This Standard provides test methods and evaluation criteria to allow for the determination that a dietary supplement contains the ingredients claimed on the label, either qualitatively or quantitatively, and that it does not contain specific undeclared contaminants. In some instances, validated laboratory methods are not yet available for analyzing certain ingredients. In such cases, new methods will be added to this Standard as they become available.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: rbrooker@nsf.org

PHTA (Pool and Hot Tub Alliance)

2111 Eisenhower Avenue, Suite 500, Alexandria, VA 22314 | standards@phta.org, www.PHTA.org

New Standard

BSR/PHTA/ICC-2-202x, Standard for Public Pool and Spa Operations and Maintenance (new standard)
This standard is intended to cover the operations and maintenance of public pools, spas, and other aquatic venues intended to operate with or within recreational water quality standards. Design and construction of public pools and other aquatic venues are addressed in other standards. Residential pools and other water-containing amenities not intended for swimming, bathing, or wading shall not be considered to be included in the scope of this standard.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: standards@phta.org

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 73-202x, Standard for Motor-Operated Appliances (revision of ANSI/UL 73-2021)
This proposal covers: (1) Clarification on the temperature limit of the capacitor.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

Comment Deadline: December 11, 2022

ULSE (UL Standards & Engagement)

171 Nepean Street, Suite 400, Ottawa, ON K2P 0B4 Canada | kevin.hf.wu@ul.org, https://ulse.org/

Revision

BSR/UL 217-202x, Standard for Safety for Smoke Alarms (revision of ANSI/UL 217-2022)
(1) Markings and installation instructions.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 746A-202X, Standard for Polymeric Materials - Short Term Property Evaluations (revision of ANSI/UL 746A-2022)
This proposal covers the addition of the definition and threshold of Polymer Blends used as an Additive in Table 9.1 of UL 746A.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Derrick Martin; Derrick.L.Martin@ul.org

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 746C-202X, Standard for Polymeric Materials - Use in Electrical Equipment Evaluations (revision of ANSI/UL 746C-2022)
This proposal covers the inclusion of requirements for tolerance for Water Immersion Test Exposure/Conditioning Time in Paragraph 58.1. The initial version of this proposal was posted in CSDS for ballot on August 12, 2022.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Derrick Martin; Derrick.L.Martin@ul.org

ULSE (UL Standards & Engagement)

9 Burlington Crescent, Ottawa, ON K1T3L1 | celine.eid@ul.org, https://ulse.org/

Revision

BSR/UL 797-202x, Standard for Safety for Electrical Metallic Tubing - Steel (revision of ANSI/UL 797-2021)
1. Introduction of a Range for the Specific Gravity 2. Electrical Metallic Tubing, Addition of trade sizes 5” & 6” in Steel 3. Removal of “for reference only (not a requirement)” from Table 5.2
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx.

Comment Deadline: December 26, 2022

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

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

New Standard

BSR/AHRI Standard 600-202x (I-P), IEER Performance Rating of Water/Brine Source Heat Pumps (new standard)
IEER has become a more mainstream method of representing combined part load and full load efficiency of HVAC equipment within AHRI standards. A single seasonal measure has become necessary to compare differing technologies in the commercial HVAC industry. It is important that WSHP can be included in this comparison and is the purpose of AHRI 600. One of the benefits of ISO 13256-1 is its use of multiple water conditions for the applications of WLHP, GWHP and GLHP along with part load operation. With these applications and varied water conditions a certified performance map across a wide source temperature range is presented and interpolation for other source temperatures is possible. This allows the calculation of IEER using existing AHRI certified data with no further testing.
Single copy price: Free
Obtain an electronic copy from: https://connect.ahrinet.org/standards-public-review/stdsunderpublicreview
Send comments (copy psa@ansi.org) to: AHRI_Standards@ahrinet.org

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE S613-2.1-JUN-2013 (R202x), Tractors and self-propelled machinery for agriculture - Air quality systems for cabs - Part 2: Cab & HVAC design (reaffirmation of ANSI/ASABE S613-2.1-JUN-2013)
This part of the S613 standard series is concerned with the generally accepted design principles that define a robust cab and HVAC system used in contaminated environments as part of an Occupational Health and Safety Management System (OHSMS). This document is intended to be a guide for engineers who are responsible for designs used in agricultural applications. Information provided by this part of the standard series should help engineers provide cab and HVAC system designs that can be used as an engineering control within a program of risk management.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE S613-3.1-JUN2018 (R202x), Tractors and self-propelled machinery for agriculture - Air quality systems for cabs - Part 3: Filters for environmental cab HVAC systems (reaffirmation of ANSI/ASABE S613-3.1-JUN2018)
This part of the S613 standard series is concerned with the generally accepted design principles and test procedures that define and qualify a filter for an HVAC system used in contaminated environments as part of an Occupational Health and Safety Management System (OHSMS). This document is intended to be a guide for engineers who are responsible for designs used in agricultural applications and for application specialists who are looking for a filter to be used when operating in a specific hazardous environment.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE S625.1-JUL2018 (R202x), Drawbar Pin Dimensions and Requirements for Towing Machine with Clevis (reaffirmation of ANSI/ASABE S625.1-JUL2018)
This standard establishes dimensional and minimum strength requirements for agricultural drawbar hitch pins used in single point attaching of a towed machine to towing machines or leading machines. Application of this standard assumes a clevis on the towing machine conforming to ANSI/ASABE AD 6489-3:2004 and a ring on the towed machine conforming to ASABE/ISO 21244:2008. Additionally, this standard defines loading conditions for drawbar pin retention systems.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASABE S647-OCT2018 (R202x), Seed Cotton Module Identification System (reaffirmation of ANSI/ASABE S647-OCT2018)
The scope of the standard is limited to identification of seed cotton modules and the technology to read the identifiers. It does not address data transfer beyond the identifier such as area harvested, location, or ownership information. The identifier is meant to provide a link between the field and the gin and to also allow association of bale related data back to the module. Actual use of the association between the bale numbers and module identifier is at the discretion of the gin and producer. This standard is designed for global applications so that manufacturers of the enabling technologies and others should expect that if the system defined in this standard is followed, it can be applied to any cotton production system in the world.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASAE S229.6-DEC1976 (R202x), Baling Wire for Automatic Balers (reaffirmation of ANSI/ASAE S229.6-DEC1976 (R2017))
This specification shall cover annealed baling wire for automatic balers. The wire shall be furnished in two sizes of coils: 960 m (3150 ft) minimum and 1981 m (6500 ft) minimum.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASAE S315.5-AUG2018 (R202x), Agricultural Baling Twine for Automatic Balers (reaffirmation of ANSI/ASAE S315.5-AUG2018)
The purpose of this standard is to provide uniform polyolefin and sisal agricultural baler twine specifications to ensure satisfactory performance in round and square balers and have adequate durability in normal storage and handling of baled forage and biomass materials. This standard is intended to cover agricultural baler twines manufactured for use in round balers, small square balers, and large square balers. This standard is not intended to restrict manufacturers in the use of materials or manufacturing processes, rather create a minimum expectation of baler twine product performance.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

ASABE (American Society of Agricultural and Biological Engineers)

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

Reaffirmation

BSR/ASAE S515-JAN94 (R202x), Pallet Load Transfer System for Vegetable Harvesters, Shuttle Vehicles, and Road Trucks (reaffirmation of ANSI/ASAE S515-JAN94 (R2017))
The purpose of this Standard is to ensure compatibility between all vehicles used in a palletized load transfer system for vegetables. This Standard applies to vegetable harvesters, field shuttle vehicles, trailers, over-the-road trucks, and yard facilities used in such a system. Typical vehicles are shown in figure 1. Various manufacturers, vehicle leasing companies, and growers need to interchange and mate up their respective equipment; thus the need for standardization. The system is used to transfer entire pallet loads from one vehicle's conveyor to another conveyor. Only those dimensions and specifications needed to ensure the successful transfer are included.
Single copy price: $51.00 (ASABE Members); $75.00 (Non-members)
Obtain an electronic copy from: vangilder@asabe.org
Order from: Carla VanGilder; vangilder@asabe.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

ASCE (American Society of Civil Engineers)

1801 Alexander Bell Drive, Reston, VA 20191 | jneckel@asce.org, www.asce.org

New Standard

BSR/ASCE EWRI 33-202x, Comprehensive Transboundary International Water Quality Management Agreement (new standard)
The Parties should carefully frame the extent of the water resources involved in the Agreement. The agreement should identify the type and geographical extent of the waters subject to the agreement. To be accurate, an analysis should examine factors that influence the availability of water, such as the following: the climatology, physiology, geology, and the interaction between underground and surface water resources. The analysis should also identify pollution sources and their impacts on basin water quality.
Single copy price: Free to reviewers
Obtain an electronic copy from: https://sa360.asce.org/ASCEWebApp/StandardsBalloting/Default.aspx
Order from: jneckel@asce.org
Send comments (copy psa@ansi.org) to: https://sa360.asce.org/ASCEWebApp/StandardsBalloting/Default.aspx or jneckel@asce.org

AWWA (American Water Works Association)

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

Revision

BSR/AWWA C504-202x, Rubber-Seated Butterfly Valves (revision of ANSI/AWWA C504-2015)
This standard establishes minimum requirements for rubber-seated butterfly valves, 3 in. (75 mm) through 72 in. (1,800 mm) in diameter, with various body and end types, for raw water, potable water, wastewater, and reclaimed water.
Single copy price: Free
Obtain an electronic copy from: ETSsupport@awwa.org
Order from: AWWA, Attn: Vicki David; vdavid@awwa.org
Send comments (copy psa@ansi.org) to: AWWA, Attn: Paul Olson; polson@awwa.org

AWWA (American Water Works Association)

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

Revision

BSR/AWWA C602-202x, Cement-Mortar Lining of Water Pipelines in Place - 4 In. (100 mm) and Larger (revision of ANSI/AWWA C602-2017)
This standard describes the requirements for the materials and application of a cement–mortar lining to the inside surface of 4-in. (100-mm) and larger new and old steel, ductile-iron, and cast-iron water pipelines that have been previously installed, as well as related work.
Single copy price: Free
Obtain an electronic copy from: ETSsupport@awwa.org
Order from: AWWA, Attn: Vicki David; vdavid@awwa.org
Send comments (copy psa@ansi.org) to: AWWA, Attn: Paul Olson; polson@awwa.org

Comment Deadline: December 26, 2022

ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

New Standard

BSR/E1.71-202x, Powered Curtain Machines (new standard)
This standard establishes requirements for the design, manufacture, installation, inspection, and maintenance of machines intended for the movement of curtains. Curtains operated by these machines may be for scenery, performance, presentation, acoustical damping, museum exhibits, retail displays, and theatrical production. Specifically included are control systems, mechanical construction, and powertrain components of said machines. Excluded are the track, load carrying systems, and the curtain fabric construction. Curtain effect machines without the ability to automatically reset to a start position are also not included in its scope.
Single copy price: Free
Obtain an electronic copy from: https://tsp.esta.org/tsp/documents/public_review_docs.php
Order from: richard.nix@esta.org
Send comments (copy psa@ansi.org) to: standards@esta.org

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

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

Revision

BSR/ASSE 1018-202x, Trap Seal Primer Valves - Potable Water Supplied (revision of ANSI/ASSE 1018-2002 (R2021))
Devices covered by this standard are designed primarily to supply water to drain traps which have infrequent use and in which water evaporation would allow sewer gas to enter the premises. This type of device is located in the domestic water distribution system and is designed to supply potable water to a drain trap to maintain the water seal.
Single copy price: Free
Obtain an electronic copy from: standards@iapmostandards.org
Order from: standards@iapmostandards.org
Send comments (copy psa@ansi.org) to: Same

NEMA (ASC C136) (National Electrical Manufacturers Association)

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

Revision

BSR C136.10-202X, Roadway and Area Lighting Equipment Locking-Type Photocontrol Devices and Mating Receptacles - Physical and Electrical Interchangeability and Testing (revision of ANSI C136.10-2017)
This standard covers the following roadway and area lighting equipment, which may be physically and electrically interchanged to operate within established values: a. Locking type photocontrol herein referred to as â€œphotocontrol.â€☐ b. Locking type mating receptacle herein referred to as â€œreceptacle.â€☐ c. Shorting and open caps.
Single copy price: $80.00
Obtain an electronic copy from: david.richmond@nema.org
Order from: david.richmond@nema.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

NEMA (ASC C136) (National Electrical Manufacturers Association)

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

Revision

BSR C136.18-202X, Roadway and Area Lighting Equipment - High-Mast Side-Mounted Luminaires (revision of ANSI C136.18-2018)
This standard is intended to cover physical, operational, maintenance, and light-distribution features that permit use of high-mast luminaires in roadway applications when specified. It is not intended that compliance with this standard will permit interchangeability with existing roadway equipment without thorough engineering review and evaluation.
Single copy price: $49.00
Obtain an electronic copy from: david.richmond@nema.org
Order from: david.richmond@nema.org
Send comments (copy psa@ansi.org) to: Same

NETA (InterNational Electrical Testing Association)

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

Revision

BSR/NETA MTS-202x, NETA Standard for Maintenance Testing Specifications for Electrical Power Equipment and Systems (revision of ANSI/NETA MTS-2019)
These specifications incorporate comprehensive field tests and inspections to assess the suitability for continued service, condition of maintenance, and reliability of electrical power distribution equipment and systems. The purpose of these specifications is to assure tested electrical equipment and systems are operational, are within applicable standards and manufacturer's tolerances, and are suitable for continued service.
Single copy price: $495.00
Obtain an electronic copy from: tbrammer@netaworld.org
Order from: tbrammer@netaworld.org
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

NFPA (National Fire Protection Association)

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

Revision

BSR/NFPA 1-202x, Fire Code (revision of ANSI/NFPA 1-2021)
The scope includes, but is not limited to, the following: (1) Inspection of permanent and temporary buildings, processes, equipment, systems, and other fire and related life safety situations (2) Investigation of fires, explosions, hazardous materials incidents, and other related emergency incidents (3) Review of construction plans, drawings, and specifications for life safety systems, fire protection systems, access, water supplies, processes, hazardous materials, and other fire and life safety issues (4) Fire and life safety education of fire brigades, employees, responsible parties, and the general public (5) Existing occupancies and conditions, the design and construction of new buildings, remodeling of existing buildings, and additions to existing buildings (6) Design, installation, alteration, modification, construction, maintenance, repairs, servicing, and testing of fire protection systems and equipment (7) Installation, use, storage, and handling of medical gas systems (8) Access requirements for fire department operations (9) Hazards from outside fires in vegetation, trash, building debris, and other materials (10) Regulation and control of special events including, but not limited to, assemblage of people, exhibits, trade shows, amusement parks, haunted houses, outdoor events, and other similar special temporary and permanent occupancies (11) Interior finish, decorations, furnishings, and other combustibles that contribute...
Obtain an electronic copy from: www.nfpa.org/1Next
Send comments (copy psa@ansi.org) to: Same

NFPA (National Fire Protection Association)

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

Revision

BSR/NFPA 70B-202x, Recommended Practice for Electrical Equipment Maintenance (revision of ANSI/NFPA 70B -2019)
This recommended practice applies to preventive maintenance for electrical, electronic, and communication systems and equipment and is not intended to duplicate or supersede instructions that manufacturers normally provide. Systems and equipment covered are typical of those installed in industrial plants, institutional and commercial buildings, and large multifamily residential complexes. Consumer appliances and equipment intended primarily for use in the home are not included.
Obtain an electronic copy from: www.nfpa.org/70bNext
Send comments (copy psa@ansi.org) to: Same

Comment Deadline: December 26, 2022

NFPA (National Fire Protection Association)

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

Revision

BSR/NFPA 1010-202x, Standard for Firefighter, Fire Apparatus Driver/Operator, Airport Firefighter, and Marine Firefighting for Land-Based Firefighters Professional Qualifications (revision, redesignation and consolidation of ANSI/NFPA 1001-2019, ANSI/NFPA 1002-2017, ANSI/NFPA 1003-2019, ANSI/NFPA 1005-2019)
This standard provides the minimum requirements for professional qualifications for the positions identified in Chapters 4 through 16.
Obtain an electronic copy from: www.nfpa.org/1010Next
Send comments (copy psa@ansi.org) to: Same

NSF (NSF International)

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

Revision

BSR/NSF/CAN 50-202x (i168r5), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2021)
This Standard covers materials, chemicals, components, products, equipment and systems, related to public and residential recreational water facility operation.
Single copy price: Free
Obtain an electronic copy from: https://standards.nsf.org/apps/group_public/download.php/67176/50i168r5%20-%20JC%20memo%20&%20ballot.pdf
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

PHTA (Pool and Hot Tub Alliance)

2111 Eisenhower Avenue, Alexandria, VA 22314 | bpavlik@phta.org, www.PHTA.org

Reaffirmation

BSR/APSP/ICC 6-2013 (R202x), Standard for Residential Portable Spas and Swim Spas (reaffirmation and redesignation of ANSI/APSP 6-2013)
This standard is intended to cover factory built residential portable (self-contained) spas or swim spa that are used for bathing and are operated by an owner. This standard does not cover Non-Self-Contained Spas, public spas, public swim spas, or permanently installed residential spas, or swim spas.
Single copy price: Free
Obtain an electronic copy from: standards@phta.org
Send comments (copy psa@ansi.org) to: standards@phta.org

Comment Deadline: December 26, 2022

SCTE (Society of Cable Telecommunications Engineers)

140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

Revision

BSR/SCTE 148-202x, Specification for Male F Terminator, 75 Ohm (revision of ANSI/SCTE 148-2016)
The purpose of this specification is to specify requirements of the male "F" terminators that are used on "F" ports as specified in [SCTE 01] and [SCTE 02]. DOCSIS 4.0 specifications include operation at frequencies up to 1794 MHz. This document provides specifications or procedures for frequencies up to 3000 MHz.
Single copy price: $50.00
Obtain an electronic copy from: admin@standards.scte.org
Order from: Global Engineering Documents, (800) 854-7179, www.global.ihs.com
Send comments (copy psa@ansi.org) to: admin@standards.scte.org

SIA (Security Industry Association)

8405 Colesville Road, Suite 500, Silver Spring, MD 20910 | EShen@securityindustry.org, www.siaonline.org

New Standard

BSR/SIA/IAPSC AG-01-202x, Architectural Graphics for Security Standard (new standard)
This standard details a Computer Aided Drafting (CAD) symbol library for security system layout. This set provides standardized, easily recognizable icons representing the form or function of the device and a reduced number of symbols through the development of generic icons with singlecharacter attributes for the mount style and technology or device type.
Single copy price: $50.00 (SIA members); $275.00 (non-members)
Obtain an electronic copy from: eshen@securityindustry.org
Order from: eshen@securityindustry.org
Send comments (copy psa@ansi.org) to: Same

ULSE (UL Standards & Engagement)

9 Burlington Crescent, Ottawa, ON K1T3L1 | celine.eid@ul.org, https://ulse.org/

Reaffirmation

BSR/UL 62-2018 (R202x), Standard for Safety for Flexible Cords and Cables (reaffirmation of ANSI/UL 62-2018)
Reaffirmation and continuance of the 20th Edition of the Standard for Flexible Cords and Cables, UL 62, as an standard.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Send comments (copy psa@ansi.org) to: Celine Eid, celine.eid@ul.org

Comment Deadline: December 26, 2022

ULSE (UL Standards & Engagement)

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

Revision

BSR/UL 749-202x, Standard for Safety for Household Dishwashers (revision of ANSI/UL 749-2018)
Proposed 12th edition of the Standard for Household Dishwashers, UL 749.
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: https://www.shopulstandards.com
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx.

VITA (VMEbus International Trade Association (VITA))

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

Revision

BSR/VITA 48.7-202x, Mechanical Standard for Electronic Plug-in Units using Air Flow-by Cooling Technology (revision of ANSI/VITA 48.7-2014)
VITA 48.7 defines a detailed mechanical implementation for Air Flow-By cooling and sealing technologies applied to plug-in modules, backplanes, and sub-racks as defined in VITA 46/48. Air Flow-By cooling seals, environmentally and EMI, the PCBA within heat exchanging covers, convectively cooling the assembly without exposing the PCBA to the cooling air. This revision provides additional design clarity, removes dependencies on external documentation, adds requirements for plug-in module specifications, and updates recommendations to better guide design practice.
Single copy price: $25.00
Obtain an electronic copy from: admin@vita.com
Send comments (copy psa@ansi.org) to: admin@vita.com

Comment Deadline: January 10, 2023

ULSE (UL Standards & Engagement)

47173 Benicia Street, Fremont, CA 94538 | Marcia.M.Kawate@ul.org, https://ulse.org/

Revision

BSR/UL 25-202x, Standard for Safety for Meters for Flammable and Combustible Liquids and LP-Gas (revision of ANSI/UL 25-2021)
The following topics are being proposed: (1) Editorial correction and (2) Revision to scope
Single copy price: Free
Obtain an electronic copy from: https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: https://www.shopulstandards.com/
Send comments (copy psa@ansi.org) to: Follow the instructions in the following website to enter comments into the CSDS Work Area: https://csds.ul.com/Home/ProposalsDefault.aspx.

Technical Reports Registered with ANSI

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

ACP (American Clean Power Association)

1501 M Street NW, Suite 1000, Washington, DC 22205 | tvinson@awea.org, www.cleanpower.org

New Technical Report

ACP TR-1-2022, Wind Plant Power Performance Measurement Technical Report (technical report)
This technical report provides a method for measuring power output versus wind speed for an entire wind farm. This is distinct from IEC 61400-12-1 and 61400-12-2 which are intended to provide methods for measuring power performance of an individual Wind Turbine Generator (WTG).
Single copy price: $25.00

Withdrawal of a Technical Report that is registered with ANSI is determined by the responsible ANSI-Accredited Standards Developer. The following Technical Reports are hereby withdrawn in accordance with the Developers own procedures.

ADA (American Dental Association)

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

ADA Technical Report No. 1069-2021, SCDI Standard Terms, Definitions and Acronyms (withdraw technical report)
This technical report is an ADA SCDI (Standards Committee on Dental Informatics) reference document containing standardized terms, acronyms, and definitions for dental informatics.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

ADA (American Dental Association)

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

ADA Technical Report No. 1083-2021, Utilization of the Electronic Dental Record to Support Clinical Quality Improvement (withdraw technical report)
This technical report provides an overview of the technical relationship of the EDR (electronic dental record) to quality improvement and patient data analysis, and examples of how it can be applied.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

Technical Reports Registered with ANSI

ADA (American Dental Association)

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

ADA Technical Report No. 1087-2021, Essential Characteristics of Digital Oral Health Risk Assessment Resources (withdraw technical report)
This Technical Report describes the essential characteristics including the input and output elements, usability, security and privacy features, and interoperability of digital tools that collect clinician- or patient-entered information for the purposes of creating individual or population estimates of risk for specific oral diseases.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

ADA (American Dental Association)

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

ADA Technical Report No. 1092-2021, Implementation Guide to Utilization of Diagnostic Code(s)/Term(s) in Dental Records (withdraw technical report)
This technical report is a primer for dental providers to facilitate adoption and use of dental diagnostic codes.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

ADA (American Dental Association)

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

ADA Technical Report No. 133-2020, A Guide to Dental Lasers and Related Light-Based Technologies: Technology, Science, and Safety Considerations (withdraw technical report)
The focus of this technical report is to provide basic information on the use of lasers in dentistry and to facilitate the appropriate selection of the necessary equipment. This report further seeks to provide scientific information and a fundamental understanding on how light energy in the visible and thermal ranges of the electromagnetic spectrum interacts with biologic structures. Additionally, this technical report provides an elementary understanding of potential hazards and laser safety considerations that need to be addressed when lasers are used in the dental environment.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

ADA (American Dental Association)

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

ADA Technical Report No. 142-2021, Guided Surgical Devices and Maxillofacial Prosthetics (withdraw technical report)
This technical report describes methods used to produce repeatable, predictable, and accurate digitally produced surgical guides and maxillofacial prosthetic appliances and is applicable for both dental digital data capture and dental laboratory CAD/CAM (computer-aided design/computer-aided manufacturing) systems.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

Technical Reports Registered with ANSI

ADA (American Dental Association)

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

ADA Technical Report No. 143-2021, Guidance for Cementation and Bonding of CAD/CAM Fabricated Restorations (withdraw technical report)
This technical report provides guidance for successful cementation and/or bonding of CAD/CAM fabricated restorations. Restorative materials covered in this report include composites and/or hybrid ceramics, metals, oxide ceramics (zirconia and alumina), and silica-based ceramics (glass-ceramics).
Direct inquiries to: Paul Bralower; bralowerp@ada.org

ADA (American Dental Association)

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

ADA Technical Report No. 168-2020, Guidance on Method Development and Validation of Cleaning Processes for Dental Instruments (withdraw technical report)
This technical report provides guidance on the development of cleaning processes for dental instruments, and their validation, as one of the steps in a multi-step instrument reprocessing procedure. It applies to cleaning prior to initial use as well as reuse.
Direct inquiries to: Paul Bralower; bralowerp@ada.org

Final Actions on American National Standards

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

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

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

Addenda

ANSI/ASHRAE Addendum ac to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE Addendum ah to ANSI/ASHRAE Standard 34-2022, Designation and Safety Classification of Refrigerants (addenda to ANSI/ASHRAE Standard 34-2019) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE Addendum a to Standard 15.2-2022, Safety Standard for Refrigeration Systems in Residential Applications (addenda to ANSI/ASHRAE Standard 15.2-2022) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE Addendum b to Standard 15.2-2022, Safety Standard for Refrigeration Systems in Residential Applications (addenda to ANSI/ASHRAE Standard 15.2-2022) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE/ICC/IES/USGBC Addendum aa to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE/ICC/IES/USGBC Addendum i to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE/ICC/IES/USGBC Addendum s to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings (addenda to ANSI/ASHRAE/ICC/IES/USGBC Standard 189.1-2020) Final Action Date: 10/31/2022

Addenda

ANSI/ASHRAE/IES Addendum h to ANSI/ASHRAE/IES Standard 100-2018, Energy Efficiency in Existing Buildings (addenda to ANSI/ASHRAE/IES Standard 100-2018) Final Action Date: 10/31/2022

AWWA (American Water Works Association)

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

Supplement

ANSI/AWWA C205a-2022, Addendum to C205-18, Cement-Mortar Protective Lining and Coating for Steel Water Pipe - 4 In. (100 mm) and Larger - Shop Applied (supplement to ANSI/AWWA C205-2017) Final Action Date: 11/3/2022

CTA (Consumer Technology Association)

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

Revision

ANSI/CTA 803-C-2022, Mobile Electronics Wiring Designations for Audio and Vehicle Security/Convenience (revision and redesignation of ANSI/CTA 803-B-2012 (R2017)) Final Action Date: 11/3/2022

ESTA (Entertainment Services and Technology Association)

271 Cadman Plaza, P.O. Box 23200, Brooklyn, NY 11202-3200 | standards@esta.org, www.esta.org

Revision

ANSI/E1.6-4-2022, Design, Inspection, and Maintenance of Portable Fixed Speed Electric Chain Hoist Control Systems in the Entertainment Industry (revision and partition of ANSI E1.6-4-2013) Final Action Date: 10/31/2022

Revision

ANSI E1.6-5-2022, Selection and Use of Control Systems for Electric Chain Hoists in the Entertainment Industry (revision and partition of ANSI E1.6-4-2013) Final Action Date: 10/31/2022

IES (Illuminating Engineering Society)

120 Wall Street, Floor 17, New York, NY 10005-4001 | pmcgillicuddy@ies.org, www.ies.org

Revision

ANSI/IES RP-29-2022, Recommended Practice: Lighting Hospitals and Healthcare Facilities (revision of ANSI/IES RP-29-2020) Final Action Date: 11/3/2022

IIAR (International Institute of Ammonia Refrigeration)

1001 North Fairfax Street, Alexandria, VA 22314 | tony_lundell@iiar.org, www.iiar.org

Revision

ANSI/IIAR 1-2022, Definitions and Terminology Used in IIAR Standards (revision of ANSI/IIAR 1-2017) Final Action Date: 10/31/2022

NENA (National Emergency Number Association)

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

Revision

ANSI/NENA STA-019.2-2022, NG9-1-1 Call Processing Metrics Standard (revision and redesignation of ANSI/NENA STA-019.1) Final Action Date: 11/3/2022

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

Revision

ANSI/NFPA 440-2024, Guide for Aircraft Rescue and Firefighting Operations and Airport/Community Emergency Planning (revision, redesignation and consolidation of ANSI/NFPA 402-2019, ANSI/NFPA 424-2017) Final Action Date: 10/27/2022

NFPA (National Fire Protection Association)

One Batterymarch Park, Quincy, MA 02269-9101 | PFoley@nfpa.org, www.nfpa.org

Revision

ANSI/NFPA 460-2024, Standard for Aircraft Rescue and Firefighting Services at Airports, Recurring Proficiency of Airport Fire Fighters, and Evaluating Aircraft Rescue and Firefighting Foam Equipment (revision, redesignation and consolidation of ANSI/NFPA 403-2018, ANSI/NFPA 405-2020, ANSI/NFPA 412-2020) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 610-2024, Guide for Emergency and Safety Operations at Motorsports Venues (revision of ANSI/NFPA 610-2018) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 1026-2024, Standard for Incident Management Personnel Professional Qualifications (revision of ANSI/NFPA 1026-2018) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 1030-2024, Standard for Professional Qualifications for Fire Prevention Program Positions (revision, redesignation and consolidation of ANSI/NFPA 1031-2014, ANSI/NFPA 1035-2015, ANSI/NFPA 1037-2016) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 1091-2024, Standard for Traffic Incident Management Personnel Professional Qualifications (revision of ANSI/NFPA 1091-2019) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 1660-2024, Standard on Community Risk Assessment, Pre-Incident Planning, Mass Evacuation, Sheltering, and Re-entry Programs (revision, redesignation and consolidation of ANSI/NFPA 1600-2019, ANSI/NFPA 1616-2020, ANSI/NFPA 1620-2020) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 1900-2024, Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances (revision, redesignation and consolidation of ANSI/NFPA 414-2020, ANSI/NFPA 1901-2016, ANSI/NFPA 1906-2016, ANSI/NFPA 1917-2019) Final Action Date: 10/27/2022

Revision

ANSI/NFPA 1910-2024, Standard for Marine Firefighting Vessels and the Inspection, Maintenance, Testing, Refurbishing, and Retirement of In-Service Emergency Vehicles (revision, redesignation and consolidation of ANSI/NFPA 1912-2016, ANSI/NFPA 1925-2018, ANSI/NFPA 1071-2020, ANSI/NFPA 1911-2017) Final Action Date: 10/27/2022

NSF (NSF International)

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

Revision

ANSI/NSF 14-2022 (i126r1), Plastics Piping System Components and Related Materials (revision of ANSI/NSF 14 -2021) Final Action Date: 10/31/2022

TAPPI (Technical Association of the Pulp and Paper Industry)

15 Technology Parkway, Peachtree Corners, GA 30092 | standards@tappi.org, www.tappi.org

Reaffirmation

ANSI/TAPPI T 212 om-2012 (R2022), One percent sodium hydroxide solubility of wood and pulp (reaffirmation of ANSI/TAPPI T 212 om-2012 (R2018)) Final Action Date: 11/3/2022

Reaffirmation

ANSI/TAPPI T 281 sp-2018 (R2022), Open drum washer mat sampling technique (reaffirmation of ANSI/TAPPI T 281 sp-2018) Final Action Date: 11/3/2022

Reaffirmation

ANSI/TAPPI T 1210 sp-2018 (R2022), Units of measurement and conversion factors (reaffirmation of ANSI/TAPPI T 1210 sp-2018) Final Action Date: 11/3/2022

Reaffirmation

ANSI/TAPPI T 1216 sp-2018 (R2022), Indices for whiteness, yellowness, brightness, and luminous reflectance factor (reaffirmation of ANSI/TAPPI T 1216 sp-2018) Final Action Date: 11/3/2022

ULSE (UL Standards & Engagement)

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

Reaffirmation

ANSI/UL 2738-2018 (R2022), Standard for Safety for Induction Power Transmitters and Receivers for use with Low Energy Products (reaffirmation of ANSI/UL 2738-2018) Final Action Date: 11/1/2022

Revision

ANSI/UL 33-2022, Standard for Heat Responsive Links for Fire-Protection Service (August 5, 2022) (revision of ANSI/UL 33-2021) Final Action Date: 10/31/2022

Revision

ANSI/UL 763-2022, Standard for Safety for Motor-Operated Commercial Food Preparing Machines (revision of ANSI/UL 763-2020) Final Action Date: 11/2/2022

Revision

ANSI/UL 1004-5-2022, Standard for Safety for Fire Pump Motors (revision of ANSI/UL 1004-5-2020) Final Action Date: 11/1/2022

VITA (VMEbus International Trade Association (VITA))

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

Revision

ANSI/VITA 48.2-2022x, Mechanical Specification for Microcomputers using REDI Conduction Cooling Applied to VITA 46 (revision of ANSI/VITA 48.2-2020) Final Action Date: 10/31/2022

Revision

ANSI/VITA 74.0-2022x, Compliant System Small Form Factor Module Base Standard (revision of ANSI/VITA 74.0 -2017) Final Action Date: 11/3/2022

WMA (World Millwork Alliance)

10047 Robert Trent Jones Parkway, New Port Richey, FL 34655 | jferris@worldmillworkalliance.com, http:

Revision

ANSI/WMA 100-2023, Standard Method of Determining Structural Performance Ratings of Side-Hinged Exterior Door Systems and Procedures for Component Substitution (revision of ANSI/WMA 100-2018) Final Action Date: 11/3/2022

Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

INCITS Executive Board – ANSI Accredited SDO and US TAG to ISO/IEC JTC 1, Information Technology

The InterNational Committee for Information Technology Standards (INCITS), an ANSI accredited SDO, is the forum of choice for information technology developers, producers and users for the creation and maintenance of formal de jure IT standards. INCITS' mission is to promote the effective use of Information and Communication Technology through standardization in a way that balances the interests of all stakeholders and increases the global competitiveness of the member organizations.

The INCITS Executive Board serves as the consensus body with oversight of its 40+ Technical Committees. Additionally, the INCITS Executive Board has the international leadership role as the US Technical Advisory Group (TAG) to ISO/IEC JTC 1, Information Technology.

Membership in the INCITS Executive Board is open to all directly and materially interested parties in accordance with INCITS membership rules. To find out more about participating on the INCITS Executive Board, contact Jennifer Garner at jgarner@itic.org or visit http://www.incits.org/participation/membership-info for more information.
Membership in all interest categories is always welcome; however, the INCITS Executive Board seeks to broaden its membership base in the following underrepresented categories:

- Producer-Software
- Producer-Hardware
- Distributor
- Service Provider
- Users
- Consultants
- Government
- SDO and Consortia Groups
- Academia
- General Interest

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE's standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.
SCTE is currently seeking to broaden the membership base of its ANS consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.
Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE's membership rules and operating procedures.
More information is available at www.scte.org or by e-mail from standards@scte.org.

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

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

BSR/AHRI Standard 600-202x (I-P), IEER Performance Rating of Water/Brine Source Heat Pumps (new standard)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE S613-2.1-JUN-2013 (R202x), Tractors and self-propelled machinery for agriculture - Air quality systems for cabs - Part 2: Cab & HVAC design (reaffirmation of ANSI/ASABE S613-2.1-JUN-2013)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE S613-3.1-JUN2018 (R202x), Tractors and self-propelled machinery for agriculture - Air quality systems for cabs - Part 3: Filters for environmental cab HVAC systems (reaffirmation of ANSI/ASABE S613-3.1-JUN2018)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE S625.1-JUL2018 (R202x), Drawbar Pin Dimensions and Requirements for Towing Machine with Clevis (reaffirmation of ANSI/ASABE S625.1-JUL2018)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASABE S647-OCT2018 (R202x), Seed Cotton Module Identification System (reaffirmation of ANSI/ASABE S647-OCT2018)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASAE S229.6-DEC1976 (R202x), Baling Wire for Automatic Balers (reaffirmation of ANSI/ASAE S229.6-DEC1976 (R2017))

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASAE S315.5-AUG2018 (R202x), Agricultural Baling Twine for Automatic Balers (reaffirmation of ANSI/ASAE S315.5-AUG2018)

ASABE (American Society of Agricultural and Biological Engineers)

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

BSR/ASAE S515-JAN94 (R202x), Pallet Load Transfer System for Vegetable Harvesters, Shuttle Vehicles, and Road Trucks (reaffirmation of ANSI/ASAE S515-JAN94 (R2017))

IICRC (The Institute of Inspection, Cleaning and Restoration Certification)

4043 South Eastern Avenue, Las Vegas, NV 89119 | mwashington@iicrcnet.org, https://www.iicrc.org

BSR/IICRC S250-202x, Standard for Professional Cleaning and Maintenance of Commercial Resilient Floor Coverings (new standard)

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

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

INCITS/ISO/IEC 27001:2022 [202x], Information security, cybersecurity and privacy protection - Information security management systems - Requirements (identical national adoption of ISO/IEC 27001:2022 and revision of INCITS/ISO/IEC 27001:2013 [R2019]
INCITS/ISO/IEC 27001:2013/COR 1:2014 [2019]
INCITS/ISO/IEC 27001:2013/COR 2:2015 [2018])

NSF (NSF International)

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

BSR/NSF 42-202x (i121r1), Drinking Water Treatment Units - Aesthetic Effects (revision of ANSI/NSF 42-2021)

NSF (NSF International)

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

BSR/NSF 173-202x (i66r1), Dietary Supplements (revision of ANSI/NSF 173-2021)

NSF (NSF International)

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

BSR/NSF 173-202x (i99r1), Dietary Supplements (revision of ANSI/NSF 173-2021)

NSF (NSF International)

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

BSR/NSF/CAN 50-202x (i168r5), Equipment and Chemicals for Swimming Pools, Spas, Hot Tubs, and Other Recreational Water Facilities (revision of ANSI/NSF/CAN 50-2021)

VITA (VMEbus International Trade Association (VITA))

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

BSR/VITA 48.7-202x, Mechanical Standard for Electronic Plug-in Units using Air Flow-by Cooling Technology (revision of ANSI/VITA 48.7-2014)

American National Standards (ANS) Announcements

Corrections

APCO - Association of Public-Safety Communications Officials-International

Title of Standard BSR/APCO 3.103.3-202X

The November 4, 2022 PINS notice mistakenly listed an incorrect Title for **BSR/APCO 3.103.3-202X**. The proper Title is ***"Minimum Training Standards for Public Safety Telecommunicators"*** (revision and redesignation of ANSI/APCO 3.103.2 -2015). Please direct inquiries to: Mindy Adams; apcostandards@apcointl.org

American National Standards (ANS) Process

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

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

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

• ANSI Essential Requirements: Due process requirements for American National Standards (always current edition): www.ansi.org/essentialrequirements

• ANSI Standards Action (weekly public review announcements of proposed ANS and standards developer accreditation applications, listing of recently approved ANS, and proposed revisions to ANS-related procedures): www.ansi.org/standardsaction

• Accreditation information – for potential developers of American National Standards (ANS): www.ansi.org/sdoaccreditation

• ANS Procedures, ExSC Interpretations and Guidance (including a slide deck on how to participate in the ANS process and the BSR-9 form): www.ansi.org/asd

• Lists of ANSI-Accredited Standards Developers (ASDs), Proposed ANS and Approved ANS: www.ansi.org/asd

• American National Standards Key Steps: www.ansi.org/anskeysteps

• American National Standards Value: www.ansi.org/ansvalue

• ANS Web Forms for ANSI-Accredited Standards Developers: https://www.ansi.org/portal/psawebforms/

• Information about standards Incorporated by Reference (IBR): https://ibr.ansi.org/

• ANSI - Education and Training: www.standardslearn.org

Accreditation Announcements (Standards Developers)

Public Review of Revised ASD Operating Procedures

PHTA - Pool and Hot Tub Alliance

Comment Deadline: December 12, 2022

The **Pool and Hot Tub Alliance - PHTA**, an ANSI Member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on PHTA-sponsored American National Standards, under which it was last reaccredited in 2020. As the revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Genevieve Lynn, Pool and Hot Tub Alliance (PHTA) | 2111 Eisenhower Avenue, Suite 500, Alexandria, VA 22314 | (703) 838-0083, standards@phta.org

To view/download a copy of the revisions during the public review period, click here

Please submit any public comments on the revised procedures to PHTA by **December 12, 2022**, with a copy to the ExSC Recording Secretary in ANSI's New York Office (jthompso@ANSI.org)

American National Standards Under Continuous Maintenance

The ANSI Essential Requirements: Due Process Requirements for American National Standards provides two options for the maintenance of American National Standards (ANS): periodic maintenance (see clause 4.7.1) and continuous maintenance (see clause 4.7.2). Continuous maintenance is defined as follows:

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements. The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option.

- AAMI (Association for the Advancement of Medical Instrumentation)
- AARST (American Association of Radon Scientists and Technologists)
- AGA (American Gas Association)
- AGSC (Auto Glass Safety Council)
- ASC X9 (Accredited Standards Committee X9, Incorporated)
- ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.)
- ASME (American Society of Mechanical Engineers)
- ASTM (ASTM International)
- GBI (Green Building Initiative)
- HL7 (Health Level Seven)
- Home Innovation (Home Innovation Research Labs)
- IES (Illuminating Engineering Society)
- ITI (InterNational Committee for Information Technology Standards)
- MHI (Material Handling Industry)
- NBBPVI (National Board of Boiler and Pressure Vessel Inspectors)
- NCPDP (National Council for Prescription Drug Programs)
- NEMA (National Electrical Manufacturers Association)
- NFRC (National Fenestration Rating Council)
- NISO (National Information Standards Organization)
- NSF (NSF International)
- PRCA (Professional Ropes Course Association)
- RESNET (Residential Energy Services Network, Inc.)
- SAE (SAE International)
- TCNA (Tile Council of North America)
- TIA (Telecommunications Industry Association)
- ULSE (UL Standards & Engagement)

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at www.ansi.org/asd, select "American National Standards Maintained Under Continuous Maintenance." Questions? psa@ansi.org.

ANSI-Accredited Standards Developers (ASD) Contacts

The addresses listed in this section are to be used in conjunction with standards listed in PINS, Call for Comment, Call for Members and Final Actions. This section is a list of developers who have submitted standards for this issue of *Standards Action* – it is not intended to be a list of all ANSI-Accredited Standards Developers. Please send all address corrections to the PSA Department at psa@ansi.org.

ACP
American Clean Power Association
1501 M Street NW, Suite 1000
Washington, DC 22205
www.cleanpower.org

Tom Vinson
tvinson@awea.org

AHRI
Air-Conditioning, Heating, and Refrigeration Institute
2311 Wilson Boulevard, Suite 400
Arlington, VA 22201
www.ahrinet.org

Karl Best
kbest@ahrinet.org

ANS
American Nuclear Society
555 North Kensington Avenue
La Grange Park, IL 60526
www.ans.org

Kathryn Murdoch
kmurdoch@ans.org

ASABE
American Society of Agricultural and Biological Engineers
2950 Niles Road
Saint Joseph, MI 49085
https://www.asabe.org/

Carla VanGilder
vangilder@asabe.org

ASC X9
Accredited Standards Committee X9, Incorporated
275 West Street, Suite 107
Annapolis, MD 21401
www.x9.org

Ambria Frazier
admin@x9.org

ASCE
American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 20191
www.asce.org

James Neckel
jneckel@asce.org

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

Ryan Shanley
rshanley@ashrae.org

Thomas Loxley
tloxley@ashrae.org

ASME
American Society of Mechanical Engineers
Two Park Avenue, 6th Floor
New York, NY 10016
www.asme.org

Maria Acevedo
ansibox@asme.org

AVIXA
Audiovisual and Integrated Experience Association
11242 Waples Mill Road, Suite 200
Fairfax, VA 22030
www.avixa.org

Loanna Overcash
lovercash@avixa.org

AWWA
American Water Works Association
6666 W. Quincy Avenue
Denver, CO 80235
www.awwa.org

Paul Olson
polson@awwa.org

CTA
Consumer Technology Association
1919 S. Eads Street
Arlington, VA 22202
www.cta.tech

Catrina Akers
cakers@cta.tech

ESTA
Entertainment Services and Technology Association
271 Cadman Plaza, P.O. Box 23200
Brooklyn, NY 11202
www.esta.org

Richard Nix
standards@esta.org

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

George Istefan
standards@iapmostandards.org

Terry Burger
terry.burger@asse-plumbing.org

IES
Illuminating Engineering Society
120 Wall Street, Floor 17
New York, NY 10005
www.ies.org

Patricia McGillicuddy
pmcgillicuddy@ies.org

IIAR
International Institute of Ammonia Refrigeration
1001 North Fairfax Street
Alexandria, VA 22314
www.iiar.org

Tony Lundell
tony_lundell@iiar.org

IICRC
The Institute of Inspection, Cleaning and Restoration Certification
4043 South Eastern Avenue
Las Vegas, NV 89119
https://www.iicrc.org

Mili Washington
mwashington@iicrcnet.org

ITI (INCITS)
InterNational Committee for Information Technology Standards
700 K Street NW, Suite 600
Washington, DC 20001
www.incits.org

Lynn Barra
comments@standards.incits.org

NEMA (ASC C136)
National Electrical Manufacturers Association
1300 North 17th Street, Suite 900
Rosslyn, VA 22209
www.nema.org
David Richmond
David.Richmond@nema.org

NENA
National Emergency Number Association
1700 Diagonal Road, Suite 500
Alexandria, VA 22314
www.nena.org
Delaine Arnold
darnold@nena.org

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

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

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

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105
www.nsf.org
Jason Snider
jsnider@nsf.org
Monica Milla
mmilla@nsf.org
Rachel Brooker
rbrooker@nsf.org

PHTA
Pool and Hot Tub Alliance
2111 Eisenhower Avenue
Alexandria, VA 22314
www.PHTA.org
Blake Pavlik
bpavlik@phta.org

PHTA
Pool and Hot Tub Alliance
2111 Eisenhower Avenue, Suite 500
Alexandria, VA 22314
www.PHTA.org
Genevieve Lynn
standards@phta.org

SCTE
Society of Cable Telecommunications Engineers
140 Philips Rd
Exton, PA 19341
www.scte.org
Kim Cooney
kcooney@scte.org

SIA
Security Industry Association
8405 Colesville Road, Suite 500
Silver Spring, MD 20910
www.siaonline.org
Edison Shen
EShen@securityindustry.org

TAPPI
Technical Association of the Pulp and Paper Industry
15 Technology Parkway
Peachtree Corners, GA 30092
www.tappi.org
Tiffany Plummer
standards@tappi.org

ULSE
UL Standards & Engagement
12 Laboratory Drive
Research Triangle Park, NC 27709
https://ulse.org/
Anne Marie Jacobs
annemarie.jacobs@ul.org
Jonette Herman
Jonette.A.Herman@ul.org
Kelly Smoke
kelly.smoke@ul.org
Nicolette Weeks
Nicolette.A.Weeks@ul.org
Shannon Henesy
shannon.henesy@ul.org

ULSE
UL Standards & Engagement
171 Nepean Street, Suite 400
Ottawa, ON K2P 0
https://ulse.org/
Kevin Wu
kevin.hf.wu@ul.org

ULSE
UL Standards & Engagement
333 Pfingsten Road
Northbrook, IL 60062
https://ulse.org/
Lisette Delgado
Lisette.delgado@ul.org

ULSE
UL Standards & Engagement
47173 Benicia Street
Fremont, CA 94538
https://ulse.org/
Derrick Martin
Derrick.L.Martin@ul.org
Marcia Kawate
Marcia.M.Kawate@ul.org

ULSE
UL Standards & Engagement
9 Burlington Crescent
Ottawa, ON K1T3L
https://ulse.org/
Celine Eid
celine.eid@ul.org

VITA
VMEbus International Trade Association (VITA)
929 W. Portobello Avenue
Mesa, AZ 85210
www.vita.com
Jing Kwok
jing.kwok@vita.com

WMA
World Millwork Alliance
10047 Robert Trent Jones Parkway
New Port Richey, FL 34655
http://worldmillworkalliance.com
Jessica Ferris
jferris@worldmillworkalliance.com

ISO & IEC Draft International Standards

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

COMMENTS

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

Those regarding IEC documents should be sent to Tony Zertuche, General Secretary, USNC/IEC, at ANSI's New York offices (tzertuche@ansi.org). The final date for offering comments is listed after each draft.

ORDERING INSTRUCTIONS

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

ISO Standards

Ceramic ware, glassware and glass ceramic ware in contact with food (TC 166)

ISO/DIS 5644, Porcelain Tableware - Specification and test method - 1/22/2023, $62.00

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

ISO/DIS 13315-3, Environmental management for concrete and concrete structures - Part 3: Production of concrete constituents and concrete - 1/19/2023, $67.00

Cranes (TC 96)

ISO/DIS 12480-1, Cranes - Safe use - Part 1: General - 1/26/2023, $71.00

ISO/DIS 16881-1, Cranes - Design calculation for rail wheels and associated trolley track supporting structure - Part 1: General - 1/26/2023, $93.00

Ergonomics (TC 159)

ISO/DIS 24227, Validation protocol for walking speed as extracted from various sensor systems that measure human body motion for the healthcare sector - 1/19/2023, $46.00

Metallic and other inorganic coatings (TC 107)

ISO/DIS 8181, Atomic layer deposition - Terminology - 1/21/2023, $53.00

Non-destructive testing (TC 135)

ISO/DIS 24367, Non-destructive testing - Acoustic emission testing - Metallic pressure equipment - 1/21/2023, $88.00

Petroleum products and lubricants (TC 28)

ISO/DIS 12156-1, Diesel fuel - Assessment of lubricity using the high-frequency reciprocating rig (HFRR) - Part 1: Test method - 1/20/2023, $62.00

Plastics (TC 61)

ISO/DIS 3671, Plastics - Aminoplastic moulding materials - Determination of volatile matter - 1/19/2023, $29.00

Robots and robotic devices (TC 299)

ISO/DIS 5363, Robotics - Test methods for exoskeleton-type walking RACA robot - 1/23/2023, $62.00

ISO/DIS 22166-201, Robotics - Modularity for service robots - Part 201: Common information model for modules - 1/26/2023, $125.00

Rubber and rubber products (TC 45)

ISO/DIS 5462, Rubber latex coated fabric gloves - Specification - 1/22/2023, $58.00

Solid biofuels (TC 238)

ISO/DIS 17827-1, Solid biofuels - Determination of particle size distribution for uncompressed fuels - Part 1: Oscillating screen method using sieves with apertures of 3,15 mm and above - 1/20/2023, $46.00

ISO/DIS 17827-2, Solid biofuels - Determination of particle size distribution for uncompressed fuels - Part 2: Vibrating screen method using sieves with aperture of 3,15 mm and below - 1/20/2023, $53.00

Surface chemical analysis (TC 201)

ISO/DIS 23124, Surface Chemical Analysis - Measurement of lateral and axial resolutions of Raman microscope - 1/19/2023, $46.00

Textiles (TC 38)

ISO/DIS 22195-3, Textiles - Determination of index ingredient from coloured textile - Part 3: Myrobalan - 1/21/2023, $46.00

Tractors and machinery for agriculture and forestry (TC 23)

ISO/DIS 16122-4, Agricultural and forestry machines - Inspection of sprayers in use - Part 4: Fixed and semi-mobile sprayers - 1/19/2023, $82.00

Transfusion, infusion and injection equipment for medical use (TC 76)

ISO/DIS 4802-1, Glassware - Hydrolytic resistance of the interior surfaces of glass containers - Part 1: Determination by titration method and classification - 1/19/2023, $62.00

ISO/DIS 4802-2, Glassware - Hydrolytic resistance of the interior surfaces of glass containers - Part 2: Determination by flame spectrometry and classification - 1/21/2023, $67.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 7810:2019/DAmd 1, Identification cards - Physical characteristics - Amendment 1: Additional requirements for integrated circuit cards with contacts - 1/23/2023, $33.00

ISO/IEC DIS 5394, Information technology - Criteria for concept systems - 1/19/2023, $82.00

ISO/IEC DIS 24772-1, Programming languages - Avoiding vulnerabilities in programming languages - Part 1: Language independent catalogue of vulnerabilities - 1/26/2023, $185.00

IEC Standards

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

100/3844/FDIS, IEC 60728-11 ED5: Cable networks for television signals, sound signals and interactive services - Part 11: Safety, 12/16/2022

100/3846/CD, IEC 62889 ED2: Digital video interface - Gigabit video interface for multimedia systems, 12/30/2022

Electric traction equipment (TC 9)

9/2903/CD, IEC 62278-1 ED1: Railway applications - Specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS) - Part 1: Generic RAMS process, 01/27/2023

9/2904/CD, IEC 62278-2 ED1: Railway Applications - Specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS) - Part 2: Systems approach to safety, 01/27/2023

Electrical equipment in medical practice (TC 62)

62D/2004/FDIS, IEC 60601-2-10/AMD2 ED2: Amendment 2 - Medical electrical equipment - Part 2-10: Particular requirements for the basic safety and essential performance of nerve and muscle stimulators, 12/16/2022

62D/1984/CDV, IEC 60601-2-19/AMD1 ED3: Amendment 1 - Medical electrical equipment - Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators, 01/27/2023

62D/1986/CDV, IEC 60601-2-20/AMD1 ED3: Amendment 1 - Medical electrical equipment - Part 2-20: Particular requirements for the basic safety and essential performance of infant transport incubators, 01/27/2023

62D/1983/CDV, IEC 60601-2-21/AMD1 ED3: Amendment 1 - Medical electrical equipment - Part 2-21: Particular requirements for the basic safety and essential performance of infant radiant warmers, 01/27/2023

62D/1982/CDV, IEC 60601-2-35/AMD1 ED2: Amendment 1 - Medical electrical equipment - Part 2-35: Particular requirements for the basic safety and essential performance of heating devices using blankets, pads and mattresses and intended for heating in medical use, 01/27/2023

62D/1981/CDV, IEC 60601-2-50/AMD1 ED3: Amendment 1 - Medical electrical equipment - Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment, 01/27/2023

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

48B/3007/FDIS, IEC 61076-3-126 ED1: Connectors for electrical and electronic equipment - Product requirements - Part 3-126: Rectangular connectors - Detail specification for 5-way power connectors for industrial environments with push-pull locking, 12/16/2022

Fibre optics (TC 86)

86A/2238/CDV, IEC 60794-2-23 ED1: Optical fibre cables - Part 2-23: Indoor optical fibre cables - Detailed specification for multi-fibre cables for use in MPO connector terminated cable assemblies, 01/27/2023

86A/2239/CDV, IEC 60794-2-24 ED1: Optical fibre cables - Part 2-24: Indoor optical fibre cables - Detailed specification for multiple multi-fibre unit cables for use in MPO connector terminated breakout cable assemblies, 01/27/2023

86B/4682/CD, IEC 61300-2-21 ED3: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-21: Tests - Composite temperature/humidity cyclic test, 12/30/2022

Fluids for electrotechnical applications (TC 10)

10/1189/CD, IEC 61039 ED3: Classification of insulating liquids, 01/27/2023

Fuel Cell Technologies (TC 105)

105/941/CDV, IEC 62282-4-202 ED1: Fuel cell technologies - Part 4-202: Fuel cell power system for unmanned aircrafts - Performance test methods, 01/27/2023

Lamps and related equipment (TC 34)

34/981/CDV, IEC 62386-305 ED1: Digital addressable lighting interface - Part 305: Particular requirements - Input devices - Colour sensor, 01/27/2023

Measuring relays and protection equipment (TC 95)

95/515(F)/FDIS, IEC 60255-26 ED4: Measuring relays and protection equipment - Part 26: Electromagnetic compatibility requirements, 11/25/2022

95/516(F)/FDIS, IEC 60255-27 ED3: Measuring relays and protection equipment - Part 27: Product safety requirements, 11/25/2022

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

113/715/DTS, IEC TS 62565-5-1 ED1: Nanomanufacturing - Material specification - Part 5-1: Nanoporous activated carbon - Blank detail specification: Electrochemical capacitors, 01/27/2023

Semiconductor devices (TC 47)

47/2786/FDIS, IEC 62951-8 ED1: Semiconductor devices - Flexible and stretchable semiconductor devices - Part 8: Test method for stretchability, flexibility and stability of flexible resistive memory, 12/16/2022

47/2782(F)/FDIS, IEC 63364-1 ED1: Semiconductor devices - Semiconductor devices for IoT system - Part 1: Test method of sound variation detection, 11/25/2022

Solar photovoltaic energy systems (TC 82)

82/2083/CDV, IEC 62446-1 ED2: Photovoltaic (PV) systems - Requirements for testing, documentation and maintenance - Part 1: Grid connected systems - Documentation, commissioning tests and inspection, 01/27/2023

Surface mounting technology (TC 91)

91/1810/CDV, IEC 63215-5 ED1: Endurance test methods for die attach materials - Part 5: Temperature cycling test methods for die attach materials (system soldering interconnection) applied to module type power electronic devices, 01/27/2023

Other

CIS/H/459/CDV, IEC 61000-6-3/AMD1/FRAG2 ED3: Amendment 1/Fragment 2: Electromagnetic compatibility (EMC) - Part 6-3: Generic standards - Emission standard for equipment in residential environments, 01/27/2023

JTC1-SC41/317/CD, ISO/IEC 30177 ED1: Internet of Things (IoT) - Underwater network management system (U-NMS) interworking, 01/27/2023

Ultrasonics (TC 87)

87/818(F)/FDIS, IEC 62127-3 ED2: Ultrasonics - Hydrophones - Part 3: Properties of hydrophones for ultrasonic fields, 11/25/2022

Newly Published ISO & IEC Standards

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

ISO Standards

Agricultural food products (TC 34)

ISO 23942:2022, Determination of hydroxytyrosol and tyrosol content in extra virgin olive oils - Reverse phase high performance liquid chromatography (RP-HPLC) method, $111.00

Biological evaluation of medical and dental materials and devices (TC 194)

ISO 10993-2:2022, Biological evaluation of medical devices - Part 2: Animal welfare requirements, $111.00

Biotechnology (TC 276)

ISO 20691:2022, Biotechnology - Requirements for data formatting and description in the life sciences, $225.00

Corrosion of metals and alloys (TC 156)

ISO 23669:2022, Corrosion of metals and alloys - Requirements for localised corrosion and environmentally assisted cracking testing of additively manufactured metals and alloys, $48.00

ISO 24239:2022, Corrosion control engineering life cycle in fossil fuel power plants - General requirements, $175.00

Furniture (TC 136)

ISO 4769:2022, Hardware for furniture - Strength and durability of hinges and their components - Hinges pivoting on a vertical axis, $111.00

Geotechnics (TC 182)

ISO 24057:2022, Geotechnics - Array measurement of microtremors to estimate shear wave velocity profile, $200.00

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

ISO 24139-1:2022, Petroleum and natural gas industries - Corrosion resistant alloy clad bends and fittings for pipeline transportation system - Part 1: Clad bends, $200.00

Mechanical vibration and shock (TC 108)

ISO 21940-21:2022, Mechanical vibration - Rotor balancing - Part 21: Description and evaluation of balancing machines, $225.00

Nuclear energy (TC 85)

ISO 21243:2022, Radiation protection - Performance criteria for laboratories performing initial cytogenetic dose assessment of mass casualties in radiological or nuclear emergencies - General principles and application to dicentric assay, $111.00

ISO 6980-1:2022, Nuclear energy - Reference beta-particle radiation - Part 1: Methods of production, $149.00

ISO 6980-2:2022, Nuclear energy - Reference beta-particle radiation - Part 2: Calibration fundamentals related to basic quantities characterizing the radiation field, $200.00

ISO 6980-3:2022, Nuclear energy - Reference beta-particle radiation - Part 3: Calibration of area and personal dosemeters and the determination of their response as a function of beta radiation energy and angle of incidence, $149.00

Optics and optical instruments (TC 172)

ISO 11382:2022, Optics and photonics - Optical materials and components - Characterization of optical materials used in the infrared spectral range from 0,78 µm to 25 µm, $73.00

Paints and varnishes (TC 35)

ISO 1522:2022, Paints and varnishes - Pendulum damping test, $73.00

Petroleum products and lubricants (TC 28)

ISO 3679:2022, Determination of flash point - Method for flash no-flash and flash point by small scale closed cup tester, $175.00

Photography (TC 42)

ISO 18951-2:2022, Imaging materials - Scratch resistance of photographic prints - Part 2: Sclerometer test method, $73.00

Road vehicles (TC 22)

ISO 21994:2022, Passenger cars - Stopping distance at straight-line braking with ABS - Open-loop test method, $175.00

ISO 22138:2022, Heavy commercial vehicles - Vehicle stability during tipper body operation - Tilt-table test method, $149.00

ISO 34502:2022, Road vehicles - Test scenarios for automated driving systems - Scenario based safety evaluation framework, $250.00

ISO 18418-2:2022, Gasoline engines - High pressure liquid fuel supply connections - Part 2: Pipe assemblies, $73.00

Sizing system, designations and marking for boots and shoes (TC 137)

ISO 19409:2022, Footwear - Sizing - Measurement of last dimensions, $111.00

Solid biofuels (TC 238)

ISO 18122:2022, Solid biofuels - Determination of ash content, $73.00

Solid mineral fuels (TC 27)

ISO 923:2022, Coal - Density separation equipment for coal - Performance evaluation, $175.00

Steel (TC 17)

ISO 404:2013/Amd 1:2022, Steel and steel products - General technical delivery requirements - Amendment 1, $20.00

Thermal insulation (TC 163)

ISO 29766:2022, Thermal insulating products for building applications - Determination of tensile strength parallel to faces, $48.00

Transport information and control systems (TC 204)

ISO 21734-1:2022, Intelligent transport systems - Performance testing for connectivity and safety functions of automated driving buses in public transport - Part 1: General framework, $175.00

Tyres, rims and valves (TC 31)

ISO 21634:2022, Rubber flaps for tyres - Requirements and test methods, $111.00

Water quality (TC 147)

ISO 5667-26:2022, Water quality - Sampling - Part 26: Guidance on sampling for the parameters of the oceanic carbon dioxide system, $73.00

Welding and allied processes (TC 44)

ISO 12153:2022, Welding consumables - Tubular-cored electrodes for gas-shielded and non-gas-shielded metal arc welding of nickel and nickel alloys - Classification, $73.00

ISO Technical Specifications

Applications of statistical methods (TC 69)

ISO/TS 23471:2022, Experimental designs for evaluation of uncertainty - Use of factorial designs for determining uncertainty functions, $149.00

Health Informatics (TC 215)

ISO/TS 5568:2022, Health informatics - Traditional Chinese medicine - Labelling metadata of human biological sample information, $73.00

ISO/TS 17975:2022, Health informatics - Principles and data requirements for consent in the collection, use or disclosure of personal health information, $175.00

Plastics (TC 61)

ISO/TS 15791-2:2022, Plastics - Development and use of intermediate-scale fire tests for plastics products - Part 2: Use of intermediate-scale tests for semi-finished and finished products, $111.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 27557:2022, Information security, cybersecurity and privacy protection - Application of ISO 31000:2018 for organizational privacy risk management, $149.00

ISO/IEC 27553-1:2022, Information security, cybersecurity and privacy protection - Security and privacy requirements for authentication using biometrics on mobile devices - Part 1: Local modes, $175.00

ISO/IEC/IEEE 42010:2022, Software, systems and enterprise - Architecture description, $225.00

ISO/IEC/IEEE 15026-2:2022, Systems and software engineering - Systems and software assurance - Part 2: Assurance case, $149.00

IEC Standards

Instrument transformers (TC 38)

IEC 61869-99 Ed. 1.0 b:2022, Instrument transformers - Part 99: Glossary, $354.00

Magnetic alloys and steels (TC 68)

IEC 60404-3 Ed. 3.0 b:2022, Magnetic materials - Part 3: Methods of measurement of the magnetic properties of electrical steel strip and sheet by means of a single sheet tester, $259.00

S+ IEC 60404-3 Ed. 3.0 en:2022 (Redline version), Magnetic materials - Part 3: Methods of measurement of the magnetic properties of electrical steel strip and sheet by means of a single sheet tester, $338.00

Semiconductor devices (TC 47)

IEC 62228-6 Ed. 1.0 b:2022, Integrated circuit - EMC evaluation of transceivers - Part 6: PSI5 transceivers, $310.00

System engineering and erection of electrical power installations in systems with nominal voltages above 1 kV A. C., particularly considering safety aspects (TC 99)

IEC 60071-11 Ed. 1.0 b:2022, Insulation co-ordination - Part 11: Definitions, principles and rules for HVDC system, $259.00

IEC Technical Specifications

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

IEC/TS 62607-2-5 Ed. 1.0 en:2022, Nanomanufacturing - Key control characteristics - Part 2-5: Carbon nanotube materials - Mass density of vertically-aligned carbon nanotubes: X-ray absorption method, $133.00

International Organization for Standardization (ISO)

ISO Proposal for a New Field of ISO Technical Activity

Dust and Dust Storms

Comment Deadline: December 16, 2022

INSO, the ISO member body for Iran, has submitted to ISO a proposal for a new field of ISO technical activity on Dust and Dust Storms, with the following scope statement:

Standardization in the field of natural dust and dust storm on an urban scale and in industrial towns, excluded artificial/manufactures dust. Standardization and development of international standards includes: terminology, specifications, constituent and size of dust, feature of dust storms and prevent the creation of dust or reduce the risks of natural dust in the areas of Healthcare, safe water, agriculture, transportation etc.

Anyone wishing to review the proposal can request a copy by contacting ANSI's ISO Team (isot@ansi.org), with a submission of comments to Steve Cornish (scornish@ansi.org) by close of business on Friday, December 16, 2022.

Registration of Organization Names in the United States

The Procedures for Registration of Organization Names in the United States of America (document ISSB 989) require that alphanumeric organization names be subject to a 90-day Public Review period prior to registration. For further information, please contact the Registration Coordinator at (212) 642-4975.
When organization names are submitted to ANSI for registration, they will be listed here alphanumerically. Alphanumeric names appearing for the first time are printed in bold type. Names with confidential contact information, as requested by the organization, list only public review dates.

Public Review

NOTE: Challenged alphanumeric names are underlined. The Procedures for Registration provide for a challenge process, which follows in brief. For complete details, see Section 6.4 of the Procedures.

A challenge is initiated when a letter from an interested entity is received by the Registration Coordinator. The letter shall identify the alphanumeric organization name being challenged and state the rationale supporting the challenge. A challenge fee shall accompany the letter. After receipt of the challenge, the alphanumeric organization name shall be marked as challenged in the Public Review list. The Registration Coordinator shall take no further action to register the challenged name until the challenge is resolved among the disputing parties.

Proposed Foreign Government Regulations

Call for Comment

U.S. manufacturers, exporters, trade associations, U.S domiciled standards development organizations and conformity assessment bodies, consumers, or U.S. government agencies may be interested in proposed foreign technical regulations notified by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to notify to the WTO Secretariat in Geneva, Switzerland proposed technical regulations that may significantly affect trade. In turn, the Secretariat circulates 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 Enquiry Point for the WTO TBT Agreement is located at the National Institute of Standards and Technology (NIST) in the Standards Coordination Office (SCO). The Enquiry Point relies on the WTO's ePing SPS&TBT platform (https://epingalert.org/) to distribute the notified proposed foreign technical regulations (notifications) and their full-texts available to U.S. stakeholders. Interested U.S. parties can register with ePing to receive e-mail alerts when notifications are added from countries and industry sectors of interest to them. To register for ePing, please visit: https://epingalert.org/

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

For further information about the USA TBT Enquiry Point, please visit:
https://www.nist.gov/standardsgov/usa-wto-tbt-enquiry-point
Contact the USA TBT Enquiry Point at (301) 975-2918; E usatbtep@nist.gov or notifyus@nist.gov

Public Review Draft

Proposed Addendum v to Standard 189.1-2020

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

Second Public Review (September 2022)
(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, 180 Technology Pkwy NW, Peachtree Corners, GA 30092

BSR/ASHRAE/ICC/USGBC/IES Addendum v to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings* 2nd 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

This ISC modifies Addendum v to further clarify how L_{max} is measured. The new section 8.3.3.2.2 uses the values of Maximum Sound Pressure Level (L_{max}) in Table 8.3.3.2 but measured or calculated using a fast-rating (125 msec interval) whereas all other sections referring to L_{max} in Table 8.3.3.2 L_{max} is measured or calculated based on a slow time rating (1 second interval). Currently in the heading Table 8.3.3.2, L_{max} is described as being valued in terms of slow time rating. With the addition of 8.3.3.2.2, this is no longer true for all references to Table 8.3.3.2. Thus this notation in the heading of Table 8.3.3.2 is deleted editorially and language added to the body of the text in Section 8.3.3.2. These changes do not add cost or scope to the existing language of the standard.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time.]

Addendum v PPR2 ISC

Revise the Section 8.3.3.2 as follows:

8.3.3.2 Interior Background Noise Requirements. The *building envelope*, interior *spaces* within the building, and building systems, including mechanical, electrical, and plumbing systems, shall be designed and constructed such that the interior sound pressure levels created by the combination of building systems noise and exterior sound sources, under normal operation with windows closed and no active sound masking systems, do not exceed the values specified in Table 8.3.3.2. The *hourly average sound pressure level* L_{eq} and *maximum sound pressure level* L_{max} shall not exceed the values listed in Table 8.3.3.2. Outdoor noise levels used in the design shall be provided in the *construction documents*. The *maximum sound pressure levels* (L_{max}) shall be measured using slow-weighting except as required in 8.3.3.2.2.

This section is for reference only and the changes shown are approved as editorial changes. The items below this line are not available for comment at this time.

Edit Table 8.3.3.2 as follows:

Table 8.3.3.2 Maximum Interior Background Sound Pressure Levels from Building Systems and Exterior Sound Sources [a]

	Hourly Average Sound Pressure Level (L_{eq})		Maximum Sound Pressure Level (L_{max} ~~[slow time weighting]~~)	
Room Type	**dBA**	**dBC**	**dBA**	**dBC**
Residential sleeping areas (nighttime[b] - between 10 p.m. and 7 a.m)	35	60	45	70
Residential living and sleeping areas (daytime)	40	60	50	70
Hotel and motel guest rooms or suites and dormitories	40	60	50	70
Meeting and banquet rooms	35	60	45	70
Corridors and lobbies	45	65	60	75
Service and support areas	45	65	60	75
Enclosed offices	35	60	45	70
Conference rooms	35	60	45	70
Teleconference rooms	30	55	40	65
Open-plan offices	45	65	55	75
Courtrooms—unamplified speech	35	60	45	70
Courtrooms—amplified speech	40	60	50	70
Laboratories—minimal speech communication	55	75	65	85
Laboratories—extensive phone use and speech communication	50	70	60	80
Laboratories—group teaching	40	60	50	70
Religious—general assembly with music program	30	55	40	65
Library study and reading areas	35	60	45	70
Gymnasiums and natatoriums without speech amplification	50	70	60	80
Gymnasiums and natatoriums with speech amplification	55	75	65	85

~~a. For high-noise exterior events, refer to Section 8.3.3.2.1.~~
~~b. "Nighttime" is defined as the time between 10 p.m. and 7 a.m~~

Relevant sections of Addendum v is provided for reference only.

8.3.3.2.2 Interior Noise Impact Events. Airborne and structure-borne noise impacts from tenants and activities within the building shall not exceed the values specified in Table 8.3.3.2. The *maximum sound pressure levels* (L_{max}) shall be measured using fast-weighting for structure-borne events, such as fitness activities and dancing, and for airborne events such as amplified music or speech, and these events shall follow the conformance path defined in 8.3.3.2.4.

8.3.3.2.3 Conformance. Conformance to the requirements in Section 8.3.3.2 shall be demonstrated either through the design requirements of Section 8.3.3.2.4 or the testing requirements of Section 8.3.3.2.5.

NOTE: Remainder renumber subsequent sections accordingly.

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

NSF/ANSI Standard
for Drinking Water Treatment Units –

Drinking Water Treatment Units – Aesthetic Effects

⋮

7 Elective performance claims – Test methods

⋮

7.3 Chemical reduction testing

7.3.1 Chemical reduction claims

Claims for chemical reduction may be made for the substances shown in Table 7.1 when tested in accordance with Section 7.3.1. To qualify for a specific chemical reduction claim, the system shall reduce the concentration of the substance from the influent challenge so that, prior to the 100% sample point, 90% of the product water sample concentrations are less than or equal to the maximum product water concentrations in Table 7.1. Samples collected at the 100% sample point shall be less than or equal to the maximum product water concentrations in Table 7.1.

NOTE — Table 7.1 displays the final concentrations to which the contaminants are to be adjusted.

Table 7.1
Chemical reduction requirements

Contaminant	Average influent challenge concentration	Individual influent sample point limits[1]	Maximum product water concentration[2]	Compound
chloride	800 mg/L ± 10%	800 mg/L ± 20%	250 mg/L	sodium chloride
foaming agent	5 mg/L ± 10%	5 mg/L ± 30%	0.5 mg/L	linear alkylbenzene sulfonate (LAS)
sulfate	800 mg/L ± 10%	800 mg/L ± 20%	250 mg/L	sodium sulfate
TDS	1,500 mg/L ± 10%	1,500 mg/L ± 25%	500 mg/L	sodium chloride

[1] Equals average influent challenge concentration variability plus one of the following, in order of availability:

1. Acceptable continuing calibration verification (CCV) limits stated in the appropriate US EPA Method.
2. Acceptable spike recoveries as stated in the appropriate US EPA Method.
3. Opinion of laboratory professionals – No guidance available in US EPA Method.

[2] Not all secondary substances are listed in this standard because they are not normally found in drinking water or are not affected by drinking water treatment systems. Hydrogen sulfide and phenol are listed because they are found in water and may be aesthetically displeasing.

⋮

7.3.1.5 Influent challenge

7.3.1.5.1 General test water

A public water supply ~~shall be used~~ with the following specific characteristics ~~maintained throughout the test~~ shall be used.

pH	7.5 ± 0.5
temperature	20 ± 3 °C (68 ± 5 °F)
TDS	200 to 500 mg/L
TOC	≥ 1.0 mg/L [1]
turbidity	< 1 NTU
[1] If naturally present in source water at adequate concentration. Adjustment of TOC is given in Section 7.3.1.5.4.	

⋮

Rationale: Updates Section 7.3.1.5.1 and adds a note for Table 7.1 to reflect that it's not possible to maintain 200-500 mg/L TDS from sodium chloride when the challenge for chloride is adjusted using sodium chloride and has an influent requirement of 800 mg/L.

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

NSF/ANSI Standard
for Health Sciences –

Dietary Supplements

•
•
•

2 Normative references

The following documents contain provisions that, through reference in this text, constitute provisions of this Standard. At the time this Standard was written, the editions indicated were valid. All documents are subject to revision, and parties are encouraged to investigate the possibility of applying the most recent edition of the document indicated below.

•
•
•

ISO~~NTIS~~/IEC 17025:~~1999~~2017, *General requirements for the competence of testing and calibration laboratories*~~19~~

~~19 National Technical Information Service. 5301 Shawnee Road, Alexandria VA 22312. www.ntis.gov~~

•
•
•

3 Definitions

•
•
•

Probiotic- : Live microorganisms that when consumed orally in adequate amounts confer a health benefit on the consumer.

•
•
•

4 Labeling and literature requirements

•
•
•

4.2 Probiotics

For products and ingredients containing probiotics, the following information must be present on the label:
— minimum colony forming units (CFU) count of each strain of live microorganism at the time of the product or ingredient's expiration, or at time of production if no expiration date is applied; or
— minimum total CFU count for a blend of live microorganisms at the time of the product or ingredient's expiration, or at time of production if no expiration date is applied; ~~acceptable~~; and
— storage directions that guarantee the minimum CFU count(s) at the time of expiration, or at time of production if no expiration date is applied;; and
— identification of the ~~bacteria~~ probiotic including genus, species, and strain based on widely accepted

nomenclature. If a trademarked name is used to identify the bacteria, then the genus, species, and strain shall also be included on the label.

•
•
•

5 Product requirements

5.1 Identity

5.1.1 Dietary ingredients

The identity of the dietary ingredient shall be verified in accordance with Section 6.1 or 8.7 using the test method(s) appropriate for establishing identity based on the manufacturer's claims.

5.1.2 Finished product

Manufacturers are responsible for ensuring that finished products shall contain each of the dietary ingredients and, if applicable, any subcomponent, such as marker constituents, declared on the label. The finished product identity claims shall be reviewed to determine if select claims shall be verified in accordance with Section 6.1 or 8.7.

5.2 Quantity

5.2.1 Dietary ingredients

COA claims for dietary ingredients shall be reviewed to determine a set of verification tests to confirm quantity of dietary ingredients and any claimed subcomponents such as marker constituents in accordance with Section 6.2 or 8.7.

•
•
•

5.2.2 Finished products

Finished product claims shall be reviewed to determine a set of verification tests to confirm the quantity of dietary ingredients, claimed subcomponents ~~marker constituents~~ (if applicable), and nutritional declarations as declared on the label in accordance with Sections 6.2 or~~and~~ 8.7.

•
•
•

6 Test methods used by testing laboratories for identification and quantification of ingredients – Dietary ingredients and finished products

•
•
•

6.2 Quantification test methods

•
•
•

6.2.4 Probiotics

Probiotics shall have identity and quantity evaluated using reference methods that are scientifically valid and suitable for the intended purpose. If no appropriate reference method exists, development of a new method is allowable. The use of any modified or new method shall require that a method validation be performed which includes recovery of the selected reference probiotic species.

Sources for methods may include AOAC International[6], USP[17] or other method sources. Modification of an existing method to better suit the sample under test is allowable.
Probiotics, as Class I dietary ingredients, shall meet minimum quantities (minus the measure of uncertainty of the analytical method) as stated as a specification in the COA or on the label of the finished product.

Default method uncertainty for probiotic quantitation, unless stated otherwise, is 0.5 Log_{10} of the measurement.

Example:
Total quantity of probiotic cultures claimed on the COA or on the label is 30 billion CFU/serving ($3x10^{10}$ CFU = 10.5 log_{10} CFU/serving).
Minimum acceptable level is $1x10^{10}$ CFU = 10 log_{10} CFU/serving.
•
•
•

8 Good manufacturing practices (GMP)

•
•
•

8.7 Alternate Means of Compliance

Under certain circumstances, alternate means of evaluation to Identity or Quantity requirements is permitted. This type of situation may arise in the following circumstances:

- **No scientifically valid method:** There is not a currently available scientifically valid method for the ingredient in the finished product. This may occur, for example, when an ingredient occurs at a low level in the finished product or when a finished product matrix is highly complex.

- **As part of an evaluation plan:** The certification body may designate specific identity or quantity specifications for Section 8.7 review.

Ingredient identification or quantification test data used for 8.7 may be generated by the applicant, applicant's qualified supplier, or applicant's third-party laboratory. When the applicant or applicant's supplier test data or manufacturing records is used as part of compliance evaluation, the applicant shall be responsible to arrange access to these records.

All data used to support compliance to any requirement of this standard, shall comply with the test method requirements of the standard.

Whenever ingredient test data is used as part of compliance evaluation, production records must document appropriate traceability between ingredient lots and finished product batches, as well as appropriate ingredient weighing, ingredient addition and second person verification of those operational activities.
Sample test data must be identified with a unique code or other clear identification that links the sample to the parent material from which it was taken. For this evaluation, the manufacturer must submit the relevant raw material test data and a representative batch production record. If an ingredient used in the product is itself a proprietary blend, the applicant must submit or arrange to have the ingredient manufacturer submit the relevant raw material test data and a representative batch production record for the proprietary blend ingredient.
•
•
•

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

NSF/ANSI Standard
for Health Sciences –

Dietary Supplements

•
•
•

7 Test methods used by testing laboratories for detection of contaminants – Dietary ingredients and finished products

•
•
•

7.3 Test methods for microbiological contaminants

•
•
•

7.3.7. *Escherichia coli*

7.3.7.1. Generic *E. coli*

~~For finished products~~ For dietary ingredients and finished products that contain only vitamin, mineral, botanical ingredient – extract, and other dietary supplement ingredients, testing shall be performed based on the qualitative USP test for the Absence of E.coli (USP <2022>).

For dietary supplement ingredients and finished products that contain botanical non-extracts, quantitation of *E. coli* shall be performed utilizing available methods, e.g. AOAC International, USP, FDA and other. Modification of an existing method, or development of a new method, are allowable provided the method is fit for purpose.

•
•
•

PHTA-2 *Standard for Public Pool and Spa Operations & Maintenance*
REVISIONS (Substantive Changes)

LIMITATION: Public Review comments can only be submitted on the revisions shown below.
For further information, contact Genevieve Lynn, PHTA Standards Department, at standards@phta.org.

DEFINITIONS

DECK. An area immediately adjacent to or attached to a pool or spa that is specifically constructed or installed for sitting, standing, or walking. Decks include dry decks and perimeter decks.

HYPERCHLORINATION: The intentional and specific raising of chlorine levels for a prolonged period of time to inactivate pathogens, or following a fecal or vomit release in an aquatic venue.

INTERACTIVE WATER PLAY ~~Venue~~ FEATURES. ~~An aquatic venue, either indoor or outdoor, that includes sprayed, jetted or other water sources contacting bathers and does not have standing or captured water as part of the bather activity area~~. Any indoor or outdoor structure designed to allow for public recreational activities with recirculated, filtered, and treated water that includes sprayed, jetted or other water sources contacting bathers and not incorporating standing or captured water as part of the bather activity area. These installations are also known as splash pads, spray pads, and wet decks.

PRIMARY DISINFECTION. Required disinfection processes or systems using an EPA-registered sanitizer approved for use in pools, hot tubs, and/or spas that are capable of retaining a residual concentration of the sanitizer in the water at all times and in all areas.

10/20 RULE (30-SECOND BENCHMARK): Where qualified lifeguards are required, a pool or aquatic facility shall provide trained lifeguards to be stationed in a manner that will permit them to identify a bather in distress within 10 seconds and to reach the bather in distress within an additional 20 seconds to respond to an incident or trauma within a total of thirty (30) seconds of its initiation.

THEORETICAL PEAK OCCUPANCY.

> **AGITATED WATER**. An aquatic venue with mechanical means (aquatic features) to discharge, spray, or move the water's surface above and/or below the static water line of the aquatic venue ~~so people are standing or playing vertically~~. Where there is no static water line, movement shall be considered above the deck plane.
>
> **FLAT WATER**. An aquatic venue in which the water line is static except for movement made by users ~~usually as a horizontal use as in swimming~~. Diving spargers do not void the flat water definition.

VENTURI INLET. A device mounted in a water line that causes restriction of flow. ~~The~~ A restriction ~~causes pressure~~ with sufficient differential to create low pressure within ~~that~~ can be used to draw a gas or liquid into the device or inlet.

SECTIONS

4.2.3 Required Closure.

- Enclosure does not meet this Standard.
- Water clarity does not meet this Standard as defined by Section 9.7 {{9.6?}}
- Sanitizer level is below the minimum standard as defined in Section 9.3.1.
- pH is outside the acceptable range as defined in Section 9.3.4.

- Submerged suction outlet fittings (drain covers) that are ~~damaged~~, missing, broken, cracked, unsecured, or expired; ~~*(Refer to ANSI/PHTA/ICC-7-2020 American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins).*~~
- Fecal or vomit accident.
- Broken glass or sharp objects in aquatic venue or on deck area.
- The water temperature exceeds 104 degrees F (40 degrees C).
- Absence of all required lifesaving equipment on deck or the absence of safety equipment required by the AHJ.
- When Cyanuric Acid (CYA) levels ~~exceeds 299 ppm.~~ are equal to or greater than 300 ppm.
- Electrical;
    - Pool lights that are ~~inoperative, or~~ dislodged or leaking.
    - Pool lights that are inoperable when needed.
    - Unprotected overhead electrical wires within 20 feet horizontally of the aquatic venue.
    - Non-GFCI protected electrical receptacles within 20 feet of the inside wall of the aquatic venue.
    - Failure to maintain an emergency lighting source.
    - Bonding of pool equipment, metallic fixtures and fittings, or pool/spa water if known to be compromised.
- ~~Total a~~Absence of legible and required depth markings at an aquatic venue.
- The absence of properly operating filtration, circulation, sanitation systems.
- Use of an unapproved or contaminated water supply source for potable water use.
- An incident or condition presents an immediate and obvious risk to bather or staff health and safety, or for any other item determined to be a public health hazard by the AHJ.

4.2.3.1 The pool or spa shall remain closed until the problem is corrected. For visible or reported fecal, vomit or blood accident in the pool venue, the most current CDC guidelines: "Fecal Accident Response Recommendations for Aquatic Staff", https://www.cdc.gov/healthywater/swimming/pdf/fecal-incident-response-guidelines.pdf, and/or "Cleaning Up Body Fluid Spills on Pool Surfaces" Fact Sheet, https://www.cdc.gov/healthywater/swimming/pdf/cleaning-body-fluid-spills-factsheet.pdf, shall be followed.

6.3.2 Required General Signage Locations and Quantity

6.3.2.1 Required signs shall be positioned for effective visual observations by users as required by the AHJ.

6.3.2.1.1 Posting of Required Signs.

6.3.2.1.1.1 Required signs shall not be mounted on fences and gates alongside of guest walkways and staircases

6.3.2.1.1.2 Messages delivered on required signs shall comply with all of the following:

6.3.2.2.10 Signage Recommending Showering Prior to Entry into the Pool. A sign recommending the use of a shower prior to entering the swimming pool.

6.3.8.3 (renumbered to 6.3.9.3). *Aquatic venue* that does not allow for parental supervision or does not have a qualified supervisor such as a swim coach during swim team training. ~~When lifeguards are required, lifeguards shall be positioned to meet the 10/20 Rule (30-second benchmark).~~

7.1.1.4 Position on pool wall. Depth markers on the vertical pool wall shall be positioned to be read from the waterside. Depth markers shall be placed so as to allow as much of the numbers to be visible above the waterline as possible. Overflow pools with no vertical wall space between the deck and the waterline shall not require underwater depth markers.

A new **Section 8.3 Electrical Systems and Components** starting with the topic of Electrical Repairs (currently Section 8.2.12) will be created. All subsequent sections through Communication Devices and Dispatch Systems will be re-numbered. Then the current **Section 8.3 Facility Heating** would become **Section 8.4 Facility Heating**, etc.

8.3.1.1.1 (renumbered to 8.4.1.1.1) Equipment Ventilation. Equipment ventilation for exhaust gases shall be routinely inspected and maintained in accordance with the facilities maintenance plan to ensure continuous safe operation.

8.3.1.1.2 (renumbered to 8.4.1.1.2) Alarm Monitor. Alarms and monitors for air quality, such as Carbon Monoxide (CO) levels, shall be installed, routinely inspected and maintained in working condition in accordance with manufacturer's instructions.

8.3.1.2 (renumbered to 8.4.1.2) Defects. Defects in the aquatic facility heating equipment, equipment installation, safeguards, alarms and/or monitoring systems shall be immediately repaired. Heating equipment shall not be operated until repair of all defects have been completed.

8.7.1.2 (renumbered to 8.8.1.2) Eating and Drinking. Bathers shall not eat or drink while in or partially in the aquatic venue water except in designated areas, such as, but not limited to, swim-up bars, and approved by the AHJ.

9.1.1.1.1 Reduced Flowrates
The aquatic venue shall be permitted ~~to turn off or reduce~~ to reduce flow rate when not open to bathers, and provided the water quality is maintained and documented in conformance with ANSI/APSP/ICC-11 *American National Standard for Water Quality in Public Pools and Spas*. Water quality shall be tested and documented prior to opening the aquatic venue to bathers. The reduced circulation rate shall not be zero, unless approved by the local health inspector or AHJ.

9.1.8.1 System Flowrate Turnover
Circulation systems providing filtration and chemical sanitizers shall circulate treated and filtered water for 24 hours a day. The circulation rate shall be permitted to be reduced during periods that the aquatic venue is closed for use provided that acceptable water quality, including but not limited to clarity and chemical levels, in accordance with ANSI/APSP/ICC-11 are met prior to reopening the aquatic venue for public use. The reduced circulation rate shall not be zero, unless approved by the local health inspector or AHJ.

Exception: The required operation times for spas shall be in accordance with Section 13.1.1 of this Standard.

9.2.2.1 Filtration Rates. ~~High-rate granular media~~ All filters shall be operated ~~at no more than 20 GPM per square foot (36.7 m/h) or as provided~~ per the manufacturer's NSF-50 listed filtration rate and manufacturer's instructions ~~and specifications~~.

Backwashing: By additional circumstances and as represented by the manufacturer and approved by the AHJ.

9.2.2.4 Backwashing Frequency. Backwashing of each filter shall be performed ~~at a minimum differential pressure increase over the initial clean filter pressure,~~ as required to maintain minimum design flow rate, and as recommended by the filter manufacturer~~, unless the system can no longer achieve the design flow rate~~.

9.3.1.1.2.2 Using Cyanuric Acid: When CYA levels reach 100 ppm in a pool, remediation to lower the concentration level shall begin. At no time shall the CYA levels be greater than 300 ppm in a pool.

9.3.1.2.4 Aquatic Venues. Move entry from under Bromine to under **Section 9.3.1.1.2.2 Using Cyanuric Acid**. **9.3.1.1.2.2.1 Aquatic Venues.** The CYA level at all aquatic venues shall remain at or below 100 ppm (mg/L).

9.3.2.5.2 Response to Secondary Disinfection System Operation. Any interruptions in secondary disinfection UV system operations that are caused by an interlock alarm or shutdown shall be evaluated as possible evidence for a low flow state of the aquatic venue pumps or system malfunction and shall prompt bather evacuation.

9.3.2.5.4 Revise header to "Primary Sanitizer Levels"

9.3.2.6.3 Revise header to "Primary Sanitizer Levels".

9.3.2.6.6 Any interruptions in secondary disinfection ozone system operations that are caused by an interlock alarm or shutdown shall be evaluated as possible evidence for a low flow state of the aquatic venue pumps or system malfunction and shall prompt bather evacuation.

9.3.5.1.2 Installed and Interlocked. Automated chemical controller system components shall be installed and interlocked so the chemical feeder cannot operate when the recirculation system is in low or no flow circumstances. For chemical feed systems that are operated manually, the feeders shall be rendered inoperative when there is no circulation to the piping.

9.3.5.3 Dry Chemical Feeders. Chemicals shall be kept dry to avoid clumping and potential feeder plugging for mechanical gate or rotating screw feeders. Dry chemical feeders shall only have chemicals added that are approved by the feeder manufacturer.

9.3.5.3.1 Cleaned and Lubricated. The feeder mechanism shall be maintained in accordance with the manufacturer's instructions and specifications. ~~cleaned and lubricated to maintain a reliable feed system.~~

9.3.7.7.1 Other Testing. At the time the ozone generating equipment is installed, again after 24 hours of operation, and annually thereafter, the air space within six inches of the *aquatic venue* water shall be tested to determine compliance of less than 0.1 ppm (mg/L) gaseous ozone over an 8-hour Time Weighted Average. (See Ozone and OSHA webpage at https://ozonesolutions.com/blog/osha-and-ozone/".

9.5.8 Remove "**9.5.8 Saturation Index.** Monthly determination of the saturation index is suggested".

9.5.8.1 Tested – Re-number section to **9.5.7.1 Tested**.

9.5.8.2 Stabilized Chlorine – Re-number section to **9.5.7.2 Stabilized Chlorine**.

9.6 Water Clarity

~~**Water Clarity.**~~ The water in an *aquatic venue* shall be sufficiently clear such that the bottom is visible while the water is static ~~at all times the aquatic venue is open or available for use~~. During all hours of operation, water clarity shall be sufficient to see a bather in distress at the bottom of the pool. Pool water shall be of a clarity to permit a Secchi or similar disc or, main suction outlet (main drain), or tile marker located on the bottom of the pool at its deepest point, to be clearly visible and sharply defined from any point on the deck up to 30 feet (9.1 m) away in a direct line of sight from the disc or main drain, or marker tile. In spas, ~~**Spas.** T~~the bottom of the spa at its deepest point shall be clearly visible. ~~(This test should~~ The spa test shall be performed when the water is in a non-turbulent state and bubbles have been allowed to dissipate.~~)~~

~~**9.6.1**~~

~~**9.6.1.1**~~ **9.6.1 Observation.** To make this observation, a 4-inch by 4-inch square *(10.2 cm X 10.2 cm)* marker tile in a contrasting color to the *pool* floor or main suction outlet shall be located at the deepest part of the *pool*.

~~**9.6.1.2**~~ **9.6.2 Pools Over Ten Feet Deep**. For *pools* over 10 feet *(3.0 m)* deep, an 8-inch by 8-inch square *(20.3 X 20.3 cm)* marker tile in a contrasting color to the *pool* floor or main suction outlet shall be located at the deepest part of the *pool*.

~~**9.6.1.3**~~ **9.6.3 No Marker Tile**. In the absence of a marker tile or suction outlet, an alternate means of achieving the goal of observing the bottom of the *pool* may be permitted.

~~**9.6.2 Visible**. This reference point shall be visible at all times at any point on the *deck* up to 30 feet (9.1m) away in a direct line of sight from the tile or main drain.~~

> ~~9.6.2.1 **Spas.** For spas, this test shall be performed when the water is in a non-turbulent state and bubbles have been allowed to dissipate.~~

~~**9.6.3.**~~**9.6.4 Documentation**. Water clarity shall be documented each ~~time chemical levels are measured~~ morning during 'opening' water tests with no swimmers in the water.

11.1.7 Fuel and Ignitable ~~Ignition~~ Sources. Possible ignitable sources, including but not limited to, gasoline, diesel, natural or propane gas, or gas-powered equipment such as lawn mowers, ~~motors,~~ grills, pool heaters, or portable stoves shall not be stored or installed in the chemical storage space.

12.1.7.1 Biohazard Action Plan. A biohazard action plan shall also be on file, ~~if~~ as required by local, state or federal regulations and as part of the aquatic facility safety plan.

BSR/UL 73, Standard for Safety for Motor-Operated Appliances

1. Clarification on the temperature limit of the capacitor

PROPOSAL

Table 46.1
Maximum temperature rises

Material and component parts		°C	°F
1.	Capacitors[b]:		
	Electrolytic[a]	40	72
	Other types[b]	65	117

[a] The temperature rise on insulating material integral with the enclosure of an electrolytic capacitor that is physically integral with or attached to a motor ~~may~~ shall not be ~~not~~ more than 65°C (117°F).

[b] A capacitor that is designed and marked to operate ~~operates~~ at a temperature rise of more than 40°C (72°F) for electrolytic or more than 65°C (117°F) for other types may be judged on the basis of its marked temperature limit. In no case shall a capacitor temperature exceed its marked temperature limit.

BSR/UL 217, Standard for Safety for Smoke Alarms

1. Markings and Installation Instructions

PROPOSAL

89.2.1 In addition to the applicable requirements in MARKING, General, Section 99, a single criteria or multicriteria smoke alarm for use in a recreational vehicle/boat shall be permanently and legibly marked with the following information. The markings shall be in contrasting color, finish or equivalent, in letters at least 1.2 mm (3/64 in) high. Items (f) and (g) shall be readily visible after installation:

a) Manufacturer's or private labeler's name or identifying symbol;

b) Model, type, or catalog designation;

c) Date of manufacture (in code is not prohibited);

d) Electrical rating in volts and amperes;

e) Reference to owner's manual;

f) The type of product, such as “RV Smoke Alarm” or “RV Multi-criteria Smoke Alarm”, “Marine Smoke Alarm or “Marine Multi-criteria Smoke Alarm” or “RV/Marine Smoke Alarm” or equivalent. It is not prohibited that this marking be incorporated in (g);

g) Identification of switches and light indicators;

h) "Watertight" if the alarm complies with the requirements for watertightness in 89.5, and

i) "For enclosed spaces only," or the equivalent if not marked in accordance with (h).

Exception: The required marking for 89.2.1(d) need not be marked on the alarm if the information is available via the manufacturer’s website and the alarm is labeled with the statement "Instructions Available at _____" where the webpage URL and an optional QR code is provided.

99.1 A smoke alarm shall be permanently marked with the following information unless specifically indicated that it appears on the installation wiring diagram. The marking shall be in a contrasting color, finish, or equivalent. Unless the letter height is specified, all markings shall be at least 1.2 mm (3/64 in) high.

a) Name or identifying symbol and address of the manufacturer or vendor.

b) Model number and date of manufacture. The date of manufacture shall be non-coded and in the format YEAR (in 4 digits), MONTH (in letters), DATE (in 2 digits) located on the outside of the smoke alarm.

c) A multi-criteria smoke alarm shall be marked, “Multi-Criteria Smoke Alarm.”

d) Electrical rating, in volts, amperes, or watts, and frequency. Not required for battery operated alarms.

e) Correct mounting position when a unit is intended to be mounted in a definite position. This information may appear in the manufacturer's published instructions.

f) Identification of lights, switches, meters, and similar devices regarding their function unless their function is obvious.

g) Maximum rating of fuse in each fuseholder and temperature rating of supplementary heat detector, when provided, in degrees Fahrenheit and Celsius.

h) Identification of spare lamps and batteries by part number, manufacturer's model number or equivalent. Located adjacent to the component.

i) Reference to an installation diagram and/or owner's manual.

j) For a smoke alarm that employs a radioactive material, the following information shall be indicated directly on the exterior of the unit:

1) The statement "CONTAINS RADIOACTIVE MATERIAL,"

2) Name or Radionuclide and quantity (no abbreviations), and

3) The statement, "U.S. NRC License No. XXX." (XXX – No. of License) or the name of the Licensee.

k) The following or equivalent notice shall be on the outer surface of the enclosure. The letters shall not be less than 3.2 mm (1/8 inch) high and shall be located to be readily visible after the alarm is mounted in its intended manner.

1) "DO NOT PAINT" and/or symbol indicated below.

The symbol shall be to scale min 12.7 mm (1/2 in) diameter.

l) The following or equivalent qualifying statement on a battery-operated alarm where battery operation, under other than normal room ambient temperature conditions during the long term (minimum 1 year) battery tests in 86.3, Battery tests, is less than 1 year:

"CONSTANT EXPOSURES TO HIGH OR LOW TEMPERATURES OR HIGH HUMIDITY MAY REDUCE BATTERY LIFE."

m) Distinction between alarm, end-of-life and trouble signals.

n) For battery-operated alarms employing replaceable batteries, reference to a source for battery replacement. (It is permissible for this to appear in the manufacturer's published instructions.)

o) For a battery-operated alarm employing replaceable batteries, the word "WARNING", and the following or equivalent marking shall be included on the unit: "Use Only Batteries Specified In Marking. Use Of A Different Battery Will Have A Detrimental Effect On Smoke Alarm Operation." The letter height shall be a minimum of 3.2 mm (1/8 in) for "WARNING" and 1.2 mm (3/64 in) for the rest of the notice.

p) For a smoke alarm employing a non-rechargeable standby battery, the marking information described in 35.2.1 and 35.2.4 (secondary power supply) shall be in letters not less than 3.2 mm (1/8 in) high.

q) Test instructions and frequency. Not less than once per week for battery-powered alarms and not less than once per month for other than battery-powered alarms.

r) Maintenance instructions, such as cleaning, lamp and battery replacement.

s) Units intended to be returned to the manufacturer for servicing shall be marked as follows on the outside of the alarm: "RETURN TO ± FOR SERVICING," or equivalent. It is permissible for units on which the cover is removable, and that are also intended to be returned to the manufacturer for servicing, to have the marking on the inside of the alarm.

(+) Name and address of manufacturer or supplier.

t) The smoke sensitivity setting for a smoke alarm having a fixed setting. For an alarm which is intended to be adjusted in the field, the range of sensitivity shall be indicated. The marked sensitivity shall be indicated as a percent per ft obscuration level. The marking shall include a nominal value plus tolerance. For an alarm that is capable of receiving a firmware update, and the sensitivity production range is impacted by the content of the firmware update (such as a new smoke algorithm), a means of indicating the current certified sensitivity or sensitivity range for the current firmware version of the unit shall be provided.

u) For a battery-operated smoke alarm employing a non-replaceable 10-year battery, a statement indicating that the unit is sealed, with no serviceable parts, and that the maintenance and testing specified elsewhere on the marking must be performed.

v) For a battery-operated smoke alarm employing a non-replaceable 10-year battery, a description of how to use the deactivation feature and indication that once deactivated the smoke alarm is incapable of being reactivated and must be replaced.

w) A smoke alarm guard shall be permanently marked with the following information in a contrasting color, finish, or equivalent:

1) Name or identifying symbol of the manufacturer or private labeler,

2) Model number and

3) A statement indicating that the guard is only to be used with smoke alarms specified in the manufacturer's published instructions of the guard or smoke alarm.

x) The smoke alarm shall be marked with the following or equivalent, “Replace after X years” where X = Lifetime of the product that identifies when the end-of-life signal will be initiated, but shall not exceed 10 years.

Exception: The required markings for 99.1(d), 99.1(e), 99.1(i), 99.1(s), and 99.1(t) need not be marked on the alarm if the information is available via the manufacturer’s website and the alarm is labeled with the statement "Instructions Available at _____" where the webpage URL is provided for compliance with the instruction section when the manufacturer does not provide an optional QR code or the required instructions in print.

BSR/UL 746A, Standard for Safety for Polymeric Materials – Short Term Property Evaluations

1. Addition of the Definition and Threshold of Polymer Blends Used as an Additive in Table 9.1

PROPOSAL

Note from the STP Project Manager: The version of Table 9.1 shown in this proposal does not represent the complete table. This version of Table 9.1 only shows the proposed revision of the table.

Table 9.1
Test considerations based upon compound variations

Additive	Addition		Deletion		Replacement[5]		Change in Level[6]		
	(absolute %)	Table 9.2	(absolute %)	Table 9.2	(absolute %)	Table 9.2	(absolute %)	(normalized %)	Table 9.2
Polymer Blend[1][4][11]	Any	CDE	Any	CDE	Any	CDE	–	≤30	B
								>30	CDE

Footnotes

[11] For changes of Polymer Blends ≤5% (absolute), the role of the Polymer Blend is considered as an Additive and the test requirements shall be those tabulated for the Additive in Table 9.1 that best describes the functional role of the changed polymer. The "Polymer Blend" row itself is to be used for changes in polymer blends > 5% (absolute).

BSR/UL 746C, Standard for Safety for Polymeric Materials – Use in Electrical Equipment Evaluations

2. Inclusion of Requirements for Tolerance for Water Immersion Test Exposure/Conditioning Time in Paragraph 58.1

PROPOSAL

58 Water Exposure and Immersion Test

58.1 Using standard test procedures, property values for the material are to be determined both before and after the conditioning described below:

a) Specimens of the material shall be immersed in distilled or deionized water at 70 ±2°C (158 ±4°F) for 168 ± 2 hours. A complete change of water is to be made on each of the first 5 days. Following the water conditioning, those specimens that are to be subjected to physical-property tests are to be immersed in distilled or deionized water at 23 ±2°C (73 ±4°F) for 30 ± ~~1~~ 5 min prior to testing within the following 60 min. Following the immersions, those specimens to be subjected to flammability tests are to be conditioned in air at 23 ±2°C (73 ±4°F) and 50 ±10 percent relative humidity for a minimum of 2 weeks, but not more than 30 days.

Exception: For materials classed 5VA or 5VB or materials that are evaluated by Enclosure Flammability – 5 inch Flame Test, Section 52, the specimens shall be immersed in distilled or deionized water at 82 ±2°C (180 ±4°F) rather than 70 ±2°C.

BSR/UL 797, Standard for Safety for Electrical Metallic Tubing - Steel

1. Introduction of a Range for the Specific Gravity

2. Electrical Metallic Tubing, Addition of trade sizes 5" & 6" in Steel

3. Removal of "for reference only (not a requirement)" from Table 5.2

PROPOSAL

1. Introduction of a Range for the Specific Gravity

6.2.2.1 A solution of copper sulfate for this test shall be made from distilled water and a reagent grade of cupric sulfate ($CuSO_4$). In a copper container or in a glass, polyethylene, or other chemically nonreactive container in which a bright piece of copper is present, a quantity of the cupric sulfate shall be dissolved in hot distilled water. The purpose is to obtain a solution that has a specific gravity slightly higher than 1.186 within the range of 1.183 to 1.189 after the solution is cooled to a temperature of 18.3°C (65.0°F). As necessary, any free acid that might be present shall be neutralized by the addition of approximately 1 gram of cupric oxide (CuO) or 1 gram of cupric hydroxide ($Cu(OH)_2$) per liter of solution. The solution shall then be diluted with distilled water to obtain a specific gravity within a range of 1.183 to 1.189 at a temperature of 18.3°C (65.0°F). The solution shall then be filtered.

2. Electrical Metallic Tubing, Addition of trade sizes 5" & 6" in Steel

5.1.2 A welded seam shall not have metal trimmings, sharp edges, or sharp projections on the interior or exterior surfaces of the tube. A slight bead on the interior wall at the weld line shall be allowed if the bead is not sharp and if the bead does not exceed 0.38 mm (0.015 in) in height for the trade size 16 – 53 (1/2 – 2) or 0.51 mm (0.020 in) in height for the trade size 63 – 103 155 (2-1/2 – 4 6)

Table 5.1
Dimensions and Weights

Metric designator	Outside diameter, mm	Minimum acceptable weight, kg/m	Trade size	Outside diameter, in	Minimum acceptable weight, lbs/ft
16	17.93 ±0.13	0.147	1/2	0.706 ± 0.005	0.285
21	23.42 ±0.13	0.224	3/4	0.922 ± 0.005	0.435
27	29.54 ±0.13	0.329	1	1.163 ± 0.005	0.640
35	38.35 ±0.13	0.489	1-1/4	1.510 ± 0.005	0.950
41	44.20 ±0.13	0.566	1-1/2	1.740 ± 0.005	1.10
53	55.80 ±0.13	0.721	2	2.197 ± 0.005	1.40
63	73.03 ± 0.25	1.061	2 1/2	2.875 ± 0.010	2.05
78	88.90 ± 0.38	1.298	3	3.500 ± 0.015	2.50
91	101.60 ± 0.50	1.710	3 1/2	4.000 ± 0.020	3.25
103	114.30 ± 0.50	1.928	4	4.500 ± 0.020	3.70
129	141.30 ± 0.50	2.732	5	5.563 ± 0.020	7.00
155	168.28 ± 0.50	3.263	6	6.625 ± 0.020	8.37

6.2.2.5 At the end of the 60s period, the specimen shall be removed from the beaker, rinsed immediately in running tap water, rubbed with clean cheesecloth until any loosely adhering deposits of copper are removed, and then dried with clean cheesecloth. Again, hands and other damaging and contaminating objects and substances shall not touch the surfaces that were immersed. The part of the specimen that was immersed shall be examined, considering each broad surface separately and disregarding the portions of the specimen within 13 mm (1/2 in) of the cut ends on sizes 12 – 53 (3/8 – 2) and 25 mm (1 in) for sizes 63 – 103 155 (2-1/2 – 4 6) and within 3 mm (1/8 in) of any longitudinal edges cut in the process of preparing the specimen.

Table 5.2
Minimum Dimensions of Elbows

Metric designator	Radius R to center line of tube, mm	Shortest length Ls of each straight end portion of tubing, mm	Trade size	Radius R to center line of tube, in	Shortest length Ls of each straight end portion of tubing, in
16	102	38	1/2	4	1 1/2
21	114	38	3/4	4 1/2	1 1/2
27	146	48	1	5 3/4	1 7/8
35	184	51	1-1/4	7 1/4	2
41	210	51	1-1/2	8 1/4	2
53	241	51	2	9 1/2	2
63	267	76	2 1/2	10 1/2	3
78	330	79	3	13	3 1/8
91	381	83	3 1/2	15	3 1/4
103	406	86	4	16	3 3/8
129	610	92	5	24	3 5/8
155	762	95	6	30	3 3/4

Table B.1
B.1 Dimensions of EMT – Steel
(See Clause 5.2.3)
(For information only)

Metric designator	Internal diameter, mm	Wall thickness, US and Canada, mm	Wall thickness, Mexico, mm	Trade size	Internal diameter, in	Wall thickness, US and Canada, in	Wall thickness, Mexico, in
16	15.80	1.07	1.1	1/2	0.622	0.042	0.042
21	20.93	1.24	1.2	3/4	0.824	0.049	0.049
27	26.64	1.45	1.5	1	1.049	0.057	0.060
35	35.05	1.65	1.5	1-1/4	1.380	0.065	0.060
41	40.89	1.65	1.5	1-1/2	1.610	0.065	0.060
53	52.50	1.65	1.5	2	2.067	0.065	0.060
63	69.37	1.83	1.8	2 1/2	2.731	0.072	0.072

78	85.24	1.83	1.8	3	3.356	0.072	0.072
91	97.38	2.11	2.1	3 1/2	3.834	0.083	0.083
103	110.08	2.11	2.1	4	4.334	0.083	0.083
129	136.46	2.41	2.4	5	5.373	0.095	0.095
155	163.45	2.41	2.4	6	6.435	0.095	0.095

Table F.1

F.1 Master Bundle Quantity

(See Clauses 7.8 and 7.9)

Table F1
Master bundle quantity – 3.05-m (10-foot) lengths

Trade size	Metric designator	Pieces	Feet	(Meters)	Nominal Wt/Lbs	Nominal (Wt/kg)
1/2	16	700	7000	2133.6	2100	948.0
3/4	21	500	5000	1524.0	2300	1037.8
1	27	300	3000	914.4	2010	916.3
1-1/4	35	200	2000	609.6	2020	911.7
1-1/2	41	150	1500	457.2	1740	789.2
2	53	120	1200	365.8	1776	807.4
2 1/2	63	61	610	185.9	1318	598.7
3	78	51	510	155.4	1341	607.8
3 1/2	91	37	370	112.8	1291	585.1
4	103	30	300	91.4	1179	535.2
5	129	25	250	76.2	1390	629.7
6	155	20	200	61.0	1328	601.7

3. Removal of "for reference only (not a requirement)" from Table 5.2

Table 5.2
Minimum Dimensions of Elbows

Metric designator	Radius R to center line of tube, mm	Shortest length Ls of each straight end portion of tubing, mm	Trade size	Radius R to center line of tube~~, for reference only (not a requirement)~~ ~~in~~	Shortest length Ls of each straight end portion of tubing, in
16	102	38	1/2	4	1 1/2
21	114	38	3/4	4 1/2	1 1/2
27	146	48	1	5 3/4	1 7/8
35	184	51	1-1/4	7 1/4	2
41	210	51	1-1/2	8 1/4	2
53	241	51	2	9 1/2	2
63	267	76	2 1/2	10 1/2	3
78	330	79	3	13	3 1/8
91	381	83	3 1/2	15	3 1/4
103	406	86	4	16	3 3/8