CONTENTS

American National Standards

Project Initiation Notification System (PINS) ............................................................... 2
Call for Comment on Standards Proposals .................................................................... 7
Final Actions - (Approved ANS) ...................................................................................... 25
Call for Members (ANS Consensus Bodies) .................................................................. 29
Accreditation Announcements (Standards Developers) .................................................. 34
American National Standards (ANS) Process ................................................................. 35
ANS Under Continuous Maintenance .............................................................................. 36
ANSI-Accredited Standards Developer Contacts .......................................................... 37

International Standards

ISO and IEC Draft Standards ......................................................................................... 39
ISO and IEC Newly Published Standards ....................................................................... 43
International Electrotechnical Commission (IEC) .......................................................... 46
International Organization for Standardization (ISO) ..................................................... 47

Information Concerning

Registration of Organization Names in the United States .............................................. 48
Proposed Foreign Government Regulations ................................................................... 49
Section 2.5.1 of the *ANSI Essential Requirements* ([www.ansi.org/essentialrequirements](http://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 ANSI: 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.

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

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

**Revision**


Stakeholders: Occupational Safety and Health Professionals working with construction and demolition operations

Project Need: Based upon the consensus of the A10 Committee and the leadership of ASSP

Interest Categories: Employer/User; Employee/Labor; Technical; Consulting and Related Interests

Scope: This standard establishes safety requirements for the installation and extraction of piles during construction and demolition operations.

**AWS (American Welding Society)**

Jennifer Rosario; jrosario@aws.org | 8669 NW 36th Street, Suite 130 | Miami, FL 33166-6672   www.aws.org

**Revision**

BSR/AWS B2.1-1-234-202x, Standard Welding Procedure Specification (SWPS) for 75% Argon Plus 25% Carbon Dioxide Shielded Flux Cored Arc Welding of Carbon Steel (M-1/P-1, Group 1 or 2), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, E7XT-X, in the As-Welded or PWHT Condition, Primarily Pipe Applications (revision of ANSI/AWS B2.1-1-234-2019)

Stakeholders: Manufacturers, welders, engineers, CWIs, accredited training facilities

Project Need: Need for pretested welding procedures that satisfy the technical requirements for the commonly used construction codes and specifications.

Interest Categories: Producers, Users, General Interest, and Educators

Scope: This standard contains the essential welding variables for carbon steel in the thickness range of 1/8 inch [3 mm] through 1-1/2 inch [38 mm], using 75% argon plus 25% carbon dioxide shielded flux cored arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove and fillet welds. This SWPS was developed primarily for pipe applications.
AWS (American Welding Society)
Jennifer Rosario; jrosario@aws.org | 8669 NW 36th Street, Suite 130 | Miami, FL 33166-6672 www.aws.org

Revision
BSR/AWS B2.1-1-235-202x, Standard Welding Procedure Specification (SWPS) for 98% Argon Plus 2% Oxygen Shielded Gas Metal Arc Welding (Spray Transfer Mode) of Carbon Steel (M-1/P-1, Group 1 or 2), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, ER70S-3, in the As-Welded or PWHT Condition, Primarily Pipe Applications (revision of ANSI/AWS B2.1-1-235:2020-AMD1)
Stakeholders: Manufacturers, welders, engineers, CWIs, accredited training facilities
Project Need: Need for pretested welding procedures that satisfy the technical requirements for the commonly used construction codes and specifications.
Interest Categories: Producers, Users, General Interest, and Educators
Scope: This standard contains the essential welding variables for carbon steel in the thickness range of 1/8 inch [3 mm] through 1-1/2 inch [38 mm], using 98% argon plus 2% oxygen shielded gas metal arc welding (spray transfer mode). It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for groove and fillet welds. This SWPS was developed primarily for pipe applications.

AWS (American Welding Society)
Jennifer Rosario; jrosario@aws.org | 8669 NW 36th Street, Suite 130 | Miami, FL 33166-6672 www.aws.org

Revision
BSR/AWS B2.1-22-015-202x, Standard Welding Procedure Specification (SWPS) for Gas Tungsten Arc Welding of Aluminum (M/P-22 to M/P-22), 18 through 10 Gauge, ER4043 or R4043, in the As-Welded Condition, with or without Backing (revision of ANSI/AWS B2.1-22-015-2022)
Stakeholders: Manufacturers, welders, engineers, CWIs, accredited training facilities
Project Need: Need for pretested welding procedures that satisfy the technical requirements for the commonly used construction codes and specifications.
Interest Categories: Producers, Users, General Interest, and Educators
Scope: This standard contains the essential welding variables for aluminum in the thickness range of 10 through 18 gauge using manual gas tungsten arc welding. It cites the base metals and operating conditions necessary to make the weldment, the filler metal specifications, and the allowable joint designs for fillet welds and groove welds.
**New Standard**

BSR/CSA HGV 4.5-202X, Priority and sequencing equipment for hydrogen vehicle fueling (new standard)

Stakeholders: Consumers, manufacturers, gas suppliers, certifying agencies

Project Need: To support the hydrogen vehicle fueling industry by providing requirements for use of priority and sequencing control panels. This proposed New Standard will provide the industry with a standard for priority and sequencing.

Interest Categories: Gas Suppliers, General Interest, Producer Interest, User Interest

Scope: This standard details mechanical, physical, and electrical requirements for newly manufactured priority and sequencing equipment used for fueling of hydrogen gas vehicles. These requirements apply to multiple-bank cascade storage systems that can be independently filled or discharged as part of a hydrogen gas vehicle fueling system. Control panels direct the flow from the compressor to each of the storage systems to maintain hydrogen at the highest pressure, and allow sufficient storage availability to complete a vehicle fill.

**Revision**

BSR/CSA HGV 4.8-202x, Hydrogen gas vehicle fueling station compressor (revision of ANSI/CSA HGV 4.8-2012 (R2018))

Stakeholders: Consumers, manufacturers, gas suppliers and certifying agencies

Project Need: To update the standard to reflect new technologies and stakeholder input.

Interest Categories: General Interest, Producer Interest, Gas Supplier and User Interest

Scope: This standard contains safety requirements for material, design, manufacture, and testing of gaseous hydrogen compressor packages used in fueling station service. This standard applies to newly manufactured equipment designed primarily to provide compressed hydrogen for vehicle fueling stations. This standard does not apply to compact hydrogen fueling systems (cHFS) with built-in compressors, compressor packages used for non-vehicular fuel applications (e.g., power generation units), or internal combustion engine driven compressors. This standard will align with the requirements in CAN/BNQ 1784-000 and NFPA 2.
**CSA (CSA America Standards Inc.)**
Debbie Chesnik; ansi.contact@csagroup.org | 8501 East Pleasant Valley Road | Cleveland, OH 44131-5575 www.csagroup.org

**New Standard**
BSR/CSA HGV 5.1-202X, Residential fueling appliance for hydrogen vehicle fueling (new standard)
Stakeholders: Consumers, manufacturers, gas suppliers, certifying agencies
Project Need: To support innovation and industry requests in the field of hydrogen gas vehicle fueling.
Interest Categories: Gas Suppliers, General Interest, Producer Interest, User Interest
Scope: This standard details mechanical, physical, and electrical requirements for a newly manufactured appliance that dispenses hydrogen gas directly into the vehicle's fuel storage system. This standard contains requirements for material, design, manufacture, and testing of residential fueling appliances for hydrogen vehicle fueling. This standard applies to self-contained package or factory-matched package of integrated systems or hardware that provide on-demand hydrogen generation and dispensing of gaseous hydrogen in residential locations with a nominal voltage not exceeding 240 Volts AC. This standard will align with the requirements in CAN/BNQ 1784-000 and NFPA 2.

**DSI (Dental Standards Institute, Inc.)**
Bryan Laskin; bryan@upgradedental.com | 109 Bushaway Road, Suite 100 | Wayzata, MN 55391 https://dentalstandardsinstitute.com/

**New Standard**
BSR/DSI PAIID1.1-202x, Prudent Adjudication Reporting in Dentistry (new standard)
Stakeholders: Users (Healthcare Professionals), Consumers (Patients), Producers (Software Vendors), Payers
Project Need: Currently, the burden of Patient Cost Transparency is on the dental provider to provide an estimate of what an insurance payer will reimburse on a given procedure code. Multiple issues make that difficult to accurately produce, including accurate benefit breakdowns and unknown medical claim review rules. Once the vague terms within procedure codes are quantified and distributed by payers for reimbursement purposes, Standard Reporting of review results can be produced. This allows faster review by humans or machines and allows for the real-time processing of claims and pre-determinations. With review removed as an obstacle, payers could supply real-time estimations to providers and patients improving access to affordable healthcare.
Interest Categories: Users (Healthcare Professionals), Consumers (Patients), Producers (Software Vendors), Payers
Scope: The Prudent Augmented Insurance Intelligence for Dentistry (PAIID) are Standards seeking to improve Patient Cost Transparency by creating a reporting system that allows dental providers and dental claim reviewers to describe the results of claim reviews based on empirical measurements to all stakeholders. This Standard describes the empirical data to be reported including information illustrating how adjudication decisions are determined based on the patient and providers reimbursement benefits.
DSI (Dental Standards Institute, Inc.)
Bryan Laskin; bryan@upgradedental.com | 109 Bushaway Road, Suite 100 | Wayzata, MN  55391   https://dentalstandardsinstitute.com/

New Standard
BSR/DSI PAIID2.1-202x, Calibration of Adjudication Techniques in Dentistry (new standard)
Stakeholders: Users (Healthcare Professionals), Consumers (Patients), Producers (Software Vendors), Payers

Project Need: Currently, the burden of Patient Cost Transparency is on the dental provider to provide an estimate of what an insurance payer will reimburse on a given procedure code. Multiple issues make that difficult to accurately produce, including accurate benefit breakdowns and unknown medical claim review rules. The accuracy can be improved if vague terms within procedure codes can be quantified by payers for reimbursement purposes. One payer may quantify the word “most” as greater than 50%, while another payer may quantify it as greater than 70%.. This Standard would create transparency into the claim review process such that: (1) Dental Providers would be able to accurately code procedures; (2) Dental Claim Reviewers would be able to accurately measure and apply their adjudication rules; (3) Artificial and Augmented Intelligence tools would be able to leverage empirical measurements to automate adjudication decisions. With the transparency of the rules, the trust between all parties including patients will improve access to affordable healthcare.

Interest Categories: Users (Healthcare Professionals), Consumers (Patients), Producers (Software Vendors), Payers

Scope: The Prudent Augmented Insurance Intelligence for Dentistry (PAIID) are Standards seeking to improve Patient Cost Transparency by creating a reporting system that allows dental providers and dental claim reviewers to describe the results of claim reviews based on empirical measurements to all stakeholders. This Standard seeks to improve Patient Cost Transparency by describing datasets that would allow dental providers and dental claim reviewers to apply consistent measurements in the determination of procedure code accuracy and reimbursement applicability.
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

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Comment Deadline: July 10, 2022

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

This proposed addendum to ANSI/ASHRAE Standard 15-2019 is one of several addenda addressing the use of refrigerants other than Group A1. This proposed addendum addresses the use of refrigerant detection and mitigation requirements when a leak is detected. This second publication public review (PPR) addresses comments submitted on the first publication public review draft.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

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

Addenda

A continuous maintenance proposal was submitted to update the definition of approved, nationally recognized laboratory. Note that the Occupational Safety and Health Administration (OSHA) department of the United States federal government uses “nationally recognized testing laboratory” (NRTL), and this change is to align with that common usage.
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
A continuous maintenance proposal was submitted to clean up the definitions of brazed and soldered joints. This is in part due to an existing gap in the current definitions that exists between 800 °F (426.5 °C) and 1000 °F (537.7 °C). This proposed change harmonizes with definitions found in both ISO 4063:2009 and ANSI/AWS A3.0MM/A3.0:2020.

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: July 10, 2022

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision
This Standard covers the preparation of buttwelding ends of piping components to be joined into a piping system by welding. It includes requirements for welding bevels, for external and internal shaping of heavy-wall components, and for preparation of internal ends (including dimensions and tolerances). Coverage includes preparation for joints with the following: (a) no backing rings, (b) split or noncontinuous backing rings, (c) solid or continuous backing rings, (d) consumable insert rings, and (e) gas tungsten arc welding (GTAW) of the root pass. Details of preparation for any backing ring must be specified when ordering the component.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Daniel Wiener; WienerD@asme.org

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision
This Standard for wrought copper and wrought copper alloy solder-joint drainage fittings, designed for use with copper drainage tube conforming to ASTM B306, covers the following: (a) description, (b) pitch (slope), (c) abbreviations for end connections, (d) sizes and method of designating openings for reducing fittings, (e) marking, (f) material, and (g) dimensions and tolerances.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Daniel Wiener; WienerD@asme.org

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision
This Standard covers design, material, manufacturing, testing, marking, and inspection requirements for factory-made pipeline bends of carbon steel materials having controlled chemistry and mechanical properties, produced by the induction bending process, with or without tangents. This Standard covers induction bends for transportation and distribution piping applications (e.g., ASME B31.4 and ASME B31.8).
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: Daniel Wiener; WienerD@asme.org
Comment Deadline: July 10, 2022

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

Revision
BSR/NSF 40-202x (i48r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)
This Standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities between 1,514 L/d (400 gal/d) and 5,678 L/d (1,500 gal/d). Management methods for the treated effluent discharged from residential wastewater treatment systems are not addressed by this Standard. System components covered under other NSF or NSF/ANSI standards or criteria shall also comply with the requirements therein. This Standard shall in no way restrict new system designs, provided such designs meet the minimum specifications described herein.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

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

Revision
BSR/NSF 245-202x (i30r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020)
This wastewater standard contains minimum requirements for residential wastewater treatment systems having rated treatment capacities of 1514 L/d (400 gal/d) to 5678 L/d (1500 gal/d) that are designed to provide reduction of nitrogen in residential wastewater. Management methods for the treated effluent discharged from these systems are not addressed by this Standard. A system, in the same configuration, must either be demonstrated to have met the Class I requirements of NSF/ANSI 40 or must meet the Class I requirements of NSF/ANSI 40 during concurrent testing for nutrient removal.
Click here to view these changes in full
Send comments (copy psa@ansi.org) to: jsnider@nsf.org

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL 60062 | megan.monsen@ul.org, https://ul.org/

Revision
BSR/UL 510-202x, Standard for Safety for Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape (revision of ANSI/UL 510-2020)
This proposal of the Tenth Edition of the Standard for Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape, UL 510, includes: revisions, clarifications, and editorial corrections.
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: July 10, 2022

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL  60062  | megan.monsen@ul.org, https://ul.org/

Revision
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

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL  60062  | megan.monsen@ul.org, https://ul.org/

Revision
BSR/UL 1059-202x, Standard for Safety for Terminal Blocks (revision of ANSI/UL 1059-2021)
This proposal includes revisions to Supplement SA for Short Circuit Testing.
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.

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

Revision
BSR/UL 1083-202x, Standard for Safety for Household Electric Skillets and Frying-Type Appliances (revision of ANSI/UL 1083-2016)
This proposal for UL 1083 covers: (1) Addition of UL 969A as a replacement to Existing Permanency of Marking Requirements for Cord Tags.
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.

UL (Underwriters Laboratories)
12 Laboratory Drive, Research Triangle Park, NC  27709-3995  | Doreen.Stocker@ul.org, https://ul.org/

Revision
Proposed Adoption of Corrigendum 1 for IEC 62841-2-3.
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.
Call for Comment on Standards Proposals

Comment Deadline: July 25, 2022

ACI (American Concrete Institute)
38800 Country Club Drive, Farmington Hills, MI 48331 | shannon.banchero@concrete.org, www.concrete.org

New Standard
BSR/ACI CODE-307-202x, Requirements for Reinforced Concrete Chimneys–Code and Commentary (new standard)
This Code provides material, design, and detailing requirements for cast-in-place and precast reinforced concrete chimneys. It sets forth minimum loadings for design and contains methods for determining the concrete and reinforcement required to obtain the strength required by the loadings. The methods of analysis apply primarily to circular chimney walls, but guidance is included for applying the general principles to noncircular chimney walls.
Single copy price: Free
Order from: discussion@concrete.org
Send comments (copy psa@ansi.org) to: Same

ACI (American Concrete Institute)
38800 Country Club Drive, Farmington Hills, MI 48331 | shannon.banchero@concrete.org, www.concrete.org

New Standard
BSR/ACI CODE-369.1-202x, Seismic Evaluation and Retrofit of Existing Concrete Buildings–Code and Requirements (new standard)
This standard provides retrofit and rehabilitation criteria for reinforced concrete buildings based on results from the most recent research on the seismic performance of existing concrete buildings. The intent of this standard is to provide provisions related to concrete material and concrete members, including material testing criteria, modeling parameters, and acceptance criteria for use within the ASCE 41 framework, similar to how the National Earthquake Hazards Reduction Program (NEHRP) Recommended Seismic Provisions produced by the Federal Emergency Management Agency (FEMA) (FEMA 450) have served as source documents for the International Building Code (IBC) and its predecessor building codes. Starting in the 2023 edition, ASCE 41 references ACI 369.1 directly for concrete related provisions.
Single copy price: Free
Order from: discussion@concrete.org
Send comments (copy psa@ansi.org) to: Same
**Comment Deadline: July 25, 2022**

**AISI (American Iron and Steel Institute)**
25 Massachusetts Avenue, NW, Suite 800, Washington, DC 20001 | jlarson@steel.org, www.steel.org

**Supplement**
BSR/AISI S100-2016/S3-202x, Supplement 3 to the 2016 Edition of the North American Specification for the Design of Cold-Formed Steel Structural Members (supplement to ANSI/AISI S100-2016 (R2020))
ANSI/AISI S100-16/S2-2020

This supplement to AISI S100-16 (2020) incorporates approved revisions and additions used for cold-formed steel member and connection design.

Single copy price: Free
Obtain an electronic copy from: hchen@steel.org
Send comments (copy psa@ansi.org) to: Helen Chen, hchen@steel.org

**API (American Petroleum Institute)**
200 Massachusetts Avenue NW, Washington, DC 20001 | buflodj@api.org, www.api.org

**New Standard**
BSR/API RP 1162-202x, Public Awareness Programs for Pipeline Operators (new standard)

This document addresses the development, implementation, evaluation, and documentation of pipeline public awareness programs associated with distribution, regulated transmission, gathering pipeline, and underground storage systems in the United States that are required under Federal or State pipeline safety regulations to have a Public Awareness Program. This RP provides minimum requirements and offers guidance to operators to develop public awareness programs that take into account the differences and similarities in pipeline types, release characteristics, stakeholder audiences, operator activities, and other factors which can influence the program’s development and implementation. This RP provides operators with public awareness program elements and illustrates the process for establishing, implementing, measuring, and adjusting a program, in alignment with the plan-do-check-act (PDCA) process for managing programs. This RP addresses certain operational changes requiring additional communication based on the introduction of new hazards.

Single copy price: Free
Obtain an electronic copy from: John Buflod; buflodj@api.org
Send comments (copy psa@ansi.org) to: John Buflod; buflodj@api.org
Comment Deadline: July 25, 2022

ASC X9 (Accredited Standards Committee X9, Incorporated)
275 West Street, Suite 107, Annapolis, MD 21401 | Ambria.frazier@x9.org, www.x9.org

Reaffirmation

This standard describes a model of account-based electronic payments. It identifies the roles played by different components of the payment process. The roles are the consumer, who wishes to make a payment; a merchant which provides value; and their respective Financial Institutions, the consumer financial institution and the merchant financial institution. It specifies a collection of electronic payment objects and references digital signature techniques to secure their content.
Single copy price: $100.00
Obtain an electronic copy from: ambria.frazier@x9.org
Order from: ambria.frazier@x9.org
Send comments (copy psa@ansi.org) to: Same

ASC X9 (Accredited Standards Committee X9, Incorporated)
275 West Street, Suite 107, Annapolis, MD 21401 | Ambria.frazier@x9.org, www.x9.org

Revision

X9.93 provides a message and file formatting standard for use in processing Electronic Benefit Transactions for the Special Supplemental Food Program for Women, Infants and Children (WIC). It is in use for processing transactions from the USDA-FNS-WIC program in over 50 WIC State agencies. The standard is essential to meeting a Congressional mandate enacted in 2010 for all WIC State agencies to convert to electronic delivery by 2020. Users of the standard have requested updates to reflect changes in the marketplace, clarifications in file formats, and innovations in the payment ecosystem.
Single copy price: $60.00
Obtain an electronic copy from: ambria.frazier@x9.org
Order from: ambria.frazier@x9.org
Send comments (copy psa@ansi.org) to: Same
**Comment Deadline: July 25, 2022**

**ASC X9 (Accredited Standards Committee X9, Incorporated)**
275 West Street, Suite 107, Annapolis, MD 21401 | Ambria.frazier@x9.org, www.x9.org

**Revision**


This standard provides all parties involved in Electronic Benefits Transfer (EBT) transactions with technical specifications for exchanging financial transaction files for the Women, Infants, and Children (WIC) program and the framework for adding other EBT files and detail records in the future. The document standardizes file formats and thereby maximizes EBT productivity for all stakeholders in the industry. This standard describes files and records between the acquirer and card issuer.

Single copy price: $60.00
Obtain an electronic copy from: ambria.frazier@x9.org
Order from: ambria.frazier@x9.org
Send comments (copy psa@ansi.org) to: Same

**ASME (American Society of Mechanical Engineers)**
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

**Revision**

BSR/ASME B31.4-202x, Pipeline Transportation Systems for Liquids and Slurries (revision of ANSI/ASME B31.4-2019)

This Code prescribes requirements for the design, materials, construction, assembly, inspection, testing, operation, and maintenance of liquid pipeline systems between production fields or facilities, tank farms, above- or belowground storage facilities, natural gas processing plants, refineries, pump stations, ammonia plants, terminals (marine, rail, and truck), and other delivery and receiving points, as well as pipelines transporting liquids within pump stations, tank farms, and terminals associated with liquid pipeline systems (see Figures 400.1.1-1 and 400.1.1-2).

Single copy price: Free
Obtain an electronic copy from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Adam Maslowski; maslowskia@asme.org

**ASME (American Society of Mechanical Engineers)**
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

**Revision**

BSR/ASME BPVC Section II-202x, Part A - Ferrous Material Specifications; Part B - Nonferrous Material Specifications; Part D - Materials Properties (revision of ANSI/ASME BPVC Section II-2021)

Section II of the Boiler and Pressure Vessel Code provides material specifications for base metallic materials and material design values and limits and cautions on the use of materials.

Single copy price: Free
Obtain an electronic copy from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Colleen O’Brien; obrienc@asme.org
Comment Deadline: July 25, 2022

ASSP (Safety) (American Society of Safety Professionals)
520 N. Northwest Highway, Park Ridge, IL 60068 | LBauerschmidt@assp.org, www.assp.org

National Adoption
This document defines generic terms related to the management of risks faced by organizations.
Single copy price: $110.00
Obtain an electronic copy from: LBauerschmidt@assp.org
Order from: LBauerschmidt@assp.org
Send comments (copy psa@ansi.org) to: Same

ASSP (Safety) (American Society of Safety Professionals)
520 N. Northwest Highway, Park Ridge, IL 60068 | LBauerschmidt@assp.org, www.assp.org

Reaffirmation
BSR/ASSE Z359.13-2013 (R202x), Personal Energy Absorbers and Energy Absorbing Lanyards (reaffirmation of ANSI/ASSE Z359.13-2013)
This standard establishes requirements for the performance, design criteria, marking, qualification and verification testing, instructions, inspections, maintenance, and removal from service of personal energy absorbers and energy absorbing lanyards for users within the capacity range of 130 to 310 pounds (59 - 140 kg.)
Single copy price: $110.00
Obtain an electronic copy from: LBauerschmidt@assp.org
Order from: LBauerschmidt@assp.org
Send comments (copy psa@ansi.org) to: Same

FCI (Fluid Controls Institute)
1300 Sumner Avenue, Cleveland, OH 44115 | fci@fluidcontrolsinstitute.org, www.fluidcontrolsinstitute.org

New Standard
BSR/FCI 20-1-202x, Standard for Performance Testing Strainers for Liquid Service (new standard)
The purpose of the standard is to provide uniform test procedures to determine the performance of strainers used in liquid service, in particular, the flow versus pressure loss characteristics and the flow coefficient.
Single copy price: Free
Obtain an electronic copy from: fci@fluidcontrolsinstitute.org
Send comments (copy psa@ansi.org) to: Leslie Schraff, fci@fluidcontrolsinstitute.org
Comment Deadline: July 25, 2022

HL7 (Health Level Seven)
3300 Washtenaw Avenue, Suite 227, Ann Arbor, MI 48104 | Karenvan@HL7.org, www.hl7.org

Reaffirmation
These conceptual models are required to form the foundation for Version 3 diet and nutritional supplement orders that are an important part of the medical nutrition therapy.
Single copy price: Free
Obtain an electronic copy from: Karenvan@HL7.org
Order from: Karen Van Hentenryck; Karenvan@HL7.org
Send comments (copy psa@ansi.org) to: Same

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | aburr@nsf.org, www.nsf.org

Revision
BSR/NSF 332-202x (i9r3), Sustainability Assessment for Resilient Floor Coverings (revision of ANSI/NSF 332-2015)
This sustainability standard establishes a consistent approach to the evaluation and determination of environmentally preferable and sustainable resilient floor coverings. The Standard includes relevant criteria across the product(s) life cycle from raw material extraction through manufacturing, use, and end-of-life management. As used in this Standard, “resilient floor coverings” includes, but is not limited to, vinyl tile, vinyl composition tile, sheet vinyl, rubber, polymeric, and linoleum flooring products in which the wearing surface is non-textile. Also included are flooring accessories such as wall base, moldings, and stair treads.
Single copy price: Free
Send comments (copy psa@ansi.org) to: aburr@nsf.org
Comment Deadline: July 25, 2022

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

Withdrawal

BSR/NSF 350-1 (i9r1), Onsite Residential and Commercial Greywater Treatment Systems for Subsurface Discharge (withdrawal of ANSI/NSF 350-1-2017 (i7r1))

This Standard contains minimum requirements for onsite residential and commercial greywater treatment systems. Systems may include:

— Greywater reuse treatment systems having a rated treatment capacity up to 5,678 L/d (1,500 gal/d): This applies to onsite residential and commercial reuse treatment systems that treat combined greywater, those that treat laundry water only from residential laundry facilities, and those that treat bathing water only. See 8.1 for performance testing and evaluation;

— Commercial greywater reuse treatment systems: This applies to onsite commercial reuse treatment systems that treat combined commercial facility greywater with capacities exceeding 5,678 L/d (1,500 gal/d) and commercial facility laundry water only of any capacity.

These systems shall be performance tested and evaluated at the location of the reuse system installation, using the greywater generated onsite from the facility serving the treatment system. See 8.2 for performance testing and evaluation. The key elements of a field evaluation of a commercial onsite reuse treatment system are described in Annex A.

Single copy price: Free


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

RVIA (Recreational Vehicle Industry Association)
3333 Middlebury Street, Elkhart, IN 46516 | treamer@rvia.org, www.rvia.org

Reaffirmation

BSR/RVIA TSIC-1-2018 (R202x), Recommended Practice Process Controls for Assembly of Wheels on Trailers (reaffirmation of ANSI/RVIA TSIC-1-2018)

The purpose of this Recommended Practice is to identify and define significant factors required for assembly process control.

Single copy price: Free

Obtain an electronic copy from: treamer@rvia.org

Send comments (copy psa@ansi.org) to: treamer@rvia.org
Comment Deadline: July 25, 2022

**SCTE (Society of Cable Telecommunications Engineers)**  
140 Philips Rd, Exton, PA 19341 | kcooney@scte.org, www.scte.org

**New Standard**  
BSR/SCTE 278-202x, Standard Data Fields for Outside Plant Power (new standard)  
This SCTE standard defines the attributes of hybrid fiber coax (HFC) outside plant power supply devices an operator should keep inventory of to accurately describe the power network. The data fields defined in this document are designed to capture all relevant unique characteristics of hybrid fiber coax powering devices. These attributes may be utilized to model utility power consumption, utility power versus inverter time, and over all power network performance in the outside plant. This document defines the outside plant from the outside wall of the hubsite (headend) to the distribution line end. This document will reference where, when, and how an operator should acquire the data and metadata.  
Single copy price: $50.00  
Obtain an electronic copy from: admin@standards.scte.org  
Send comments (copy psa@ansi.org) to: admin@standards.scte.org

**UL (Underwriters Laboratories)**  
47173 Benicia Street, Fremont, CA 94538 | Derrick.L.Martin@ul.org, https://ul.org/

**Reaffirmation**  
This proposal covers the reaffirmation of UL 61010-2-201 as an standard.  
Single copy price: Free  
Send comments (copy psa@ansi.org) to: Derrick Martin; Derrick.L.Martin@ul.org

**UL (Underwriters Laboratories)**  
333 Pfingsten Road, Northbrook, IL 60062-2096 | Heather.Sakellariou@ul.org, https://ul.org/

**Revision**  
BSR/UL 588-202x, Standard for Safety for Seasonal and Holiday Decorative Products (revision of ANSI/UL 588-2021)  
The following is being recirculated for your review: (5) Addition of requirements for Commercial Use Lighting Strings.  
Single copy price: Free  
Send comments (copy psa@ansi.org) to: https://csds.ul.com/Home/ProposalsDefault.aspx
UL (Underwriters Laboratories)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | Gillian.Wintonic@ul.org, https://ul.org/

Withdrawal
ANSI/UL 100-2012 (R2016), Standard for Sustainability for Gypsum Boards and Panels (withdrawal of ANSI/UL 100-2012 (R2016))
This standard establishes multiple attribute sustainability requirements for gypsum board and panel products as defined in 5.18 – 5.20. The criteria in this standard were developed based on the life cycle stages of gypsum boards and panels. Sustainability factors considered in this standard are: materials, energy, manufacturing and operations, health and environment, product performance, and product stewardship. Credit for innovations in these, or other factors not listed, is also addressed in this standard.
Single copy price: Free
Order from: Order from: http://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

Comment Deadline: August 9, 2022
ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

Revision
BSR/ASME PCC-1-202x, Standard for Pressure Boundary Bolted Flange Joint Assembly (revision of ANSI/ASME PCC-1-2019)
This Standard covering bolted flange joint assemblies (BFJAs) applies to pressure-boundary flanged joints with ring-type gaskets that are entirely within the circle enclosed by the bolt holes and with no contact outside this circle. The principles of this Standard may be selectively applied to other joint geometries.
Single copy price: Free
Order from: https://cstools.asme.org/csconnect/PublicReviewPage.cfm
Send comments (copy psa@ansi.org) to: Steven Rossi; RossiSJ@asme.org

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL 60062 | Elizabeth.Northcott@ul.org, https://ul.org/

Revision
BSR/UL 583-202x, Standard for Electric-Battery-Powered Industrial Trucks (revision of ANSI/UL 583-2021)
1. For Preliminary Review Only: Proposed adoption of the Eleventh Edition of the Standard for Electric-Battery-Powered Industrial Trucks, UL 583, as a UL standard for the United States and Canada.
Single copy price: Free
Order from: http://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
Comment Deadline: August 9, 2022

UL (Underwriters Laboratories)
333 Pfingsten Road, Northbrook, IL  60062-2096  | jeffrey.prusko@ul.org, https://ul.org/

Revision
BSR/UL 2039-202x, Standard for Flexible Connector Piping for Fuels (revision of ANSI/UL 2039-2016)

Single copy price: Free
Obtain an electronic copy from: shopULstandards.com or https://csds.ul.com/Home/ProposalsDefault.aspx
Order from: shopULstandards.com or https://csds.ul.com/Home/ProposalsDefault.aspx
Send comments (copy psa@ansi.org) to: Jeff Prusko; jeffrey.prusko@ul.org

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

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

AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL  33166-6672  | pportela@aws.org, www.aws.org

ANSI/AWS A5.1/A5.1M-2012, Specification for Carbon Steel Electrodes for Shielded Metal Arc Welding
Direct inquiries to: Peter Portela; pportela@aws.org

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

AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL  33166-6672  | pportela@aws.org, www.aws.org

ANSI/AWS A5.22/A5.22M-2012, Specification for Stainless Steel Flux Cored and Metal Cored Welding Electrodes and Rods
Direct inquiries to: Peter Portela; pportela@aws.org

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

AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL  33166-6672  | jrosario@aws.org, www.aws.org

ANSI/AWS B2.1-1-210-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding with Consumable Insert Root of Carbon Steel (M-1/P-1/S-1, Group 1 or 2), 1/8 through 1-1/2 inch Thick, INMs-1 and ER70S-2, As-Welded or PWHT Condition, Primarily Pipe Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

Call for Comment on Standards Proposals
Notice of Withdrawal: ANS at least 10 years past approval date

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org

ANSI/AWS B2.1-1-211-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding with Consumable Insert Root followed by Shielded Metal Arc Welding of Carbon Steel (M-1/P-1/S-1, Group 1 or 2), 1/8 through 1-1/2 inch Thick, INMs-1, ER70S-2, and E7018, As-Welded or PWHT Condition, Primarily Pipe Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org

ANSI/AWS B2.1-8-024-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/16 through 1-1/2 inch Thick, ER3XX, As-Welded Condition, Primarily Plate and Structural Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org

ANSI/AWS B2.1-8-025-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding followed by Shielded Metal Arc Welding of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/8 through 1-1/2 inch Thick, As-Welded Condition, Primarily Plate and Structural Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org

ANSI/AWS B2.1-8-212-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/8 through 1-1/2 Inch Thick, ER3XX, As-Welded Condition, Primarily Pipe Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org
Notice of Withdrawal: ANS at least 10 years past approval date

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

**AWS (American Welding Society)**

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

ANSI/AWS B2.1-8-213-2012, Standard Welding Procedure Specification (SWPS) for Shielded Metal Arc Welding of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/8 through 1-1/2 inch Thick, E3XX-XX, As-Welded Condition (Primarily Pipe Applications)
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

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

**AWS (American Welding Society)**

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

ANSI/AWS B2.1-8-214-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding followed by Shielded Metal Arc Welding of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/8 through 1-1/2 inch Thick, ER3XX and E3XX-XX, As-Welded Condition, Primarily Pipe Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

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

**AWS (American Welding Society)**

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

ANSI/AWS B2.1-8-215-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding with Consumable Inserts of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/8 through 1-1/2 inch Thick, IN3XX and ER3XX, As-Welded Condition, Primarily Pipe Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org

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

**AWS (American Welding Society)**

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

ANSI/AWS B2.1-8-216-2012, Standard Welding Procedure Specification (WPS) for Gas Tungsten Arc Welding with Consumable Inserts followed by Shielded Metal Arc Welding of Austenitic Stainless Steel (M-8/P-8/S-8, Group 1), 1/8 through 1-1/2 inch Thick, IN3XX, ER3XXX, and E3XX-XX, As-Welded Condition, Primarily Pipe Applications
Direct inquiries to: Jennifer Rosario; jrosario@aws.org
Notice of Withdrawal: ANS at least 10 years past approval date

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | gupta@aws.org, www.aws.org

ANSI/AWS C4.5M-2012, Uniform Designation System for Oxyfuel Nozzles
Direct inquiries to: Rakesh Gupta; gupta@aws.org

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | pportela@aws.org, www.aws.org

Direct inquiries to: Peter Portela; pportela@aws.org

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

**AWS (American Welding Society)**
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | sborrero@aws.org, www.aws.org

ANSI/AWS G2.5/G2.5M-2012, Guide for the Fusion Welding of Zirconium and Zirconium Alloys
Direct inquiries to: Stephen Borrero; sborrero@aws.org

**Withdrawal of an ANS by ANSI-Accredited Standards Developer**

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

**AHRI (Air-Conditioning, Heating, and Refrigeration Institute)**
2311 Wilson Boulevard, Suite 400, Arlington, VA 22201-3001 | kbest@ahrinet.org, www.ahrinet.org

ANSI/AHRI Standard 580-2014, Performance Rating of Non-Condensable Gas Purge Equipment for Use with Low Pressure Centrifugal Liquid Chillers
Direct inquiries to: Karl Best; kbest@ahrinet.org
Final Actions on American National Standards

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

AGA (ASC Z380) (American Gas Association)
400 North Capitol Street, NW, Suite 450, Washington, DC  20001 | lescobar@aga.org, www.aga.org

Addenda

ANS (American Nuclear Society)
555 North Kensington Avenue, La Grange Park, IL  60526 | kmurdoch@ans.org, www.ans.org

Reaffirmation

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

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

Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation

Reaffirmation
Revision

Revision

Revision
ANSI/ASTM D7915-2022, Practice for Application of Generalized Extreme Studentized Deviate (GESD) Technique to Simultaneously Identify Multiple Outliers in a Data Set (revision of ANSI/ASTM D7915-2018) Final Action Date: 5/24/2022

Revision

Revision

Revision

Revision

Revision

Revision

Revision
ANSI/ASTM F2845-2022, Test Method for Measuring the Dynamic Stiffness (DS) and Cylindrical Coefficient of Restitution (CCOR) of Baseballs and Softballs (revision of ANSI/ASTM F2845-2014) Final Action Date: 5/24/2022

Revision
**CSA (CSA America Standards Inc.)**
8501 East Pleasant Valley Road, Cleveland, OH  44131-5575  | ansi.contact@csagroup.org, www.csagroup.org

**Revision**

**CTA (Consumer Technology Association)**
1919 S. Eads Street, Arlington, VA  22202  | cakers@cta.tech, www.cta.tech

**Revision**
ANSI/CTA 2045.2-A-2022, Modular Communications Interface for Generic Display Message Set (revision of ANSI/CTA 2045.2-2014) Final Action Date: 6/2/2022

**Revision**

**NEMA (ASC C29) (National Electrical Manufacturers Association)**
1300 17th St N #900,, Arlington, VA  22209  | Paul.Crampton@nema.org, www.nema.org

**Reaffirmation**
ANSI/NEMA C29.3-2015 (R2022), Wet Process Porcelain Insulators - Spool Type (reaffirmation of ANSI/NEMA C29.3-2015) Final Action Date: 6/2/2022

**NEMA (ASC Z535) (National Electrical Manufacturers Association)**
1300 North 17th Street, Suite 900, Rosslyn, VA  22209  | Pau_orr@nema.org, www.nema.org

**Revision**

**Revision**
ANSI Z535.3-2022, Criteria for Safety Symbols (revision of ANSI Z535.3-2011 (R2017)) Final Action Date: 6/2/2022

**Revision**
ANSI Z535.5-2022, Safety Tags and Barricade Tapes (for Temporary Hazards) (revision of ANSI Z535.5-2011 (R2017)) Final Action Date: 6/2/2022

**OEOSC (ASC OP) (Optics and Electro-Optics Standards Council)**
75 Barett Drive, #1190, Webster, NY  14580  | paugino@optimaxsi.com, www.OEOSC.org

**National Adoption**
UL (Underwriters Laboratories)
12 Laboratory Drive, Research Triangle Park, NC 27709-3995 | griff.edwards@ul.org, https://ul.org/

Revision
Call for Members (ANS Consensus Bodies)

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

ANSI Accredited Standards Developer

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

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

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

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

Membership in all interest categories is always welcome; however, the INCITS Executive Board seeks to broaden its membership base in the following underrepresented categories:

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

ANSI Accredited Standards Developer

SCTE (Society of Cable Telecommunications Engineers)

SCTE, an ANSI-accredited SDO, is the primary organization for the creation and maintenance of standards for the cable telecommunications industry. SCTE’s standards mission is to develop standards that meet the needs of cable system operators, content providers, network and customer premises equipment manufacturers, and all others who have an interest in the industry through a fair, balanced and transparent process.

SCTE is currently seeking to broaden the membership base of its ANSI consensus bodies and is interested in new members in all membership categories to participate in new work in fiber-optic networks, advanced advertising, 3D television, and other important topics. Of particular interest is membership from the content (program and advertising) provider and user communities.

Membership in the SCTE Standards Program is open to all directly and materially affected parties as defined in SCTE’s membership rules and operating procedures.

More information is available at www.scte.org or by e-mail from standards@scte.org.
ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org

ASME (American Society of Mechanical Engineers)
Two Park Avenue, 6th Floor, New York, NY 10016-5990 | ansibox@asme.org, www.asme.org
BSR/ASME BPVC Section II-202x, Part A - Ferrous Material Specifications; Part B - Nonferrous Material Specifications; Part D - Materials Properties (revision of ANSI/ASME BPVC Section II-2021)

ASSP (ASC A10) (American Society of Safety Professionals)
520 N. Northwest Highway, Park Ridge, IL 60068 | TFisher@ASSP.org, www.assp.org

AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org
BSR/AWS B2.1-1-234-202x, Standard Welding Procedure Specification (SWPS) for 75% Argon Plus 25% Carbon Dioxide Shielded Flux Cored Arc Welding of Carbon Steel (M-1/P-1, Group 1 or 2), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, E7XT-X, in the As-Welded or PWHT Condition, Primarily Pipe Applications (revision of ANSI/AWS B2.1-1-234-2019)

AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org
BSR/AWS B2.1-1-235-202x, Standard Welding Procedure Specification (SWPS) for 98% Argon Plus 2% Oxygen Shielded Gas Metal Arc Welding (Spray Transfer Mode) of Carbon Steel (M-1/P-1, Group 1 or 2), 1/8 inch [3 mm] through 1-1/2 inch [38 mm] Thick, ER70S-3, in the As-Welded or PWHT Condition, Primarily Pipe Applications (revision of ANSI/AWS B2.1-1-235:2020-AMD1)
AWS (American Welding Society)
8669 NW 36th Street, Suite 130, Miami, FL 33166-6672 | jrosario@aws.org, www.aws.org

BSR/AWS B2.1-22-015-202x, Standard Welding Procedure Specification (SWPS) for Gas Tungsten Arc Welding of Aluminum (M/P-22 to M/P-22), 18 through 10 Gauge, ER4043 or R4043, in the As-Welded Condition, with or without Backing (revision of ANSI/AWS B2.1-22-015-2022)

CSA (CSA America Standards Inc.)
8501 East Pleasant Valley Road, Cleveland, OH 44131-5575 | ansi.contact@csagroup.org, www.csagroup.org

BSR/CSA HGV 5.1-202x, Residential fueling appliance for hydrogen vehicle fueling (new standard)

DSI (Dental Standards Institute, Inc.)
109 Bushaway Road, Suite 100, Wayzata, MN 55391 | bryan@upgradedental.com, https://dentalstandardsinstitute.com/

BSR/DSI PAIID1.1-202x, Prudent Adjudication Reporting in Dentistry (new standard)

DSI (Dental Standards Institute, Inc.)
109 Bushaway Road, Suite 100, Wayzata, MN 55391 | bryan@upgradedental.com, https://dentalstandardsinstitute.com/

BSR/DSI PAIID2.1-202x, Calibration of Adjudication Techniques in Dentistry (new standard)

ECIA (Electronic Components Industry Association)
13873 Park Center Road, Suite 315, Herndon, VA 20171 | ldonohoe@ecianow.org, www.ecianow.org

BSR/EIA 198-3-10-202x, Multilayer (Monolithic), Unencapsulated, Ceramic Dielectric, Surface-Mount Low Induction Chip Capacitors and Multi-Terminal Low Induction Capacitors (revision of ANSI/EIA 198-3-10-2015)

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BSR/EIA 364-82B-202x, Corrosivity of Plastics Test Procedure for Electrical Connector and Socket Housings (revision and redesignation of ANSI/EIA 364-82A-2005 (R2017))

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BSR/EIA 60384-17-202x, Fixed Capacitors for Use in Electronic Equipment - Part 17: Sectional Specification - Fixed Metallized Polypropylene Film Dielectric a.c. and Pulse Capacitors (identical national adoption of IEC 60384-17:2019 ED3)

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FCI (Fluid Controls Institute)
1300 Sumner Avenue, Cleveland, OH 44115 | fci@fluidcontrolsinstitute.org, www.fluidcontrolsinstitute.org
BSR/FCI 20-1-202x, Standard for Performance Testing Strainers for Liquid Service (new standard)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 40-202x (i48r1), Residential Wastewater Treatment Systems (revision of ANSI/NSF 40-2020)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 245-202x (i30r1), Residential Wastewater Treatment Systems - Nitrogen Reduction (revision of ANSI/NSF 245-2020)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | aburr@nsf.org, www.nsf.org
BSR/NSF 332-202x (i9r3), Sustainability Assessment for Resilient Floor Coverings (revision of ANSI/NSF 332-2015)

NSF (NSF International)
789 N. Dixboro Road, Ann Arbor, MI 48105-9723 | jsnider@nsf.org, www.nsf.org
BSR/NSF 350-1 (i9r1), Onsite Residential and Commercial Greywater Treatment Systems for Subsurface Discharge (withdrawal of ANSI/NSF 350-1-2017 (i7r1))
Public Review of Revised ASD Scope

AGA - American Gas Association, ASC B109, Gas Displacement Meters

Comment on Scope Deadline: July 11, 2022

The American Gas Association, sponsor of ASC B109, Gas Displacement Meters, has submitted revisions to its current scope of ASD accreditation on file with ANSI for informational purposes. The revised scope follows:

Accredited Standards Committee B109 is responsible for the development and maintenance of standards for gas meters, gas service regulators and related devices that are used in the revenue measurement of fuel gas. For both new types and newly constructed meters and service regulators, these standards include: definitions, construction criteria, performance criteria, test methods, in-service performance criteria, installation requirements/practices, and equipment.

Please submit any comments or questions by July 11, 2022 to: Luis Escobar, American Gas Association (AGA (ASC B109)) | 400 N. Capitol St., NW, Suite 450, Washington, DC 20001 | (202) 824-7058, lescobar@aga.org (please copy jthompso@ANSI.org).
American National Standards (ANS) Process

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

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

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

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

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

The standard shall be maintained by an accredited standards developer. A documented program for periodic publication of revisions shall be established by the standards developer. Processing of these revisions shall be in accordance with these procedures. The published standard shall include a clear statement of the intent to consider requests for change and information on the submittal of such requests. Procedures shall be established for timely, documented consensus action on each request for change and no portion of the standard shall be excluded from the revision process. In the event that no revisions are issued for a period of four years, action to reaffirm or withdraw the standard shall be taken in accordance with the procedures contained in the ANSI Essential Requirements.

The Executive Standards Council (ExSC) has determined that for standards maintained under the Continuous Maintenance option, separate PINS announcements are not required. The following ANSI Accredited Standards Developers have formally registered standards under the Continuous Maintenance option.

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

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at [www.ansi.org/asd](http://www.ansi.org/asd), select “American National Standards Maintained Under Continuous Maintenance.” Questions? [psa@ansi.org](mailto:psa@ansi.org).
# ANSI-Accredited Standards Developers (ASD) Contacts

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

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<td>NEMA (ASC C12)</td>
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ISO & IEC Draft International Standards

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

COMMENTS
Comments regarding ISO documents should be sent to ANSI’s ISO Team (isot@ansi.org); comments on ISO documents must be submitted electronically in the approved ISO template and as a Word document as other formats will not be accepted.
Those regarding IEC documents should be sent to Tony Zertuche, General Secretary, USNC/IEC, at ANSI’s New York offices (tzertuche@ansi.org). The final date for offering comments is listed after each draft.

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

ISO Standards

**Air quality (TC 146)**
ISO/FDIS 13137, Workplace atmospheres - Pumps for personal sampling of chemical and biological agents - Requirements and test methods - 4/22/2021, $93.00

**Aircraft and space vehicles (TC 20)**
ISO/DIS 3323, Aircraft - Hydraulic components - Marking to indicate fluid for which component is approved - 8/20/2022, $33.00
ISO/DIS 5491, Vertiports - Infrastructure and equipment for Vertical Take-Off and Landing (VTOL) of electrically powered cargo Unmanned Aircraft System (UAS) - 8/25/2022, $58.00

**Cycles (TC 149)**
ISO/DIS 6742-1, Cycles - Lighting and retro-reflective devices - Part 1: Lighting and light signalling devices - 8/21/2022, $77.00
ISO/DIS 6742-2, Cycles - Lighting and retro-reflective devices - Part 2: Retro-reflective devices - 8/22/2022, $77.00
ISO/DIS 6742-3, Cycles - Lighting and retro-reflective devices - Part 3: Installation and use of lighting and retro-reflective devices - 8/22/2022, $46.00
ISO/DIS 6742-4, Cycles - Lighting and retro-reflective devices - Part 4: Lighting systems powered by the cycles movement - 8/22/2022, $67.00
ISO/DIS 6742-5, Cycles - Lighting and retro-reflective devices - Part 5: Lighting systems not powered by the cycles movement - 8/21/2022, $40.00

**Fine ceramics (TC 206)**
ISO/DIS 5722, Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for determining tensile and shear creep of ceramic adhesive - 8/20/2022, $53.00

**Geotechnics (TC 182)**
ISO/DIS 18674-8, Geotechnical investigation and testing - Geotechnical monitoring by field instrumentation - Part 8: Measurement of loads: Load cells - 8/21/2022, $102.00

**Human resource management (TC 260)**
ISO/DIS 30405, Human resource management - Guidelines on recruitment - 4/4/2022, $71.00

**Industrial trucks (TC 110)**
ISO/DIS 3691-1, Industrial trucks - Safety requirements and verification - Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks - 4/3/2022, $146.00

**Information and documentation (TC 46)**
ISO/FDIS 26324, Information and documentation - Digital object identifier system - 8/8/2021, $71.00

**Machine tools (TC 39)**
ISO/DIS 2773, Test conditions for pillar type vertical drilling machines - Testing of the accuracy - 4/3/2022, $58.00

**Materials, equipment and offshore structures for petroleum and natural gas industries (TC 67)**
ISO/DIS 22974, Petroleum and natural gas industry - Pipeline transportation systems - Pipeline integrity assessment specification - 8/19/2022, $88.00
Nuclear energy (TC 85)
ISO/FDIS 12749-2, Nuclear energy, nuclear technologies, and radiological protection - Vocabulary - Part 2: Radiological protection - 7/5/2021, $119.00

Paper, board and pulps (TC 6)
ISO/DIS 24118-1.2, Paper and board - Stylus contact method - Part 1: Determination of surface roughness - 6/13/2022, $53.00

Powder metallurgy (TC 119)
ISO/DIS 3995, Metallic powders - Determination of green strength by transverse rupture of rectangular compacts - 8/20/2022, $40.00

Railway applications (TC 269)
ISO/FDIS 23054-1, Railway applications - Track geometry quality - Part 1: Characterisation of track geometry and track geometry quality - 5/31/2021, $102.00

Road vehicles (TC 22)
ISO/DIS 7637-1, Road vehicles - Electrical disturbances from conduction and coupling - Part 1: Definitions and general considerations - 8/21/2022, $53.00

Small tools (TC 29)
ISO/DIS 8405, Tools for moulding - Ejector sleeves with cylindrical head - Basic series for general purposes - 4/3/2022, $40.00

Solid biofuels (TC 238)
ISO/FDIS 18134-1, Solid biofuels - Determination of moisture content - Part 1: Reference method - 8/16/2021, $40.00

Steel (TC 17)
ISO/DIS 4998, Steel sheet, zinc-coated and zinc-iron alloy-coated by the continuous hot-dip process, of structural quality - 4/4/2022, $67.00
ISO/DIS 630-6, Structural steels - Part 6: Technical delivery conditions for seismic-proof improved structural steels for building - 8/21/2022, $67.00

Steel wire ropes (TC 105)
ISO/DIS 3444, Stainless steel wire ropes - 8/20/2022, $71.00

Tobacco and tobacco products (TC 126)
ISO/DIS 3402, Tobacco and tobacco products - Atmosphere for conditioning and testing - 4/3/2022, $33.00
ISO/FDIS 24211, Vapour products - Determination of selected carbonyls in vapour product emissions - 7/23/2021, $67.00

Tractors and machinery for agriculture and forestry (TC 23)

Traditional Chinese medicine (TC 249)
ISO/DIS 7177, Traditional Chinese Medicine - Coptis chinensis and Coptis japonica rhizome - 8/13/2022, $62.00

ISO/IEC JTC 1, Information Technology
ISO/IEC DIS 4396-3, Telecommunications and information exchange between systems - Future network recursive inter-network architecture - Part 3: Common distributed application protocol - 8/19/2022, $112.00
ISO/IEC DIS 4396-9, Telecommunications and information exchange between systems - Future network recursive inter-network architecture - Part 9: Error and flow control protocol - 8/19/2022, $98.00
ISO/IEC FDIS 15938-17, Information technology - Multimedia content description interface - Part 17: Compression of neural networks for multimedia content description and analysis - 11/22/2020, $146.00

IEC Standards
All-or-nothing electrical relays (TC 94)
94/708/CD, IEC 61810-7-2 ED1: All-or-nothing electrical relays - Tests and Measurements - Part 7-2: Mechanical tests and weighing, 07/29/2022

Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)
46/888/CDV, IEC 60966-2-1 ED4: Radio frequency and coaxial cable assemblies - Part 2-1: Sectional specification for flexible coaxial cable assemblies, 08/26/2022
46/889/CDV, IEC 60966-2-2 ED3: Radio frequency and coaxial cable assemblies - Part 2-2: Blank detail specification for flexible coaxial cable assemblies, 08/26/2022
46/884/CDV, IEC 60966-3 ED4: Radio frequency and coaxial cable assemblies - Part 3: Sectional specification for semi-flexible coaxial cable assemblies, 08/26/2022
46/885/CDV, IEC 60966-3-1 ED4: Radio frequency and coaxial cable assemblies - Part 3-1: Blank detail specification for semi-flexible coaxial cable assemblies, 08/26/2022
46/886/CDV, IEC 60966-4 ED3: Radio frequency and coaxial cable assemblies - Part 4: Sectional specification for semi-rigid coaxial cable assemblies, 08/26/2022
46/887/CDV, IEC 60966-4-1 ED3: Radio frequency and coaxial cable assemblies - Part 4-1: Blank detail specification for semi-rigid coaxial cable assemblies, 08/26/2022
Capacitors and resistors for electronic equipment (TC 40)
40/2950(F)/FDIS, IEC 60384-19 ED4: Fixed capacitors for use in electronic equipment - Part 19: Sectional specification: Fixed metallized polyethylene terephthalate film dielectric surface mount DC capacitors, 06/24/2022

Dependability (TC 56)

Electric traction equipment (TC 9)
9/2843/FDIS, IEC 62590-3-1 ED1: Railway applications - Fixed installations - Electronic power converters - Part 3-1: AC traction applications - Electronic power compensators, 07/15/2022
9/2836A/CD, IEC 63453 ED1: Railway applications - Current collection systems - Validation of simulation of the dynamic interaction between pantograph and overhead contact line, 08/19/2022

Electric welding (TC 26)
26/734(F)/FDIS, IEC 60974-12 ED4: Arc welding equipment - Part 12: Coupling devices for welding cables, 06/24/2022

Electrical installations of ships and of mobile and fixed offshore units (TC 18)
18/1774/CDV, IEC/IEEE 80005-1/AMD2 ED2: Amendment 2 - Utility connections in port - Part 1: High voltage shore connection (HVSC) systems - General requirements, 08/26/2022

Electroacoustics (TC 29)
29/1125/CD, IEC 63143-1 ED1: Electroacoustics - Modular instrumentation for acoustical measurements - Part 1: Specifications, 08/26/2022

Fibre optics (TC 86)
86A/2218/CD, IEC 60793-1-41 ED4: Optical fibres - Part 1-41: Measurement methods and test procedures - Bandwidth, 08/26/2022
86B/4622/FDIS, IEC 61753-053-02 ED1: Fibre optic interconnecting devices and passive components - Performance standard - Part 053-02: Non-connectorized, single-mode fibre, electrically controlled, variable optical attenuator for category C - Controlled environments, 07/15/2022

86B/4623/CD, IEC 61754-7-5 ED1: Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 7-5: Type MPO connector family - Three fibre rows 8 and 12 fibre wide, 08/26/2022
86C/1807/DTR, IEC TR 61292-12 ED1: Optical amplifiers - Part 12: Optical fibre amplifiers for space division multiplexing transmission, 07/29/2022
86B/4625/DTR, IEC TR 62627-01 ED3: Fibre optic interconnecting devices and passive components - Part 01: Fibre optic connector cleaning methods, 07/29/2022

Industrial-process measurement and control (TC 65)
65C/1173/CD, IEC 61918/AMD2 ED4: Amendment 2 - Industrial communication networks - Installation of communication networks in industrial premises, 08/26/2022

Measuring equipment for electromagnetic quantities (TC 85)
85/830/CDV, IEC 61557-14 ED2: Electrical safety in low voltage distribution systems up to 1 000 V a.c and 1 500 V d.c - Equipment for testing, measuring or monitoring of protective measures - Part 14: Equipment for testing the safety of electrical equipment of machinery, 08/26/2022
85/831/CDV, IEC 61557-16 ED2: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c - Equipment for testing, measuring or monitoring of protective measures - Part 16: Equipment for testing the effectiveness of the protective measures of electrical equipment and/or medical electrical equipment, 08/26/2022
85/828/CDV, IEC 61557-7/AMD1 ED3: Amendment 1 - Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC - Equipment for testing, measuring or monitoring of protective measures - Part 7: Phase sequence, 08/26/2022
85/829/CDV, IEC 61557-9 ED4: Electrical safety in low voltage distribution systems up to 1 000 V a.c. and 1 500 V d.c. - Equipment for testing, measuring or monitoring of protective measures - Part 9: Equipment for insulation fault location in IT systems, 08/26/2022

Nanotechnology standardization for electrical and electronic products and systems (TC 113)
113/684/NP, PNW TS 113-684 ED1: Nanomanufacturing - Key control characteristics - Part 6-32: Two-dimensional materials - Charge carrier mobility, contact resistance, sheet resistance, doping, and hysteresis: Gated transfer length method, 08/26/2022

Performance of household electrical appliances (TC 59)
59K/353/NP, PNW 59K-353 ED1: Cooking fume extractors - Methods for measuring the capture efficiency, 08/26/2022
Power electronics (TC 22)
22F/889/CD, IEC 62751-2/AMD2 ED1: Amendment 2 - Power losses in voltage sourced converter (VSC) valves for high-voltage direct current (HVDC) systems - Part 2: Modular multilevel converters, 08/26/2022

Printed Electronics (TC 119)
119/391/CD, IEC 62899-302-4 ED1 Printed Electronics - Part 302-4: Medium for Inkjet printing dot placement evaluation for printed electronics, 08/26/2022

Rotating machinery (TC 2)

Secondary cells and batteries (TC 21)
21/1148/CD, IEC 61427-2 ED2: Secondary cells and batteries for renewable energy storage - General requirements and methods of test - Part 2: On-grid applications, 07/29/2022
21A/795/CDV, IEC 62620/AMD1 ED1: Amendment 1 - Secondary cells and batteries containing alkaline or other non-acid electrolytes - Secondary lithium cells and batteries for use in industrial applications, 08/26/2022

Solar photovoltaic energy systems (TC 82)
82/2064/NP, PNW 82-2064 ED1: Connectors for AC-application in photovoltaic (PV) systems - Safety requirements and tests, 08/26/2022

Standard voltages, current ratings and frequencies (TC 8)
8/1623/CD, IEC TS 62786-41 ED1: Distributed energy resources connection with the grid - Part 41 Requirements for frequency measurement used to control DER and loads, 08/26/2022

Surface mounting technology (TC 91)
91/1787/CDV, IEC 63215-2 ED1: Endurance test methods for die attach materials - Part 2: Temperature cycling test method for die attach materials applied to discrete type power electronic devices, 08/26/2022

Switchgear and Controlgear and Their Assemblies for Low Voltage (TC 121)
121A/482/CDV, IEC 60947-2 ED6: Low-voltage switchgear and controlgear - Part 2: Circuit-breakers, 08/26/2022

SYC
SyCLVC/128/CD, IEC SRD 63317 ED1: Systems Reference Deliverable (SRD) - LVDC industry applications, 08/26/2022

Wind turbine generator systems (TC 88)
88/894/DTS, IEC TS 61400-29 ED1: Wind energy generation systems - Marking and lighting of wind turbines, 08/26/2022

TC 125

ISO & IEC Draft International Standards
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

**Fasteners (TC 2)**

ISO 4042:2022, Fasteners - Electroplated coating systems, $225.00

**Fire safety (TC 92)**

ISO 3182:2022, Light measuring system for smoke emission testing, $48.00

**Fluid power systems (TC 131)**

ISO 8133:2022, Hydraulic fluid power - Mounting dimensions for accessories for single rod cylinders, 16 MPa (160 bar) compact series, $111.00

**Graphic technology (TC 130)**

ISO 19445:2022, Graphic technology - Metadata for graphic arts workflow - XMP metadata for image and document proofing, $73.00

**Light metals and their alloys (TC 79)**

ISO 18768-1:2022, Organic coatings on aluminium and its alloys - Methods for specifying decorative and protective organic coatings on aluminium - Part 1: Powder coatings, $175.00


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

ISO 3421:2022, Petroleum and natural gas industries - Drilling and production equipment - Offshore conductor design, setting depth and installation, $200.00

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

ISO 13696:2022, Optics and photonics - Test method for total scattering by optical components, $175.00

**Paper, board and pulps (TC 6)**

ISO 24215:2022, Lignins - Determination of carbohydrate composition in kraft lignin, soda lignin and hydrolysis lignin, $111.00

**Plastics (TC 61)**

ISO 14899:2022, Plastics - Polyols for use in the production of polyurethanes - Determination of basicity, $48.00

ISO 16152:2022, Plastics - Determination of xylene-soluble matter in polypropylene, $111.00

**Plastics pipes, fittings and valves for the transport of fluids (TC 138)**

ISO 13479:2022, Polyolefin pipes for the conveyance of fluids - Determination of resistance to crack propagation - Test method for slow crack growth on notched pipes, $149.00

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

ISO 1817:2022, Rubber, vulcanized or thermoplastic - Determination of the effect of liquids, $149.00

ISO 5794-1:2022, Rubber compounding ingredients - Silica, precipitated, hydrated - Part 1: Non-rubber tests, $175.00

**Small craft (TC 188)**

ISO 10592:2022, Small craft - Remote hydraulic steering systems, $149.00

**Steel (TC 17)**

ISO 4954:2022, Steels for cold heading and cold extruding, $225.00

**Technical drawings, product definition and related documentation (TC 10)**

ISO 9177-2:2022, Mechanical pencils for technical drawings - Part 2: Black leads - Classification and dimensions, $48.00
ISO Technical Reports

Ferrous metal pipes and metallic fittings (TC 5)
ISO/TR 4340:2022, Water aggressiveness evaluation and optimized lining choice, $149.00

ISO Technical Specifications

Health Informatics (TC 215)
ISO/TS 5346:2022, Health informatics - Categorial structure for representation of traditional Chinese medicine clinical decision support system, $73.00

ISO/IEC JTC 1, Information Technology

ISO/IEC 5218:2022, Information technology - Codes for the representation of human sexes, $111.00

ISO/IEC 18181-1:2022/Amd 1:2022, Amendment 1: Information technology - JPEG XL image coding system - Part 1: Core coding system - Amendment 1: Profiles and levels for JPEG XL image coding system, $20.00

IEC Standards

Cables, wires, waveguides, r.f. connectors, and accessories for communication and signalling (TC 46)
IEC 61169-71 Ed. 1.0 b:2022, Radio-frequency connectors - Part 71: Sectional specification for RF coaxial connectors with inner diameter of outer conductor 5.0 mm - Characteristic impedance 50 Ohms (type NEX10®), $259.00

Fibre optics (TC 86)
IEC 61757-4-3 Ed. 1.0 b Cor.1:2022, Corrigendum 1 - Fibre optic sensors - Part 4-3: Electric current measurement - Polarimetric method, $0.00

Industrial-process measurement and control (TC 65)
IEC 61131-9 Ed. 2.0 b:2022, Programmable controllers - Part 9: Single-drop digital communication interface for small sensors and actuators (SDCI), $443.00

IEC 62657-3 Ed. 1.0 b:2022, Industrial communication networks - Coexistence of wireless systems - Formal description of the automated coexistence management and application guidance, $259.00

IEC 62657-4 Ed. 1.0 b:2022, Industrial communication networks - Coexistence of wireless systems - Part 4: Coexistence management with central coordination of wireless applications, $417.00

Maritime navigation and radiocommunication equipment and systems (TC 80)
IEC 63173-2 Ed. 1.0 b:2022, Maritime navigation and radiocommunication equipment and systems - Data interface - Part 2: Secure communication between ship and shore (SECOM), $443.00

Power system control and associated communications (TC 57)
IEC 61970-401 Ed. 1.0 b:2022, Energy management system application program interface (EMS-API) - Part 401: Profile framework, $259.00

Primary cells and batteries (TC 35)
IEC 60086-5 Ed. 5.0 b Cor.1:2022, Corrigendum 1 - Primary batteries - Part 5: Safety of batteries with aqueous electrolyte, $0.00

Secondary cells and batteries (TC 21)
IEC 62485-5 Ed. 1.0 b Cor.1:2022, Corrigendum 1 - Safety requirements for secondary batteries and battery installations - Part 5: Safe operation of stationary lithium ion batteries, $0.00

Solar photovoltaic energy systems (TC 82)
IEC 62108 Ed. 3.0 b:2022, Concentrator photovoltaic (CPV) modules and assemblies - Design qualification and type approval, $354.00

S+ IEC 62108 Ed. 3.0 en:2022 (Redline version), Concentrator photovoltaic (CPV) modules and assemblies - Design qualification and type approval, $460.00

Steam turbines (TC 5)
IEC 60953-0 Ed. 1.0 b:2022, Rules for steam turbine thermal acceptance tests - Part 0: Wide range of accuracy for various types and sizes of turbines, $417.00

Surge arresters (TC 37)
IEC 61643-31 Ed. 1.0 b Cor.1:2022, Corrigendum 1 - Low-voltage surge protective devices - Part 31: Requirements and test methods for SPDs for photovoltaic installations, $0.00

Switchgear and controlgear (TC 17)
IEC 62271-203 Ed. 3.0 b:2022, High-voltage switchgear and controlgear - Part 203: AC gas-insulated metal-enclosed switchgear for rated voltages above 52 kV, $392.00
IEC 62271-203 Ed. 3.0 en:2022 CMV, High-voltage switchgear and controlgear - Part 203: AC gas-insulated metal-enclosed switchgear for rated voltages above 52 kV, $689.00

IEC 62271-204 Ed. 2.0 b:2022, High-voltage switchgear and controlgear - Part 204: Rigid gas-insulated transmission lines for rated voltage above 52 kV, $354.00

S+ IEC 62271-204 Ed. 2.0 en:2022 (Redline version), High-voltage switchgear and controlgear - Part 204: Rigid gas-insulated transmission lines for rated voltage above 52 kV, $460.00

IEC Technical Reports

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

IEC/TR 63065 Amd.1 Ed. 1.0 en:2022, Amendment 1 - Guidelines for operation and maintenance of line commutated converter (LCC) HVDC converter station, $25.00

IEC/TR 63065 Ed. 1.1 en:2022, Guidelines for operation and maintenance of line commutated converter (LCC) HVDC converter station, $443.00

IEC/TR 63363-1 Ed. 1.0 en:2022, <p>Performance of voltage sourced converter (VSC) based high-voltage direct current (HVDC) transmission - Part 1: Steady-state conditions</p>, $392.00
Call for Members (USNC)

USNC TAG to IEC/PC 128

The USNC TAG Secretary for the USNC TAG to IEC/PC 128 - Operation of electrical installations would like to grow the membership of the TAG. Individuals who are interested in joining the USNC TAG to IEC/PC 128 are invited to contact Betty Barro at bbarro@ansi.org as soon as possible.

Please see the scope for IEC/PC 128 – Operation of electrical installations below:

Scope

Standardization in the field of broad (general) principles of operation of electrical installations. These operating instructions are intended to ensure that all operation of and work activity on, with, or near electrical installations can be carried out safely. These are electrical installations operating at voltage levels from and including extra-low voltage up to and including high voltage. These electrical installations are designed for the generation, transmission, conversion, distribution and use of electrical power. Some of these electrical installations are permanent and fixed, such as a distribution installation in a factory or office complex, others are temporary, such as on construction sites and others are mobile or capable of being moved either whilst energised or whilst not energised nor charged.
ISO Proposal for a New Field of ISO Technical Activity

Online catering service

Comment Deadline: June 10, 2022

SAC, the ISO member body for China, has submitted to ISO a proposal for a new field of ISO technical activity on Online catering service, with the following scope statement:

*Standardization in the field of online catering service. The scope will include, but is not limited to:*
  * Vocabulary, principles, and framework of online catering service,*
  * Guidelines for service of online catering service providers, including physical restaurants, virtual kitchens/virtual restaurants*  
  * Contents and methods of meal display and information description on online catering service website/App, and accessible online ordering,*  
  * Operation management of online catering service providers, including purchasing and inventory, marketing,*  
  * Monitoring, evaluation, and improvement of service.*

*Excluded: Standardization covered by ISO/TC 34/SC 17(food safety management), ISO/TC 122(Packaging), ISO/TC 228/WG 16(Tourism and related services - Restaurants), ISO/TC 268/SC 2(Sustainable cities and communities - Sustainable mobility and transportation), ISO/TC 290(Online reputation) and ISO/TC 315(Cold chain logistics), and ISO/TC 326(Machinery intended for use with foodstuffs)*

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, June 10, 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, regulatory agencies and standards developing organizations may be interested in proposed foreign technical regulations notified by Member countries of the World Trade Organization (WTO). In accordance with the WTO Agreement on Technical Barriers to Trade (TBT Agreement), Members are required to notify proposed technical regulations that may significantly affect trade to the WTO Secretariat in Geneva, Switzerland. In turn, the Secretariat issues and makes available these notifications. The purpose of the notification requirement is to provide global trading partners with an opportunity to review and comment on the regulations before they become final.

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

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

For further information about the USA TBT Inquiry Point, please visit: https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point Contact the USA TBT Inquiry Point at (301) 975-2918; F: (301) 926-1559; E: usatbtep@nist.gov or notifyus@nist.gov.
BSR/ASHRAE Addendum s to ANSI/ASHRAE Standard 15-2019

Second Public Review Draft


Second Public Review (June 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).

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092
Second Public Review Draft (Independent Substantive Change)

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

FOREWORD

This proposed addendum s to ANSI/ASHRAE Standard 15-2019 is one of several addenda addressing the use of refrigerants other than Group A1. This proposed addendum addresses the use of refrigerant detection and mitigation requirements when a leak is detected. This second publication public review (PPR) addresses comments submitted on the first publication public review draft.

Note: This public review draft of addendum s makes proposed independent substantive changes to the previous public review draft. These substantive changes to the previous public review draft and related changes to Standard 15-2019 are indicated by blue-colored text with double-underlining (for additions) and red-colored text with strikethrough (for deletions), except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard shown in blue or red text are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.

Addendum s to Standard 15-2019

Modify Section 3 as follows. The remainder of Section 3 remains unchanged.

3. DEFINITIONS

3.1 Defined Terms

[ ... ]

air circulation: mechanically inducing airflow within a space or spaces connected by air ducts.

[ ... ]

conditioned space: an area, room, or space that is enclosed within the building thermal envelope that is directly or indirectly heated or cooled. Spaces are indirectly heated or cooled where 1. they connect through openings with conditioned spaces, 2. where they are separated from conditioned spaces by uninsulated walls, floors, or ceilings, or 3. where they contain uninsulated air ducts, tubing, or other sources of heating or cooling.

[ ... ]

don'ts: an air conditioner, heat pump, or dehumidifier in which conditioned air is distributed directly into the conditioned space from the refrigerating system without the use of air ducts.

[ ... ]

ventilation: providing a space with ventilation air.

ventilation air: air from the outdoors or another indoor space delivered to a space via mechanical methods that is intended to dilute released refrigerant.

[ ... ]

Modify Section 7 as follows. The remainder of Section 7 remains unchanged.

7. RESTRICTIONS ON REFRIGERANT USE

[ ... ]
7.6.2  **Listing and Installation Requirements.** Refrigeration systems shall be listed and shall be installed in accordance with Sections 7.6.2.1 through 7.6.2.5, the listing, the manufacturer’s instructions, and any markings on the equipment restricting the installation.

[…]

7.6.2.3*  **Manufacturer’s Refrigerant Detection Systems Detector Requirements.** The following refrigeration systems shall have an integral refrigerant detection system:

[…]

7.6.2.4*  The refrigerant detection system shall comply with the following:

a. Utilize a non-adjustable set point, non-adjustable in the field, to generate an output signal to initiate mitigation actions.

[…]

c. Capable of detecting the presence of a specified refrigerant corresponding to the refrigerant designation of the refrigerant contained in the refrigeration system. Capable of detecting the loss of the refrigerant contained in the refrigeration system.

[…]

f. Energize air circulation fans of the equipment upon failure of a self-diagnostic check.

g. Generate an output signal in not more than 30 seconds when exposed to a refrigerant concentration of 25% LFL (+0%, –1%).

7.6.2.5*  **Mitigation Action Requirements.** The output signal of Section 7.6.2.4(g) shall complete the following mitigation actions shall be completed in not more than 15 seconds after initiation of the output signal of Section 7.6.2.4(g), and shall be maintained for at least 5 minutes after the output signal has reset:

a. Energize the air circulation fan(s) of the equipment per manufacturer’s instructions.

[…]

c. Activate mechanical ventilation, if required by Section 7.6.4.

[…]

e. Activate safety shut-off valves utilized to reduce releasable refrigerant charge shall be closed.

[…]

7.6.4  **Compressors and Pressure Vessels Located Indoors.** …

[…]

b. The space where the equipment is located shall be provided with a mechanical ventilation system in accordance with Section 7.6.4(c) and a refrigerant detector refrigerant detection system in accordance with Section 7.6.2.4.5. The mechanical ventilation system shall be started when the refrigerant detector refrigerant detection system senses refrigerant in accordance with Section 7.6.2.4.5. The mechanical ventilation system shall continue to operate for at least five minutes after the refrigerant detector refrigerant detection system has sensed a drop in the refrigerant concentration below the value specified in Section 7.6.2.4(g)2.6.5(b).

[…]

**Modify Informative Appendix A as follows. The remainder of Informative Appendix A remains unchanged.**

(This appendix is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for
Second Public Review Draft (Independent Substantive Change)

a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.

INFORMATIVE APPENDIX A—EXPLANATORY MATERIAL

Sections of the standard with associated explanatory information in this appendix are marked with an asterisk “*” after the section number, and the associated appendix information is located in a corresponding section number preceded by “A”.

A3.1 Defined Terms

ventilation air: the ventilation air requirements in ANSI/ASHRAE Standard 15 are different from those in ANSI/ASHRAE Standard 62.1, Ventilation and Acceptable Indoor Air Quality, in that they are not intended to control indoor air quality. Rather, ventilation air in Standard 15 serves as a safety mitigation method for reducing the refrigerant concentration within a space.

A7.6.2.5(c) The ventilation requirements in ANSI/ASHRAE Standard 15 are different from those in ANSI/ASHRAE Standard 62.1, Ventilation and Acceptable Indoor Air Quality, in that they are not intended to control indoor air quality. Rather, ventilation in Standard 15 serves as a safety mitigation method for reducing the refrigerant concentration within a space.

A7.6.2.5(e) Safety shut-off valves located on the lowside of the refrigeration system may remain open during pumpdown to reduce releasable refrigerant charge. The pumpdown cycle should not reduce the lowside pressure below atmospheric pressure, and the safety shut-off valves must close at the end of the pumpdown cycle to be considered to meet this requirement.

A7.6.2.5(f) Potential ignition sources include those items that are defined in ANSI/UL 60335-2-40 and CAN/CSA C22.2 No. 60335-2-40, including arcs and sparks from electrical components in Clause 22.115, and hot surfaces and flames in Clause 22.117.
BSR/ASHRAE Addendum u
to ANSI/ASHRAE Standard 15-2019

First Public Review Draft

Proposed Addendum u to
Standard 15-2019, Safety Standard
for Refrigeration Systems

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

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

A continuous maintenance proposal was submitted to update the definition of approved, nationally recognized laboratory. Note that the Occupational Safety and Health Administration (OSHA) department of the United States federal government uses “nationally recognized testing laboratory” (NRTL), and this change is to align with that common usage.

Changes other than to the definition are to editorially correct the usage through ANSI/ASHRAE Standard 15-2019. Note that the definition of “listed” is not included here as it was modified by Addendum b to ANSI/ASHRAE Standard 15-2019, and Section 7.6.5 is not included here because it is being modified by draft Addendum s. Also note that Addendum e to Standard 15-2019 renumbered Sections 9.10.1 and 9.11.1 in the published version of ANSI/ASHRAE Standard 15-2019 to Sections 9.10.1.1 and 9.14.1 (without textual change), respectively.

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

Addendum u to Standard 15-2019

Modify Section 3 as follows. The remainder of Section 3 remains unchanged.

3. DEFINITIONS

3.1 Defined Terms

[ ... ]

*approved, nationally recognized testing laboratory (NRTL): a laboratory that is acceptable to the AHJ and provides uniform testing and examination procedures and standards for meeting design, manufacturing, and factory testing requirements of this code; an organization which is recognized by a national body having authority for such approval, which tests for safety, and lists, labels, or accepts, equipment or materials; is organized, equipped, and qualified for testing; and has a follow-up inspection service of the current production of the listed listed products.

[ ... ]

Modify Section 5 as follows. The remainder of Section 5 remains unchanged.

5. REFRIGERATING SYSTEM CLASSIFICATION

[ ... ]

5.3.2 The change of refrigerant shall be in accordance with one of the following:

a. Written instructions of the original equipment manufacturer

b. An evaluation of the system by a registered design professional or by a nationally recognized testing laboratory that validates safety and suitability of the replacement refrigerant
Modify Section 9 as follows. The remainder of Section 9 remains unchanged.

9. DESIGN AND CONSTRUCTION OF EQUIPMENT AND SYSTEMS

9.3.1.1 Pressure vessels having inside dimensions of 6 in. (152 mm) or less shall be
a. listed either individually or as part of an assembly by an approved, nationally recognized testing
   laboratory; or

9.10.1 Refrigerant piping, valves, fittings, and related parts having a maximum internal or external design pressure
greater than 15 psig (103.4 kPa gage) shall be listed either individually or as part of an assembly or a system
by an approved, nationally recognized testing laboratory, or shall comply with ASME B31.5 where applicable.

9.11.1 Every pressure containing component of a refrigerating system, other than pressure vessels, piping, pressure
gages, and control mechanisms, shall be listed either individually or as part of a complete refrigerating
system or a subassembly by an approved, nationally recognized testing laboratory or shall be designed, constructed, and assembled to have an ultimate strength sufficient to withstand three times the design pressure for which it is rated.

Modify Section 13 as follows. The remainder of Section 13 remains unchanged.

13. DESIGN AND CONSTRUCTION OF EQUIPMENT AND SYSTEMS

Equipment listed by an approved, nationally recognized testing laboratory, and identified as part of the listing as being in conformance with this standard, is deemed to meet the design, construction of equipment, and factory test requirement sections of this standard for the refrigerant or refrigerants for which equipment was designed.

Modify Informative Appendix A as follows. The remainder of Informative Appendix A remains unchanged.

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INFORMATIVE APPENDIX A—EXPLANATORY MATERIAL

Sections of the standard with associated explanatory information in this appendix are marked with an asterisk “*” after the section number, and the associated appendix information is located in a corresponding section number preceded by “A”.

A3.1 Defined Terms

nationally recognized testing laboratory (NRTL): For the U.S.A., the Occupational Safety and Health Administration (OSHA) is one such national body. Refer to 29 CFR 1910.7.
BSR/ASHRAE Addendum v to ANSI/ASHRAE Standard 15-2019

First Public Review Draft


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

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092
First Public Review Draft

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FOREWORD

A continuous maintenance proposal was submitted to clean up the definitions of brazed and soldered joints. This is in part due to an existing gap in the current definitions that exists between 800°F (426.5°C) and 1000°F (537.7°C). This proposed change harmonizes with definitions found in both ISO 4063:2009 and ANSI/AWS A3.0MM/A3.0:2020. No change is proposed to the definition of mechanical joint; it is provided solely for reference.

From a historical perspective, editions of Standard 15 from 1978 through 1992 used 800°F (426.5°C) in the definition of brazed joint. As a result of a change proposal, that temperature threshold was revised for editions of Standard 15 from 1994 through 2019 to be 1000°F (537.7°C or 537°C, depending on the edition). Retired members of SSPC 15 were consulted, but no clear reason for the change from 800°F (426.5°C) to 1000°F (537.7°C) was found; it was suspected that the intention was to harmonize with a U.S. regional building code of the time, rather than a technical basis or scientific definition.

Other useful information on the history of the ANSI/AWS A3.0 values: A nominal value (2 significant figures) was selected to be between the melting temperature of zinc and aluminum. While the U.S. initially selected 800°F (426.5°C) as that nominal value (AWS Brazing Manual, dated 1955), later efforts to harmonize internationally led the AWS to revise the nominal value to 840°F (450°C).

Significant figures (significant digits): Use of more than 2 significant figures is not warranted and an exact conversion between Fahrenheit and Celsius to a precision of 0.1 is not appropriate. Compliance would be determined by reporting the liquidus temperature (melting temperature) to 2 significant figures, and then applying the resultant value to determine whether the alloy would meet the brazed joint or the soldered joint definition.

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

Addendum v to Standard 15-2019

Modify Section 3 as follows. The remainder of Section 3 remains unchanged.

3. DEFINITIONS

3.1 Defined Terms

[brazed joint: a gas-tight joint obtained by the joining of metal parts with metallic mixtures or alloys that melt at liquidus temperatures above 840°F (450°C) 1000°F (537°C) but less than the melting solidus temperatures of the joined parts.]

[mechanical joint: a gas-tight joint obtained by joining metal parts with a positive-holding mechanical construction such as flanged, screwed, or flared joints or compression fittings.]

[soldered joint: a gas-tight joint formed by joining metal parts with alloys that melt at liquidus temperatures not exceeding 840°F (450°C) 800°F (426.5°C) and above 400°F (205°C204.5°C).]
BSR/ASHRAE Addendum w to ANSI/ASHRAE Standard 15-2019

First Public Review Draft


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

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ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092
First Public Review Draft

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FOREWORD

Addendum j to ANSI/ASHRAE Standard 15-2019 revised the definitions of “flammable” and “nonflammable” with the flammability classification class numbers from ANSI/ASHRAE Standard 34, Designation and Safety Classification of Refrigerants. That change will create an inconsistency within the next edition of the standard, where previously all other content within the standard made use of the safety group (a combination of both toxicity and flammability classifications) but did not make direct use of the toxicity classification alone nor the flammability classification alone. Section 6 explains how refrigerant safety classifications are used within Standard 15, but currently only describes the use of safety groups and not the individual classifications. The proposed changes resolve this inconsistency.

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

Addendum w to Standard 15-2019

Modify Section 6 as follows. The remainder of Section 6 remains unchanged.

6. REFRIGERANT SAFETY CLASSIFICATION

6.1 Single Compound Refrigerants. Single compound refrigerants shall be classified into safety groups in accordance with ASHRAE Standard 34. The classifications indicated in the referenced edition of ASHRAE Standard 34 shall be used for refrigerants that have them assigned. Other refrigerants shall be classified in accordance with the criteria in ASHRAE Standard 34; such classifications shall be submitted for approval to the authority having jurisdiction (AHJ).

6.2 Blends. Refrigerants blends shall be classified following the worst case of fractionation composition, determined in accordance with ASHRAE Standard 34. For blends assigned only a single safety group in ASHRAE Standard 34, that classification shall be used.

6.1 Refrigerants shall be assigned safety classifications in accordance with ASHRAE Standard 34.

6.2 Refrigerants with a refrigerant number designation in the referenced edition of ASHRAE Standard 34 shall use the indicated toxicity classification and flammability classification when a safety group classification is assigned by ASHRAE Standard 34.

6.3 Refrigerants without a refrigerant number designation or without a safety group classification in the referenced edition of ASHRAE Standard 34 shall be classified in accordance with the criteria in ASHRAE Standard 34, whether a single-compound refrigerant or a refrigerant blend of two or more compounds. Such safety classifications not assigned by ASHRAE Standard 34 shall be submitted for approval to the AHJ. Compliance with the requirements of this standard is contingent upon use of approved safety classifications when not assigned by the referenced edition of ASHRAE Standard 34.
BSR/ASHRAE/IES Addendum cx to ANSI/ASHRAE/IES Standard 90.1-2019

Public Review Draft


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

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

This addendum involves select Normative References that were not correctly addressed by previous updates in addendum CM. During public review of Addendum CM, commenters identified several additional Normative References to be corrected for the following organizations:

- Air Conditioning, Heating and Refrigeration Institute (AHRI)
- International Organization for Standardization (ISO)

These changes are being proposed separately from Addendum CM to ensure the original reference update does not experience delays in publication.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]
Addendum cx to 90.1-2019

Modify Section 12 as follows (IP and SI Units.) Note that the references being modified in this addendum also appear in pending Addendum cm. The versions below are intended to correct certain titles from Addendum cm; upon publication, they will appear as shown below.

<table>
<thead>
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<th>Title</th>
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<tr>
<td>AHRI 550/590 (I-P/2020) (with Addendum 1) AHRI 551/591 (SI/2020) (with Addendum 1)</td>
<td>Performance Rating of DX-Dedicated Outdoor Air System Units</td>
</tr>
<tr>
<td>ANSI/AHRI 1230 (I-P/2014/2021) with Addendum 1</td>
<td>Performance Rating of Computer and Data Processing Room Air Conditioners</td>
</tr>
<tr>
<td>AHRI Standard 1360 (I-P/2017) AHRI Standard 1361 (SI/2017)</td>
<td></td>
</tr>
</tbody>
</table>

International Organization for Standardization (ISO) ISO Central Secretariat BIBC II Chemin de Blandonnet 8, CP 401, 1214 Vernier, Geneva, Switzerland

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
</tr>
</thead>
</table>
Proposed Revision of:

Buttwelding Ends

Draft Date 05/2022

AN AMERICAN NATIONAL STANDARD
The following is a list of publications referenced in this Standard. Unless otherwise specified, the latest edition of ASME publications shall apply.

ASME B16.5, Pipe Flanges and Flanged Fittings
ASME B16.9, Factory-Made Wrought Buttwelding Fittings
ASME B16.47, Large Diameter Steel Flanges
ASME B36.10M, Welded and Seamless Wrought Steel Pipe
ASME B36.19M, Stainless Steel Pipe

Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASTM A335/A335M-15, Specification for Seamless Ferritic Alloy Steel Pipe for High-Temperature Service

ASTM E29-13, Standard Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications

Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 9000-2015, Quality management systems — Fundamentals and vocabulary
ISO 9001-2015, Quality management systems — Requirements
ISO 9004-2009, Managing for the sustained success of an organization — A quality management approach

Publisher: International Organization for Standardization (ISO), Central Secretariat, Chemin de Blandonnet B, Case Postale 401, 1214 Vernier, Geneva, Switzerland (www.iso.org)

May also be obtained from American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.
Mandatory Appendix II

References

The following is a list of publications referenced in this Standard. Unless otherwise specified, the latest edition of ASME publications shall apply.

ASME B16.5, Pipe Flanges and Flanged Fittings
ASME B16.9, Factory-Made Wrought Buttwelding Fittings
ASME B16.47, Large Diameter Steel Flanges
ASME B36.10M, Welded and Seamless Wrought Steel Pipe
ASME B36.19M, Stainless Steel Pipe
Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASTM A106/A106M-15 19a, Specification for Seamless Carbon Steel Pipe for High-Temperature Service
ASTM A335/A335M-15 21a, Specification for Seamless Ferritic Alloy Steel Pipe for High-Temperature Service

ASTM E29-13(2019), Standard Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications
Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 9000-2015, Quality management systems — Fundamentals and vocabulary¹
ISO 9001-2015, Quality management systems — Requirements¹
ISO 9004-2009, Managing for the sustained success of an organization — A quality management approach¹
Publisher: International Organization for Standardization (ISO), Central Secretariat, Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland (www.iso.org)

¹ May also be obtained from American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.
Proposed Revision of:

Wrought Copper and Wrought Copper Alloy Solder-Joint Drainage Fittings — DWV

Draft Date 05/2022
The following is a list of publications referenced in this Standard. Unless otherwise specified, the latest edition of ASME publications shall apply. Materials manufactured to other editions of the referenced ASTM standards may be used to manufacture fittings meeting the requirements of this Standard as long as the fitting manufacturer verifies that material meets the requirements of the referenced edition.

ASME B1.20.1, Pipe Threads, General Purpose (Inch)
ASME B16.22, Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
ASME B16.23, Cast Copper Alloy Solder-Joint Drainage Fittings (DWV)
Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASTM A74-16, Standard Specification for Cast Iron Soil Pipe and Fittings
ASTM B88-14, Standard Specification for Seamless Copper Water Tube

ASTM B306-13, Standard Specification for Copper Drainage Tube (DWV)
ASTM E29-13, Standard Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications
Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 9000:2015, Quality management systems — Fundamentals and vocabulary
ISO 9001:2015, Quality management systems — Requirements
ISO 9004:2009, Managing for the sustained success of an organization — A quality management approach
Publisher: International Organization for Standardization (ISO), Central Secretariat, Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland (www.iso.org)

1 May also be obtained from American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.
MANDATORY APPENDIX II
REFERENCES

The following is a list of publications referenced in this Standard. Unless otherwise specified, the latest edition of ASME publications shall apply. Materials manufactured to other editions of the referenced ASTM standards may be used to manufacture fittings meeting the requirements of this Standard as long as the fitting manufacturer verifies that material meets the requirements of the referenced edition.

ASME B1.20.1, Pipe Threads, General Purpose (Inch)
ASME B16.22, Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings
ASME B16.23, Cast Copper Alloy Solder-Joint Drainage Fittings (DWV)
Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASTM B88-1420, Standard Specification for Seamless Copper Water Tube

ASTM B306-1320, Standard Specification for Copper Drainage Tube (DWV)
ASTM E29-13(2019), Standard Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications
Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 9000:2015, Quality management systems — Fundamentals and vocabulary
ISO 9001: 2015, Quality management systems — Requirements
ISO 9004:20092018, Managing for the sustained success of an organization — A quality management approach
Publisher: International Organization for Standardization (ISO), Central Secretariat, Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland (www.iso.org)

\(^1\)May also be obtained from American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY 10036.
Proposed Revision of:

Factory-Made, Wrought Steel, Buttwelding Induction Bends for Transportation and Distribution Systems

Draft Date 05/2022

AN AMERICAN NATIONAL STANDARD
MANDATORY APPENDIX I
REFERENCES

The following is a list of publications referenced in this Standard. Unless otherwise specified, the latest edition of ASME publications shall apply.

Publisher: National Association of Corrosion Engineers (NACE International), 15835 Park Ten Place, Houston, TX 77084-4906 (www.nace.org)

ASME Boiler and Pressure Vessel Code
ASME B16.25, Buttwelding Ends
ASME B31 Code for Pressure Piping
ASME B36.10M, Welded and Seamless Wrought Steel Pipe
Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASTM A370-15, Standard Test Methods and Definitions for Mechanical Testing of Steel Products
ASTM E29-13, Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications
ASTM E140-12be1, Hardness Conversion Table for Metals
Publisher: The American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

ISO 6708:1995, Pipework components — Definition and selection of DN (nominal size)
ISO 9000:2015, Quality management systems — Fundamentals and vocabulary
ISO 9001:2015, Quality management systems — Requirements
ISO 9004:2009, Managing for the sustained success of an organization — A quality management approach
Publisher: International Organization for Standardization (ISO), Central Secretariat, Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland (www.iso.org)

SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning
Publisher: The Society for Protective Coatings (SSPC), 800 Trumbull Drive, Pittsburgh, PA 15205 (www.sspc.org)
Mandatory Appendix I References

The following is a list of publications referenced in this Standard. Unless otherwise specified, the latest edition of ASME publications shall apply.

Publisher: National Association of Corrosion Engineers (NACE International), 15835 Park Ten Place, Houston, TX 77084-4906 (www.nace.org)

ASME Boiler and Pressure Vessel Code
ASME B16.25, Buttwelding Ends
ASME B31 Code for Pressure Piping
ASME B36.10M, Welded and Seamless Wrought Steel Pipe
Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)

ASTM A370-15, Standard Test Methods and Definitions for Mechanical Testing of Steel Products
ASTM E29-13e19, Practice for Using Significant Digits in Test Data to Determine Conformance With Specifications
ASTM E140-12e12B(2019)e1, Hardness Conversion Table for Metals
Publisher: The American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C 7 0 0 , W e s t C o n s h o h o c k e n , P A 1 9 4 2 8 - 2 9 5 9 (www.astm.org)

ISO 6708:1995, Pipework components — Definition and selection of DN (nominal size)
ISO 9000:2015, Quality management systems — Fundamentals and vocabulary
ISO 9001:2015, Quality management systems — Requirements
ISO 9004:2009, Managing for the sustained success of an organization — A quality management approach
Publisher: International Organization for Standardization (ISO), Central Secretariat, Chemin de Blandonnet 8, Case Postale 401, 1214 Vernier, Geneva, Switzerland (www.iso.org)

SSPC-SP 6/NACE No. 3, Commercial Blast Cleaning
Publisher: The Society for Protective Coatings (SSPC), 800 Trumbull Drive, Pittsburgh, PA 15205 (www.sspc.org)
[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of strikeout and additions by grey highlighting. Rationale Statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard
for Wastewater Technology –

## Residential Wastewater Treatment Systems

### 2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.


NFPA 70, *National Electrical Code (NEC)*, 2020³


40 CFR Part 133, *Secondary Treatment Regulation*⁴

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² American Welding Society. 8669 NW 36 Street, #130, Miami, FL 33166-6672. <www.aws.org>

³ National Fire Protection Association. 1 Batterymarch Park, Quincy, MA 02169-7471. <www.nfpa.org>


National Archives and Records Administration, Office of the Federal Register. 7 G Street NW, Suite A-734, Washington, DC 20401. <www.ecfr.gov>
8.5.2 Class I systems

The following criteria shall be met in order for a system to be classified as a Class I residential wastewater treatment system: all requirements for each parameter shall be achieved except as provided for in Section 8.5.2.2. Sections 8.5.1.3, 8.5.1.4, and 8.5.1.5 are testing minimums. These minimums shall be attained to be considered a valid test.

8.5.2.1 EPA secondary treatment guideline parameters

2 Normative references

The following documents contain requirements that, by reference in this text, constitute requirements of this Standard. At the time of publication, the indicated editions were valid. All of the documents are subject to revision and parties are encouraged to investigate the possibility of applying the recent editions of the documents indicated below. The most recent published edition of the document shall be used for undated references.


6 American Welding Society. 8669 NW 36 Street, #130, Miami, FL 33166-6672. <www.aws.org>
NFPA 70, *National Electrical Code* (NEC), 2020

NSF/ANSI 40, *Residential Wastewater Treatment Systems*


40 CFR Part 133, *Secondary Treatment Regulation*

8.4 Criteria

8.4.1 Testing conditions

If conditions during the testing and evaluation period result in system upset, improper sampling, improper dosing, or influent characteristics outside the ranges specified in Section 8.2.1, an assessment shall be conducted to determine the extent to which these conditions adversely affected the performance of the system. Based on this assessment, specific data points may be excluded from the averages. Rationale for all data exclusions shall be documented in the final report.

8.4.2 Catastrophic site problems

In the event that a catastrophic site problem not described in this Standard including, but not limited to, influent characteristics, malfunctions of test site apparatus and acts of God, jeopardizes the validity of the performance testing, manufacturers shall be given the choice to:

— perform maintenance on the system, reinitiate system start-up procedures, and restart the performance testing; or

— with no routine maintenance performed, have the system brought back to pre-existing conditions and resume testing within 3 wk after the site problem has been identified and corrected. Data collected during the system recovery period shall be excluded from the effluent averages. “Pre-existing conditions” shall be defined as the point when the results of 1 wk worth of sampling are within 15% of the averages of the samples from the previous 3 wk of sampling.

8.4.3 Effluent quality

For purposes of determining system performance, only samples collected during design loading periods, described in Section 8.2.2, shall be used in the calculations. The data collected during the stress sequences shall not be included in the calculations but shall be included in the final report.

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7 National Fire Protection Association. 1 Batterymarch Park, Quincy, MA 02169-7471. <www.nfpa.org>


National Archives and Records Administration, Office of the Federal Register. 7 G Street NW, Suite A-734, Washington, DC 20401. <www.ecfr.gov>
BSR/UL 510, Standard for Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape

1. Proposal to make multiple changes to the Tenth Edition of the Standard for Polyvinyl Chloride, Polyethylene, and Rubber Insulating Tape, UL 510, including: revisions, clarifications, and editorial corrections.

PROPOSAL

4.4 Unless otherwise indicated for a specific test, testing of each construction in the unpigmented (natural) and heaviest pigmented loading of the darkest and lightest tapes (such as black and white) are considered to represent the range of colors for each test, if the performance characteristics are essentially the same. If the performance characteristics are not essentially the same for all specimens representing the range, acceptance shall be limited to the tape only in the colors tested, unless additional specimens in intermediate colors are provided for tests. If the tape is produced with the pigment in different layers, such as the backing, reinforcement and/or adhesive, each of those unique constructions will also require the applicable tests described within this standard. Tape constructed with a clear (transparent) overall color shall be considered a unique construction required for testing.

4.8 Another polymeric material, backing or adhesive, may be substituted in a tape having met the requirements of this standard only when the material meets the conditions in Annex B, Substitution of Materials, and compliance is determined through appropriate evaluation.

4.9 The apparatus for all the air-oven aging of specimens shall be in accordance with ASTM D5423, minimum of five air changes.

5.15 The tape shall not be acceptable if the specimens show any of the following observations after any of the five applications of flame:

a) More than 25% of the indicator flag is burned away or charred (soot that can be removed with a cloth or the fingers and brown scorching are shall be ignored); or

b) Emits flaming or glowing particles or flaming drops at any time that ignite the cotton on the burner, wedge, or floor of the enclosure (flameless charring of the cotton shall be ignored); or

c) Continues to flame longer than 60 seconds after any application of the gas flame.

6.2 The as-received tensile strength and elongation are to be determined using the apparatus described in 20.5 and the methods applicable to the particular type of tape. A second set of tape specimens (at least five specimens) is to be vertically mounted in the specimen drum of the artificial weathering apparatus described in 6.3. After a total of 720 hours of exposure, the specimens are to be removed from the drum, 50 mm (2 inches) benchmarks are to be added to each specimen, and tested for tensile strength and elongation using the methods described in Section 8 for Thermoplastic tape and 20 for Rubber tape.

8.1 The tensile strength and elongation for thermoplastic tape constructions shall be evaluated in accordance with the Breaking Strength and Elongation method in ASTM D1000, as modified with benchmarks that are 50 mm (2 inches) apart on the specimen. Measurement of elongation is to be made with reference to the center of each mark, which is, halfway between the edges.

8.3 The minimum average tensile strength and elongation values at rupture are shown in Table 8.1. The maximum load is to be noted from the dial or scale and recorded together with the original width and thickness of the specimen for use in calculating the tensile strength.

<table>
<thead>
<tr>
<th>Condition of specimens at time of measurement</th>
<th>Minimum elongation [50 mm (2 inches) benchmarks]</th>
<th>Minimum tensile strength</th>
</tr>
</thead>
</table>

Table 8.1

Physical properties of thermoplastic tape
9.1 The dielectric breakdown for thermoplastic tape constructions shall be evaluated in accordance with the Dielectric Breakdown Voltage short time method described in ASTM D1000.

10.1 The adhesion strength for thermoplastic tape constructions shall be evaluated in accordance with the Adhesion Strength to Steel and Backing method described in ASTM D1000.

12.1 Thermoplastic tape shall not be acceptable if the specimens show any of the following after conditioning and 24 hours after flexing:
   a) Cracking when flexed, or otherwise be adversely affected such as flagging greater than 2 mm (0.079 inch) (which is lifting of the terminating end of the wrapping); or
   b) Conductor shows any corrosive or adverse effects from the tape after removal; or
   c) Flagging greater than 2 mm (0.079 inch) (which is lifting of the terminating end of the wrapping).

12.2 Single layer specimens of finished tape (backing plus adhesive) shall be used. Sample sets of four specimens are to be conditioned in a full-draft circulating-air oven described in ASTM D5423, Type 2. The motor-operated fan or other means for circulating the air is to be located entirely outside the aging chamber. Unless otherwise specified, the oven shall maintain the specified temperature within ±3°C (±5.4°F). The following condition shall be conducted for the applicable backing materials:
   a) PVC backing material – 113.0 ±1.0°C (235.4 ±1.8°F) for seven days; or
   b) PE backing material – 87.0 ±1.0°C (188.6 ±1.8°F) for 60 days.

12.6 The insulated splices shall be placed in a full-draft circulating-air oven that is noted in 12.2. After 24 hours, two of the splices are to be removed from the oven, cooled in still air at a room temperature of 23.0 ±5.0°C (73.4 ±9°F) for 16 to 96 hours, and subjected to flexing as described in Section 12.7. If the tape observes any of the items indicated in 12.1, the test shall be terminated and the seven day specimens shall be removed from the oven and discarded. If the tape does not observe any of the items under 12.1, the two remaining specimens are to stay in the oven for a total conditioning time specified in 12.2 and are then to be removed from the oven, flexed, and examined, cooled in still air at a room temperature of 23.0 ±5.0°C (73.4 ±9°F) for 16 to 96 hours, and subjected to flexing as described in 12.7.

12.7 After removal from oven conditioning, the wire splices are to be tightly wrapped around the mandrel. Each consecutive wrap around the mandrel shall be placed closely as possible to the prior wrap to provide the shortest winding distance. The flexing is to be performed by holding the wire of the assembly approximately 25 mm (1 inch) to the left of the splice firmly against a mandrel consisting of a solid steel rod with a diameter of 13 mm (0.5 inch) and is rigidly supported at one end with its longitudinal axis horizontal. The end of the assembly, which includes the splice, is then to be wrapped tightly, while contacting the prior wrap, around the mandrel in a clockwise direction until approximately 25 mm (1 inch) of the wire to the right of the splice is wrapped around the mandrel. The direction of wrap is then to be reversed and continued in the counterclockwise direction until approximately 25 mm (1 inch) of the wire to the right of the splice is wrapped around the mandrel. Five clockwise operations and five counterclockwise operations followed by a clockwise unwrap are to complete the flexing procedure. Each
operation is to be conducted at a uniform rate such that the flexing procedure is completed in 15 to 25
seconds. After flexing, the tape is to be examined for cracking or other damage. In addition, upon
examination, the conductor shall show no corrosion or other adverse effects from the tape after removal
of the tape from the splices.

14.4 The apparatus for the determination of percentage deformation shall consist of:

a) An A full draft air-circulating oven capable of maintaining the required air temperature specified in 4.9
and having the characteristics required by ASTM D5374; and

b) The necessary weights needed to exert a total force of 4.90 N (500 g-f) mounted in a metal frame so
as to have free vertical movement, as illustrated in Figure 14.1. The weight shall be provided with a 9.5
±0.2 mm (0.375 ±0.010 inch) diameter flat presser foot, slightly rounded at the edges, and intended to
bear upon the specimen under test.; and

c) Dial micrometer as specified in 7.3.

14.5 The specimen is to be placed in the oven for one hour of preliminary heating at a temperature of
100.0 ±1.02.5°C (212.0 ±1.84.5°F) along with the weights and supporting frame:

a) At the end of one hour, the specimen is to be placed under the foot of one of the weights for an
additional hour, and

b) At the end of the second hour, the sample is carefully removed from under the weight and the
thickness is re-measured at the marked location within 15 seconds of removal from the oven, in the same
manner as specified in 14.3. The percent decrease in the thickness of the insulation (tape) is to be
calculated using the following formula.

15.2 An unused roll of tape is to be laid flat in a full-draft circulating-air oven operating at one of the
following temperature and times:

a) 40.0 ±1.02°C (104.0 ±1.83.6°F) for 60 days; or

b) 65.0 ±1.02°C (149.0 ±1.83.6°F) for 10 days (Alternate condition, at the manufacturer’s option).

16.1 The insulation resistance in high humidity for PVC tape shall be evaluated in accordance with the
Insulation Resistance at High Humidity method described ASTM D1000, using copper electrodes. The
conditioning temperature of specimens with the copper electrodes shall be 23.0 ±5.0°C (73.4 ±9°F).

16.3 The average resistance shall be at least 1.0 TΩ (1,000,000 MΩ) for a 25 mm (1 inch) width of tape.

20.3 The minimum average tensile strength and elongation values at rupture are shown Table 20.1. The
maximum load is to be noted from the dial or scale and recorded together with the original width and
thickness of the specimen for use in calculating the tensile strength.

<table>
<thead>
<tr>
<th>Condition of specimens at time of measurement</th>
<th>Minimum Elongation [50 mm (2 inches) bench marks]</th>
<th>Minimum tensile strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rubber tape</td>
<td>300%</td>
<td>1.7 MN/m²</td>
</tr>
<tr>
<td>Rubber tape</td>
<td>[150 mm (6 inches)]</td>
<td>(250 lbf/inches²)</td>
</tr>
<tr>
<td>23 ±5°C (73 ±9°F) and 50 ±10% RH</td>
<td></td>
<td>(171 N/cm²)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(176 gf/mm²)</td>
</tr>
</tbody>
</table>
20.9 The load at rupture, maximum load is to be noted from the dial or scale and recorded together with the original width and thickness of the specimen for use in calculating the tensile strength.

ANNEX B (INFORMATIVE)
SUBSTITUTION OF MATERIALS

B.1 Criteria for Substitution of Materials

B.1.1 Substitution of a polymeric material, backing or adhesive, shall be allowed in a tape having met the requirements of this standard only when all of the following conditions are met, and compliance is determined through appropriate evaluation:

a) There is an identical generic description (for example: PVC, Rubber, Acrylic); and

b) Tape constructed with the candidate material shall be evaluated to the required tests for the intended uses of the existing material according to its characteristics. Reduction of performance, such that the candidate polymeric material does not meet the requirements indicated Section 4 is not permitted.

Note: For example, Exposure to Heat test the original backing film observed no signs of flagging, cracking or conductor corrosion and the candidate backing film observed flagging, the candidate is considered a reduction in performance and a new unique designation shall be considered.

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BSR/UL 510A, Standard for Component Tapes


PROPOSAL

1.1 This standard covers tape having constructional features such as reinforcement, adhesive and non-adhesive, and metal foil backed tapes intended for use with finished electro-mechanical products.

3.2 The following standards are referenced in this standard, and portions of these referenced standards may be essential for compliance.

American Society for Testing and Materials (ASTM) Standards

ASTM D5374, Standard Test Methods for Forced-Convection Laboratory Ovens for Evaluation of Electrical Insulation

7.1 The apparatus for all the air-oven conditioning of specimens shall be in accordance with ASTM D5423, minimum of five air changes, Type 2. The motor-operated fan or other means for circulating the air shall be located entirely outside the conditioning chamber. Unless otherwise specified, the oven shall maintain the specified temperature within ±3°C (±5.4°F).

8.1 The requirements in Sections 9 – 12 apply to all electrical insulating tapes covered in this standard and are supplemented by additional requirements in Sections 13 – 22 in accordance with the functional uses in the end product (see Table 5.1 for guidance). Tapes constructed solely with a metallic backing or similar constructions are not intended to be installed as electrical insulation. The requirements in Sections 9 – 11 apply to all tapes used in applications where elevated temperatures are a concern. The requirements in Thickness, Section 9 and Flame Test, Section 20 apply to all tapes used in applications where flammability is a concern.

Exception: Tapes may be evaluated only for flammability property in accordance with Thickness, Section 9 and Flame Test, Section 20.

8.4 Unless otherwise indicated for a specific test, testing of each construction in the unpigmented (natural) and heaviest pigmented loading of the darkest and lightest tapes (such as black and white) are considered to represent the range of colors for each test, if the performance characteristics are essentially the same. If the performance characteristics are not essentially the same for all specimens representing the range, acceptance shall be limited to the tape only in the colors tested, unless additional specimens in intermediate colors are provided for tests. If the tape is produced with the pigment in different layers, such as the backing, reinforcement and/or adhesive, each of those unique constructions will also require the applicable tests described in this standard, basic tests in Sections 9 – 12 and any other test chosen. Tape constructed with a clear (transparent) overall color shall be considered a unique construction required for testing.

8.6 Another polymeric material, backing or adhesive, may be substituted in a tape having met the requirements of this standard only when the material meets the conditions in Annex B, Substitution of Materials, and compliance is determined through appropriate evaluation.

10 Rated Temperature (All Tapes)

10.2 The tape shall be subjected to each tests indicated in 8.1 and shall be conducted specified in Physical Properties – Tensile Strength, Section 11 and Dielectric Breakdown Test, Section 12 in the as-received condition and after 7 days (168 ±2 hours) or optionally after 60 days (1440 ±7 hours) at the exposure temperature, TE, as shown in Table 10.1.

11.1.1 The tensile strength for non-rubber tape constructions shall be evaluated in accordance with the Breaking Strength and Elongation method in ASTM D1000.
12.1 The dielectric breakdown for non-rubber and rubber tape constructions shall be evaluated in accordance with the Dielectric Breakdown Voltage short time method described in ASTM D1000.

13.1 The insulation resistance in high humidity for tapes shall be evaluated in accordance with the Insulation Resistance at High Humidity method described in ASTM D1000, using copper electrodes. The conditioning temperature of specimens with the copper electrodes shall be 23.0 ±5.0°C (73.4 ±9°F).

14.1 The CTI test shall be performed evaluated in accordance with the ASTM D3638 or IEC 60112 methods described in UL 746A. The test shall be performed on both the adhesive and backing surfaces.

14.2 A minimum of 40 specimens should be prepared, each 125 mm (5 inches) by 50 mm (5 by 2 inches) consisting of sufficient layers to build the specimen to a minimum thickness of 3 mm (0.12 inch). Specimens are to shall be adhered to a metal plate, 20 specimens with adhesive side up are to have the backing side adhered to the metal (adhesive side) plate and 20 specimens with the adhesive side down are to have the adhesive adhered to the metal plate (backing side). Samples are to shall be adequately secured to the metal plates so that they are flat and free of wrinkles, air bubbles and contamination which may appear in the layered specimen. Double sided tape may be used to adhere the backing-side to the metal plate. These samples are to be supplied with a release liner to prevent contamination.

15.1 The adhesion strength for an adhesive coated tape shall be evaluated in accordance with the Adhesion Strength to Steel and Backing method described in ASTM D1000.

16.1.2 An unused roll of tape is to be laid flat in a full-draft circulating-air oven operating at one of the following temperature and times:

a) 40.0 ±12.0°C (104.0 ±1.8°F) for 60 days; or
b) 65.0 ±12.0°C (149.0 ±1.8°F) for 10 days (Alternate condition, at the manufacturer’s option).

17.1 Tape shall not be acceptable if the specimens show any of the following after conditioning and 24 hours after flexing:

a) Cracking when flexed, or otherwise be adversely affected such as flagging greater than 2 mm (which is lifting of the terminating end of the wrapping); or
b) Conductor shows any corrosive or adverse effects from the tape after removal; or

17.2 Sample sets of four specimens shall be conditioned for 7 days, or optionally after 60 days, at the exposure temperature, TE (see Table 10.1). Conditioning is conducted in a full-draft circulating-air oven described in ASTM D5423, Type 2.

17.6 The insulated splices shall be placed in a full-draft circulating-air oven as noted in 17.4. After 24 hours, two of the splices are to be removed from the oven, cooled in still air at a room temperature of 23.0±5°C (73.4 ±9°F) for 16 to 96 hours, and subjected to flexing as described in 17.7. If the tape observes any of the items indicated in 17.1, the test shall be terminated and the 7 or 60 day specimens shall be removed from the oven and discarded. If the tape does not observe any of the items under 17.1, the two remaining specimens shall stay in the oven for a total of 7 or 60 days, and then removed from the oven, flexed, and examined, cooled in still air at a room temperature of 23.0±5°C (73.4 ±9°F) for 16 to 96 hours, and subjected to flexing as described in 17.7.

17.7 After removal from oven conditioning, the wire splices are to be tightly wrapped around the mandrel. Each consecutive wrap around the mandrel shall be placed closely as possible to the prior wrap to provide the shortest winding distance. The flexing is to be performed by holding the wire of the assembly approximately 25 mm (1 inch) to the left of the splice firmly against a mandrel consisting of a solid steel rod with a diameter of 13 mm (0.5 inch) and is rigidly supported at one end with its longitudinal axis horizontal. The end of the assembly, which includes the splice, is to then be wrapped tightly, while contacting the prior wrap, around the mandrel in a clockwise direction until approximately 25 mm (1 inch) of the wire to the right of the splice is wrapped around the mandrel. The direction of wrap is to then be reversed and continued in the counterclockwise direction until approximately 25 mm (1 inch) of the wire to
the right of the splice is wrapped around the mandrel. Five clockwise operations and five counterclockwise operations, followed by a clockwise unwrap is to complete the flexing procedure. Each operation is to be conducted at a uniform rate such that the flexing procedure is completed in 15 to 25 seconds. After flexing, the tape is to be examined for cracking or other damage. In addition, upon examination, the conductor shall show no corrosion or other adverse effects from the tape after removal of the tape from the splices.

18.1.1 The elongation for non-rubber tape constructions excluding fiber, paper, glass, polymer films with reinforcement or fabric tapes shall be evaluated in accordance with the Breaking Strength and Elongation method in ASTM D1000, as modified with benchmarks that are 50 mm (2 inches) apart on the specimen. Measurement of elongation is to be made with reference to the center of each mark, which is, halfway between the edges.

19.3 The apparatus for the determination of percentage deformation shall consist of:

a) An A full draft air-circulating oven capable of maintaining the required air temperature as specified in 7.1 and having the characteristics required by ASTM D5374; and

b) The necessary weights needed to exert a total force of 4.90 N (500 gf) mounted in a metal frame so as to have free vertical movement, as illustrated in Figure 19.1. The weight shall be provided with a 9.5 ±0.2 mm (0.375 ±0.010 inch) diameter flat presser foot, slightly rounded at the edges, and intended to bear upon the specimen under test; and

c) Dial micrometer as specified in 9.2.1.

21.2 The as-received tensile strength and elongation are to be determined using the apparatus described in 11.1.1 and 18.1.1, respectively, for non-rubber tapes and 11.2.1 and 18.2.1 for rubber tapes. A second set of tape specimens (at least five specimens) is to be vertically mounted with the backing side facing the UV source, in the specimen drum of the artificial weathering apparatus described in 21.3. After a total of 720 hours of exposure, the specimens is to be removed from the drum, 50 mm (2 inches) benchmarks are to be added to each specimen, and tested for tensile strength and elongation using the methods applicable to the particular type of tape.

ANNEX B (INFORMATIVE)
SUBSTITUTION OF MATERIALS

B.1 Criteria for Substitution of Materials

B.1.1 Substitution of a polymeric material, backing or adhesive, shall be allowed in a tape having met the requirements of this standard only when all of the following conditions are met, and compliance is determined through appropriate evaluation:

a) There is an identical generic description (for example: PVC, Rubber, Acrylic); and

b) Tape constructed with the candidate material shall be evaluate to the required tests for the functional uses of the existing material according to Table 5.1. Reduction of performance, such that the candidate polymeric material does not meet the minimum requirements indicated in General, Section 8, is not permitted; and

c) Tape classified for use as a dielectric insulator according to Table 5.1 shall meet the performance requirements:

1) Tensile strength of the tape constructed with the candidate material, tested in the as-received condition, shall be compared and shall indicate that the substitute material has a strength of at least 80 % of that of the original material.
2) Dielectric strength of the tape constructed with the candidate material, tested in the as-received condition, shall be compared and shall indicate that the substitute material has a strength of at least 80% of that of the original material.

Note: Example, Exposure to Heat test the original backing film observed no signs of flagging, cracking or conductor corrosion and the candidate backing film observed flagging, the candidate is considered a reduction in performance and a new unique designation shall be considered.
BSR/UL 1059, Standard for Terminal Blocks

1. Revisions to Supplement for Short Circuit Testing

PROPOSAL

SA2.1.2 If the specified protective device related to the short circuit current rating is a fuse, a fuse of a different class may be substituted for the specified fuse and maintain the same short-circuit current rating if the peak let-through current and $I^2t$ of the substitute fuse is not greater than that of the specified fuse.

See Table SA2.1 for peak let-through currents and $I^2t$ values for common classes of fuses. Refer to the applicable fuse Standards for peak let-through currents and $I^2t$ values that are not provided in Table SA2.1.

SA2.1.2A For terminal blocks intended to be used with fuses, the protective devices used for the test are to be selected as follows:

a) Fuses specified for terminal blocks rated over 10,000 amperes shall be limited to high-interrupting capacity, current-limiting types – for example, Class CC, G, J, L, R, and T.

b) A terminal block rated for use with RK1 or RK5 fuses is to be tested with fuses having $I^2t$ and $I_p$ characteristics for Class RK5 fuses. All references to Class R fuses are intended to mean fuses with energy let-through ($I^2t$), characteristics of Class RK5 fuses.

Exception No. 1: A terminal block marked to restrict its use to RK1 fuses is able to be tested with fuses having energy let-through characteristics of a Class RK1 fuse.

c) A Class CC, G, J, L, R, or T fuse is to be selected such that, when tested on a single-phase circuit, the peak let-through current and clearing $I^2t$ are not less than the maximum value established for the fuse. For a fuse with $I_p$ and $I^2t$ limits established for several different short-circuit current levels, the test fuse is to be selected to have at least the maximum values of the current corresponding to the marked short-circuit current rating of the terminal block. See Table SA2.1 for peak let-through currents and $I^2t$ values for common classes of fuses. Refer to the applicable fuse Standards for peak let-through currents and $I^2t$ values that are not provided in Table SA2.1.

Exception No. 2: A test limiter is able to be used in place of the fuses.

SA2.5 Calibration characteristics for protective device

SA2.5.1 To obtain the required values specified in SA2.1.2A(c), it may be necessary to employ a fuse or current limiter larger than that specified for use with the terminal block being tested; or a commercially available test fuse designed and calibrated to exhibit $I^2t$ and $I_p$ characteristics at least equal to the maximum permitted limits for the fuse or current limiter. The let-through characteristics are to be determined in accordance with SA2.5.3 – SA2.5.5.
SA2.5.2 Fuses or current limiters used for tests are to be selected from a batch from which two samples have been selected. The value of the $I_p$ and $I^2t$ determined for the two selected samples is to be equal to or greater than the required values. These determinations are to be made in accordance with SA2.5.3 - SA2.5.5.

SA2.5.3 Figure SA2.4 is typical of oscillograms obtained during the test of a fuse or current limiter on an alternating-current circuit; and represents a circuit that opened before the current could reach its first major peak. The peak let-through current $I_p$ is to be determined as illustrated.

![Figure SA2.4 Peak let-through current](image)

SA2.5.4 The let-through energy ($I^2t$) is to be determined from an oscillogram showing a current trace during the interruption of the circuit by the fuse or current limiter. The determination is to be made by the application of Simpson’s rule illustrated in Figure SA2.5 or the use of an integrating planimeter.

![Figure SA2.5 Application of Simpson’s Rule to fuse current oscillogram to obtain let-through $I^2t$](image)
SA2.5.5 The time base in degrees-per-inch (degrees/cm) is to be determined by averaging the distance, between zero-line crossover points of the voltage wave or a timing wave, in which the fuse-current trace is most nearly centered.

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BSR/UL 1083, Standard for Household Electric Skillets and Frying-Type Appliances

1. Addition of UL 969A as a replacement to Existing Permanency of Marking Requirements for Cord Tags

PROPOSAL

50 Test for Permanence of Cord Tag - Deep Fryers and Cooker/Fryers

50.1 General

50.1.1 To determine compliance with 54.14 and 54.15, a cord tag shall comply with the Standard for Marking and Labeling Systems – Flag Labels, Flag Tags, Wrap-Around Labels and Related Products, UL 969A, for the cord type it is applied to, occasional exposure to cooking oil, and to the environmental conditions consistent with the intended use of the product (e.g. indoor-dry, indoor, or outdoor use) and occasional exposure to cooking oil. The cord tag shall be a flag-type tag with an adhesive back. The tag is to be wrapped tightly once around and is to adhere to the power supply cord. The ends of the tag are to adhere to each other and project as a flag. The required markings are to be positioned on the projecting flag portion of the tag. Representative samples that have been subjected to the tests described in 50.1.3 - 50.2.1 shall meet the following requirements:

   a) The tag shall resist tearing for longer than 1/16 inch (1.6 mm) at any point;

   b) The tag shall not separate from the power supply cord;

   c) There shall be no permanent shrinkage, deformation, cracking, or any other condition that renders the marking on the tag illegible; and

   d) Overlamination shall remain in place and not be torn or otherwise damaged. The printing shall remain legible.

50.2 Test method

50.2.1 Each sample is to consist of a length of power supply cord to which the tag has been applied. The power supply cord, with the attachment plug pointing up, is to be held tautly in a vertical plane. A force of 5 lbf (22.2 N) is to be applied to the upper-most corner of the tag farthest from the power supply cord, within 1/4 inch (6.4 mm) of the vertical edge of the tag. The force is to be applied vertically downward in a direction parallel to the major axis of the cord. In determining compliance with 50.1.1(c), manipulation is permissible, such as straightening of the tag by hand. To determine compliance with 50.1.1(d), each sample is to be scraped 10 times across printed areas and edges, with a force of approximately 2 lbf (8.9 N), using the edge of a 5/64 inch (2.0 mm) thick steel blade held at a right angle to the test surface.

54.14 A deep cooker/fryer; or a skillet or fry pan shall be provided with a tag that is permanently attached to the power supply cord located within 2 inches (51 mm) of the plug when shipped from the factory. The
tag material and means of attachment to the power supply cord shall comply with the requirements in Test for Permanence of Cord Tag - Deep Fryers and Cooker/Fryers, Section 50. The tag shall contain the word “WARNING” and the following instructions or the equivalent:

**WARNING**

SERIOUS HOT-OIL BURNS MAY RESULT FROM A DEEP FRYER (COOKER/ FRYER, SKILLET, OR FRY PAN) BEING PULLED OFF A COUNTERTOP. DO NOT ALLOW THE CORD TO HANG OVER THE EDGE OF THE COUNTER WHERE IT MAY BE GRABBED BY CHILDREN OR BECOME ENTANGLED WITH THE USER.

DO NOT USE WITH AN EXTENSION CORD.

The words “WARNING” and “DO NOT USE WITH AN EXTENSION CORD” in the above marking shall be in red letters at least 3/16 inch (4.8 mm) in height. All other letters on the tag shall be black and not less than 1/16 inch (1.6 mm) in height. All letters shall be uppercase.

*Exception:* A skillet or fry pan having a power supply cord no longer than 42 inches as measured from the face of the plug to the entrance of the cord into the appliance, need not be provided with the tag specified in 54.14.

56.11 The instructions required in 10.1.3 shall include the following information:

a) A short power-supply cord (or detachable power-supply cord) is to be provided to reduce the risk resulting from becoming entangled in or tripping over a longer cord.

b) Longer detachable power-supply cords or extension cords are available and may be used if care is exercised in their use.

*Exception:* An extension cord or longer detachable cord is not recommended for use with deep fryers and cooker/fryers.

c) If a long detachable power-supply cord or extension cord is used:

1) The marked electrical rating of the cord or extension cord should be at least as great as the electrical rating of the appliance;

2) If the appliance is of the grounded type, the extension cord should be a grounding 3-wire cord; and

3) The longer cord should be arranged so that it does not drape over the countertop or table top where it can be pulled on by children or tripped over unintentionally.

*Exception:* Statements in items (b) and (c) above may be omitted if the product complies with all of the following:

a) The instruction manual includes a statement prohibiting the use of a longer detachable power supply cord or extension cord.

b) The appliance is provided with a cord tag marked “CAUTION: Do not use an extension cord” or equivalent. The tag shall be permanently attached to the power supply cord, and located within 2 inches (51 mm) of the plug when shipped from the factory. The tag material and means of attachment to the power supply cord shall comply with the requirements in Test for Permanence of Cord Tag - Deep Fryers and Cooker/Fryers, Section 50.
UL 62841-2-3 Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery – Safety – Part 2-3: Particular Requirements For Hand-Held Grinders, Disc-Type Polishers And Disc-Type Sanders

1. Proposed Adoption of Corrigendum 1 for IEC 62841-2-3

PROPOSAL

K.8.14.1.101.2 Safety instructions for all operations

Replacement of item j):

j) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.

NOTE 101 The above warning is omitted, if polishing or sanding are the only intended operations.

Item k) is not applicable.

K.8.14.1.101.2DV Modification: Replace Clause K.8.14.1.101.2 of the Part 2 with the following:

K.8.14.1.101.2DV Safety instructions for all operations

Replacement of item k):

k) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting accessory may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.

NOTE 101 The above warning is omitted, if polishing or sanding are the only intended operations.

Item l) is not applicable.

Replacement of item k):

k) Hold the power tool by insulated gripping surfaces only, when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and could give the operator an electric shock.

NOTE 101 The above warning is omitted, if polishing or sanding are the only intended operations.

Item l) is not applicable.

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