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.
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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. Fax: 212-840-2298; e-mail: psa@ansi.org

* Standard for consumer products
Comment Deadline: November 11, 2018

API (American Petroleum Institute)

Supplement
This standard specifies requirements for the following drill stem elements: upper and lower Kelly valves; square and hexagonal Kellys; drill stem subs; standard steel and non-magnetic drill collars; drilling and coring bits. This standard is not applicable to drill pipe and tool joints, rotary-shouldered connection designs, thread-gauging practice, or grand master, reference master and working gauges.
Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: cocob@api.org

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

Addenda
BSR/ASHRAE Addendum 62.1i-201x, Ventilation for Acceptable Indoor Air Quality (addenda to ANSI/ASHRAE Standard 62.1-2016)
The current scope of Standard 62.1 contains informative text and is also unclear in the current Section 2.3 regarding when or where additional ventilation requirements apply. This proposed addendum removes informative text that is not scope definition and clarifies when the standard does not provide ventilation rates. Addendum h adds informative text to Informative Appendix G – Application.
Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Online Comment Database at https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts

AWS (American Welding Society)

Addenda
This specification provides the general welding requirements for welding aircraft and space hardware. It includes but is not limited to the fusion welding of aluminum-based, nickel-based, iron-based, cobalt-based, magnesium-based, and titanium-based alloys using electric arc and high-energy beam processes. There are requirements for welding design, personnel and procedure qualification, inspection, and acceptance criteria for aerospace, support, and non-flight hardware. Additional requirements cover repair welding of existing hardware.
Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: mdiaz@aws.org

UL (Underwriters Laboratories, Inc.)

Revision
This proposal includes revisions to clarify the inclusion of the use of electronic medium for required documentation based on the responses to comments received on the Proposal dated August 24, 2018.
Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Vickie Hinton, (919) 549-1851, Vickie.T.Hinton@ul.com

BSR/UL 2353-201x, Standard for Safety for Single- and Multi-Layer Insulated Winding Wire (revision of ANSI/UL 2353-2016)
(1) Revision to insulation thickness.
Click here to view these changes in full
Send comments (with copy to psa@ansi.org) to: Megan Monsen, (847) 664-1292, megan.monsen@ul.com
Comment Deadline: November 26, 2018

AAFS (American Academy of Forensic Sciences)

**New Standard**

BSR/ASB Std 019-201x, Wildlife Forensics General Standards (new standard)

This document provides minimum standards and recommendations for practicing wildlife forensic analysts. This document covers good laboratory practices, evidence handling, and training as well as considerations of taxonomy and reference collections that are specific to wildlife forensic science.

Single copy price: Free

Obtain an electronic copy from: http://asb.aafs.org/

Order from: Document will be provided electronically on AAFS Standards Board website free of charge.

Send comments (with copy to psa@ansi.org) to: asb@aafs.org. This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: https://asb.aafs.org/notification-of-standard-development-and-coordination/

BSR/ASB Std 028-201x, Wildlife Forensics Morphology Standard (new standard)

This document describes morphology, which is the study of form. In a wildlife forensic context, it is the discipline using physical comparison to identify wildlife parts and products, typically to the family, genus, or species source. Depending on the nature of the evidence, a variety of macroscopic and microscopic comparison techniques may be employed.

Single copy price: Free

Obtain an electronic copy from: http://asb.aafs.org/

Order from: Document will be provided electronically on AAFS Standards Board website free of charge.

Send comments (with copy to psa@ansi.org) to: asb@aafs.org. Document and comments template can be viewed on the AAFS Standards Board website at: https://asb.aafs.org/notification-of-standard-development-and-coordination/

BSR/ASB Std 029-201x, Wildlife Forensics Report Writing Standard (new standard)

This document describes the information to be provided in reports of wildlife forensic examinations for use in legal proceedings. Requirements for both genetic and morphological examination reports are covered. Forensic reports serve a variety of audiences, and must provide a clear and concise summary of methods, results and limitations for the use of the investigator, the court, and the litigants.

Single copy price: Free

Obtain an electronic copy from: http://asb.aafs.org/

Order from: Document will be provided electronically on AAFS Standards Board website free of charge.

Send comments (with copy to psa@ansi.org) to: asb@aafs.org. This is a public comment period for a recirculation. Updated document, redline version, and comments can be viewed on the AAFS Standards Board website at: https://asb.aafs.org/notification-of-standard-development-and-coordination/

API (American Petroleum Institute)

**Supplement**

BSR/API RP 2E/Q/ISO 19901-2-2004-201x, Petroleum and natural gas industries - Specific requirements for offshore structures - Part 2: Seismic design procedures and criteria (supplement to ANSI/API Recommended Practice 2EQ-2014)

This standard contains requirements for defining the seismic design procedures and criteria for offshore structures. The requirements are applicable to fixed steel structures and fixed concrete structures. The effects of seismic events on floating structures and partially buoyant structures are also briefly discussed. The site-specific assessment of jack-ups in elevated condition is only covered to the extent that the requirements are applicable. Only earthquake-induced ground motions are addressed in detail. Other geologically induced hazards such as liquefaction, slope instability, faults, tsunamis, mud volcanoes, and shock waves are mentioned and briefly discussed. For high seismic areas and/or high-exposure-level fixed structures, a site-specific seismic hazard assessment is required; for such cases, the procedures and requirements for a site-specific probabilistic seismic hazard analysis (PSHA) are addressed. However, a thorough explanation of PSHA procedures is not included. Where a simplified design approach is allowed, worldwide offshore maps are included in Annex B that show the intensity of ground shaking corresponding to a return period of 1000 years. In such cases, these maps may be used with corresponding scale factors to determine appropriate seismic actions for the design of a structure.

Single copy price: $50.00

Obtain an electronic copy from: cocob@api.org

Send comments (with copy to psa@ansi.org) to: cocob@api.org
**ASABE (American Society of Agricultural and Biological Engineers)**

**Reaffirmation**

BSR/ASABE S516-2014 (R201x), Terminology for Forest Operations and Equipment (reaffirmation of ANSI/ASABE S516-2014)

This Standard specifies terminology for operations and equipment commonly used to establish, tend, and harvest forest stands. The intent of this Standard is to establish uniform terminology to describe forest operations and equipment in technical papers, specifications, standards, and general use.

Single copy price: 65.00 (non-members) / $44.00 (ASABE members)

Obtain an electronic copy from: brace@asabe.org

Order from: Walter Brace, (269) 932-7009, brace@asabe.org

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


This International Standard specifies terms and definitions, establishes test procedures, and creates minimum performance requirements for telescopic mechanical screw-type jacks or hydraulic jacks mounted on agricultural implements as original equipment and/or replacement jacks. Furthermore, this International Standard defines terms, establishes test procedures, and creates minimum acceptance criteria for the use of telescopic mechanical screw-type jacks or hydraulic jacks mounted on agricultural implements as original equipment jacks or jacks fitted with a jack attachment mounts (both weld-on and removable). In addition, it specifies minimum markings and information for use to be provided by the jack manufacturer. These jacks are used specifically for supporting the hitch points of towed agricultural implements during storage, lifting and lowering of implement hitches to facilitate attaching to or disconnecting from an agricultural tractor or other agricultural machines, and leveling of machinery for stationary use.

Single copy price: 65.00 (non-members) / $44.00 (ASABE members)

Obtain an electronic copy from: brace@asabe.org

Order from: Walter Brace, (269) 932-7009, brace@asabe.org

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


This International Standard specifies the preferred method of operation and requirements related to operator controls actuated by hand and foot, installed in agricultural tractors and self-propelled agricultural machinery and used by a seated operator as intended and under the conditions foreseen by the manufacturer. It also gives recommendations for the maximum control actuating forces, direction of motion, and location of these controls.

Single copy price: 65.00 (non-members) / $44.00 (ASABE members)

Obtain an electronic copy from: brace@asabe.org

Order from: Walter Brace, (269) 932-7009, brace@asabe.org

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


Many natural, man-made, and unexpected events (i.e., power interruptions, equipment failures, extreme weather condition, storms, and natural disasters) occur requiring temporary emergency ventilation and care of livestock and poultry. These events may require either short term (i.e., minutes to days) or long term (i.e., weeks to months) temporary emergency ventilation. The purpose of this Engineering Practice is to provide data and guidelines to assist designing emergency ventilation, feeding, watering, and lighting systems for livestock and poultry.

Single copy price: 65.00 (non-members) / $44.00 (ASABE members)

Obtain an electronic copy from: walsh@asabe.org

Order from: Jean Walsh, (269) 932-7027, walsh@asabe.org

Send comments (with copy to psa@ansi.org) to: Same
BSR/ASAE S423.1-2014 (R201x), Thermal Performance Testing of Open-Loop Solar Ambient Air Heaters with Defined Inlet and Outlet Conditions (reaffirmation of ANSI/ASAE S423.1-2014)

The purpose of this Standard is to provide a method for testing the thermal efficiency of open-looped solar air heaters which are used exclusively for heating ambient air. The test data should provide a basis for computing technical performance and for comparing efficiency of collectors of different design and/or construction. Examples of use of solar ambient air heaters are preheating of ventilation air, heating make-up air for all types of environmental control systems, and heating of air to dry agricultural products without recirculation. This test procedure simplifies the testing equipment needs, procedures and computations as compared to the currently recognized methods. The scope of this Standard is restricted to collectors which have a fixed orientation and slope during the test and are used exclusively for heating ambient air with defined inlet and outlet conditions. This Standard provides the method for using a 6-hour continuous test consisting of twenty-four 15-minute test periods.

Single copy price: 65.00 (non-members) / $44.00 (ASABE members)

Obtain an electronic copy from: brace@asabe.org

Order from: Walter Brace, (269) 932-7009, brace@asabe.org

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

BSR/ASAE S289.2 FEB1998 (R201x), Concrete Slip-Form Canal Linings (reaffirmation of ANSI/ASAE S289.2 FEB1998 (R2013))

This standard is to provide standards and specifications for the installation of concrete slip-form canal linings in the interest of reducing costs and assuring quality control.

Single copy price: $65.00

Obtain an electronic copy from: walsh@asabe.org

Order from: Jean Walsh, (269) 932-7027, walsh@asabe.org

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

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

Addenda

BSR/ASHRAE Addendum 135bs-201x, BACnet - A Data Communication Protocol for Building Automation and Control Networks

(addenda to ANSI/ASHRAE Standard 135-2016)

The current standard does not address the need of elevator applications regarding BIBBs and device profiles. The addendum adds new elevator application specific BIBBs and device profiles.

Single copy price: $35.00

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

Order from: standards.section@ashrae.org

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

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

Revision


This revision of ANSI/ASHRAE Standard 30-2017 prescribes methods of testing to measure the thermal capacity, energy efficiency, and water pressure drop of packaged liquid chiller equipment using a refrigerant vapor compression cycle.

Single copy price: $35.00

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

Order from: standards.section@ashrae.org

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

BSR/ASHRAE Standard 146-201x, Method of Test for Rating Pool Heaters (revision of ANSI/ASHRAE Standard 146-2011)

This revision of ANSI/ASHRAE Standard 146-2011 provides methods of testing for rating pool heaters, heating capacity, and energy efficiency.

Single copy price: $35.00

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

Order from: standards.section@ashrae.org

Send comments (with copy to psa@ansi.org) to: http://www.ashrae.org/standards-research--technology/public-review-drafts
**ASME (American Society of Mechanical Engineers)**

**Revision**

BSR/ASME A120.1-201x, Safety Requirements for Powered Platforms and Traveling Ladders and Gantries for Building Maintenance (revision of ANSI/ASME A120.1-2014)

This Standard establishes safety requirements for powered platforms (scaffolds) for buildings where window cleaning and related services are accomplished by means of suspended equipment at heights in excess of 35 ft (11 m) above a safe surface (e.g., grade, street, floor, or roof level). Additionally, this Standard establishes safety requirements for permanent traveling ladders and gantries (TLG).

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

Order from: Mayra Santiago, ASME; ansibox@asme.org

Send comments (with copy to psa@ansi.org) to: Elijah Dominguez, (212) 591-8521, domingueze@asme.org

BSR/ASME B31.12-201x, Hydrogen Piping and Pipelines (revision of ANSI/ASME B31.12-2014)

This Code is applicable to piping in gaseous and liquid hydrogen service and to pipelines in gaseous hydrogen service. This Code is applicable up to and including the joint connecting the piping to associated pressure vessels and equipment but not to the vessels and equipment themselves. It is applicable to the location and type of support elements but not to the structure to which the support elements are attached. The design for pressure and temperature shall be in accordance with the requirements of Part IP for industrial piping and Part PL for pipelines.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

Order from: Mayra Santiago, ASME; ansibox@asme.org

Send comments (with copy to psa@ansi.org) to: Justin Wu, (212) 591-7074, wuj@asme.org

BSR/ASME BPVC Section III-201x, Rules for Construction of Nuclear Facility Components (revision of ANSI/ASME BPVC Section III-2017)

The rules of this Section constitute requirements for the design, construction, stamping, and overpressure protection of items used in nuclear power plants and other nuclear facilities. This Section consists of the following divisions:

(a) Division 1. Metallic vessels, heat exchangers, storage tanks, piping systems, pumps, valves, core support structures, supports, and similar items;

(b) Division 2. Concrete containments with metallic liners;

(c) Division 3. Containment Systems for Spent Nuclear Fuel and High-Level Radioactive Material;

(d) Division 4. Components for fusion devices; and

(e) Division 5. High temperature reactors, vessels, storage tanks, piping, pumps, valves, core support structures and non-metallic core components for use in nuclear power plants and other nuclear facilities.

Single copy price: Free

Obtain an electronic copy from: http://cstools.asme.org/publicreview

Order from: Mayra Santiago, ASME; ansibox@asme.org

Send comments (with copy to psa@ansi.org) to: Allyson Byk, (212) 591-8521, byka@asme.org

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

**Revision**

BSR/ASSP Z359.7-201x, Qualification and Verification Testing of Fall Protection Products (revision and redesignation of ANSI/ASSE Z359.7-2011)

This standard specifies requirements for qualification and verification testing of ANSI/ASSP Z359, Fall Protection Code, products. It includes requirements for third-party testing, witness testing and manufacturer testing of fall protection products to the requirements of the ANSI/ASSP Z359 standards.

Single copy price: $99.00

Obtain an electronic copy from: OMunteanu@ASSP.org

Order from: Ovidiu Munteanu, (847) 232-2012, OMunteanu@ASSP.org

Send comments (with copy to psa@ansi.org) to: Same
HI (Hydraulic Institute)

New Standard

BSR/HI 14.3-201x, Rotodynamic Pumps for Design and Application (new standard)

The purpose and aims of the Hydraulic Institute are to promote the advancement of the pump manufacturing industry and further the interests of the public and to this end, among other things.

Single copy price: Free

Obtain an electronic copy from: tserazi@pumps.org

Order from: Tori Serazi, (973) 267-9700, tserazi@pumps.org

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

HI (Hydraulic Institute)

Revision

BSR/HI 9.6.9-201x, Rotary Pumps Guidelines for Condition Monitoring (revision of ANSI/HI 9.6.9-2013)

This guideline is for rotary pumps, including both sealed and sealless pump designs as stated in each section.

Single copy price: $70.00

Obtain an electronic copy from: tserazi@pumps.org

Order from: Tori Serazi, (973) 267-9700, tserazi@pumps.org

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

ICE (Institute for Credentialing Excellence)

Revision

BSR/ICE 1100-201x, Standard for Assessment-Based Certificate Programs (revision and redesignation of ANSI/NOCA 1100-2009)

This standard pertains to assessment-based certificate programs. An assessment-based certificate program is a non-degree granting program that: (a) provides instruction and training to aid participants in acquiring specific knowledge, skills, and/or competencies associated with intended learning outcomes; (b) evaluates participants’ accomplishment of the intended learning outcomes; and (c) awards a certificate only to those participants who meet the performance, proficiency, or passing standard for the assessment(s) (hence, the term, “assessment-based certificate program”).

Single copy price: Free

Obtain an electronic copy from: standards@credentialingexcellence.org

Send comments (with copy to psa@ansi.org) to: standards@credentialingexcellence.org

PLASTICS (Plastics Industry Association)

Reaffirmation

BSR/PLASTICS B151.20-2013 (R2018), Safety Requirements for Plastic Sheet Production Machinery (reaffirmation and redesignation of ANSI/SPI B151.20-2013)

The requirements of this standard shall apply to plastic sheet production machinery. This standard also specifies safety requirements relating to the design and construction of multi-roll calenders intended for the processing of plastics and concerns the calender including all components fixed to its frame.

Single copy price: Free

Obtain an electronic copy from: mhayes@plasticsindustry.org

Order from: Megan Hayes, (202) 974-5217, mhayes@plasticsindustry.org

Send comments (with copy to psa@ansi.org) to: Same
UL (Underwriters Laboratories, Inc.)

New National Adoption

BSR/UL 62841-3-12-201x, Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-12 Particular Requirements for Transportable Threading Machines (identical national adoption of IEC 62841-3-12)

(1) Proposed adoption of the first edition of IEC 62841-3-12, Standard for Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-12: Particular Requirements for Transportable Threading Machines, as the first edition of UL 62841-3-12.

Single copy price: Free

Obtain an electronic copy from: http://www.shopulstandards.com

Send comments (with copy to psa@ansi.org) to: Elizabeth Northcott, (847) 664-3198, Elizabeth.Northcott@ul.com

UL (Underwriters Laboratories, Inc.)

Reaffirmation

BSR/UL 1062-2014 (R201x), Standard for Safety for Unit Substations (reaffirmation of ANSI/UL 1062-2014)

The intent of this project is to reaffirm UL 1062 as an American National Standard.

Single copy price: Free

Obtain an electronic copy from: http://www.shopulstandards.com

Send comments (with copy to psa@ansi.org) to: Derrick Martin, (510) 319-4271, Derrick.L.Martin@ul.com

BSR/UL 1692-2009 (R201x), Standard for Safety for Polymeric Materials - Coil Forms (reaffirmation of ANSI/UL 1692-2009 (R2014))

The intent of this project is to reaffirm UL 1692 as an American National Standard.

Single copy price: Free

Obtain an electronic copy from: http://www.shopulstandards.com

Send comments (with copy to psa@ansi.org) to: Derrick Martin, (510) 319-4271, Derrick.L.Martin@ul.com

VITA (VMEbus International Trade Association (VITA))

Revision

BSR/VITA 46.0-201x, VPX Baseline Standard (revision of ANSI/VITA 46.0-2013)

This standard describes VITA 46.0 VPX Baseline Standard, an evolutionary step forward for the provision of high-speed interconnects in harsh environment applications.

Single copy price: $25.00

Obtain an electronic copy from: admin@vita.com

Send comments (with copy to psa@ansi.org) to: admin@vita.com
Comment Deadline: December 11, 2018

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

BOMA (Building Owners and Managers Association)

Revision

BSR/BOMA Z65.3-201x, Gross Areas of a Building: Standard Methods of Measurement (revision of ANSI/BOMA Z65.3-2009)

The purpose of the Gross Areas Standard is to provide a comprehensive and consistent methodology for measuring all building types while presenting the data in various ways that are useful to the stakeholders of any given property. This BOMA Gross Areas Standard includes four new Gross Area methods, known as Gross Area 1 (Leasing Method), Gross Area 2 (Valuation Method), Gross Area 3 (Volumetric Method) and Gross Area 4 (Construction Method). This new categorized and systematic approach provides users with an unlimited number of possible ways to dissect and analyze the areas of a building. This 2018 Gross Areas Standard includes many new features, enhancements, and clarifications. Key among them are compatibility with the International Property Measurement Standards (IPMS), greater variety of potential use cases and use by other industries, improved text and illustrations throughout, helpful hints, and an easier step-by-step layout among other things. It also addresses many questions that users have asked about previous versions of the standard.

Single copy price: Free of charge

Obtain an electronic copy from: tjohnston@boma.org

Send comments (with copy to psa@ansi.org) to: tjohnston@boma.org

IEEE (Institute of Electrical and Electronics Engineers)

Addenda

BSR/IEEE 802.11ak-201x, Standard for Information technology -Telecommunications and information exchange between systems Local and metropolitan area networks-Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment 4: Enhancements for Transit Links within Bridged Networks (addenda to ANSI/IEEE 802.11-2003)

This amendment specifies protocols, procedures, and managed objects to enhance the ability of IEEE P802.11 media to provide internal connections as transit links within IEEE Std 802.1Q bridged networks.

Single copy price: $94.00 (pdf); $118.00 (print)

Order from: https://www.techstreet.com/ieee

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org


To amend the guide to add guidelines for producing reusable TSFs for use on platforms utilizing ATML, and produce example TSFs showing conformance with the guidelines.

Single copy price: $52.00 (pdf); $64.00 (print)

Order from: https://www.techstreet.com/ieee

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

IEEE (Institute of Electrical and Electronics Engineers)

New Standard

BSR/IEEE 2030.101-201x, Guide for Designing a Time Synchronization System for Power Substations (new standard)

This guide covers the design, installation and monitoring of time synchronization systems in power utility substations. This includes time sources such as Global Positioning Satellite (GPS) and time distribution systems such as Inter-Range Instrumentation Group-B (IRIG-B), Network Time Protocol (NTP) or Simple Network Time Protocol (SNTP), and IEEE Std C37.238™ plus IEC/IEEE 61850-9-3 Precision time protocol profiles for power utility automation. This guide assumes that the time source and the Intelligent Electronic Device (IED) have accurate clocks.

Single copy price: $145.00 (pdf); $181.00 (print)

Order from: https://www.techstreet.com/ieee

Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org
BSR/IEEE C37.100.2-201x, Standard for Common Requirements for Testing of AC Capacitive Current Switching Devices over 1000 V (new standard)

This standard provides common requirements for testing of ac capacitive current switching devices over 1000V.

Single copy price: $60.00 (pdf); $75.00 (print)
Order from: https://www.techstreet.com/ieee
Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

IEEE (Institute of Electrical and Electronics Engineers)

Revision

BSR/IEEE 1527-201x, Recommended Practice for the Design of Buswork Located in Seismically Active Areas (revision of ANSI/IEEE 1527-2006)

This document provides recommended practices for the engineering and design of flexible and rigid bus connections for bus and equipment in electric power substations located in seismically active areas. It covers the design of buswork connections in the seismic qualification of equipment covered within the scope of IEEE Std 693.

Single copy price: $94.00 (pdf); $118.00 (print)
Order from: https://www.techstreet.com/ieee
Send comments (with copy to psa@ansi.org) to: k.evangelista@ieee.org

UL (Underwriters Laboratories, Inc.)

Revision


Proposed revisions to the 7th Edition of UL 268, a binational smoke detector standard with ULC-S529 containing requirements serving both Canada and the United States. Proposals include revisions to the sensitivity, fire, audibility, stability, and cooking nuisance tests and a new Go/No-Go Flaming Polyurethane Foam Test. Additional proposals include revisions for nuisance sensor requirements, firmware updates, and alarm silencing.

Single copy price: Free

Send comments (with copy to psa@ansi.org) to: Paul Lloret, (510) 319-4269, Paul.E.Lloret@ul.com

Projects Withdrawn from Consideration

An accredited standards developer may abandon the processing of a proposed new or revised American National Standard or portion thereof if it has followed its accredited procedures. The following projects have been withdrawn accordingly:

LEO (Leonardo Academy Inc.)


Inquiries may be directed to Michael Arny, (608) 280-0255, michaelarny@leonardoacademy.org
Call for Members (ANS Consensus Bodies)

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

ASA (ASC S12) (Acoustical Society of America)
Office: 1305 Walt Whitman Road
Suite 300
Melville, NY 11747
Contact: Caryn Mennigke
Phone: (631) 390-0215
E-mail: asastds@acousticalsociety.org

BSR/ASA S12.67-201x, Pre-Installation Airborne Sound Measurements and Acceptance Criteria of Shipboard Equipment (revision of ANSI/ASA S12.67-2008 (R2013))

HI (Hydraulic Institute)
Office: 6 Campus Drive
Parsippany, NJ 07054
Contact: Tori Serazi
Phone: (973) 267-9700
E-mail: tserazi@pumps.org

BSR/HI 9.6.9-201x, Rotary Pumps Guidelines for Condition Monitoring (revision of ANSI/Hi 9.6.9-2013)

BSR/HI 14.3-201x, Rotodynamic Pumps for Design and Application (new standard)

PLASTICS (Plastics Industry Association)
Office: 1425 K Street NW, Suite 500
Washington, DC 20005
Contact: Megan Hayes
Phone: (202) 974-5217
E-mail: mhayes@plasticsindustry.org

BSR/PLASTICS B151.20-2013 (R2013), Safety Requirements for Plastic Sheet Production Machinery (reaffirmation and redesignation of ANSI/SPI B151.20-2013)

TAPPI (Technical Association of the Pulp and Paper Industry)
Office: 15 Technology Parkway South
Suite 115
Peachtree Corners, GA 30092
Contact: Priscilla Briggs
Phone: (770) 209-7249
E-mail: standards@tappi.org

BSR/TAPPI T 515 om-2014 (R201x), Visual grading and color matching of paper (reaffirmation of ANSI/TAPPI T 515 om-2014)

BSR/TAPPI T 524 om-2013 (R201x), Color of paper and paperboard (45/0, C/2) (reaffirmation of ANSI/TAPPI T 524 om-2013)

BSR/TAPPI T 527 om-2013 (R201x), Color of paper and paperboard (d/0, C/2) (reaffirmation of ANSI/TAPPI T 527 om-2013)

BSR/TAPPI T 1200 sp-2014 (R201x), Interlaboratory evaluation of test methods to determine TAPPI repeatability and reproducibility (reaffirmation of ANSI/TAPPI T 1200 sp-2014)

BSR/TAPPI T 1205 sp-2014 (R201x), Dealing with suspect (outlying) test determinations (reaffirmation of ANSI/TAPPI T 1205 sp-2014)

TIA (Telecommunications Industry Association)
Office: 1320 North Courthouse Road
Suite 200
Arlington, VA 22201
Contact: Teesha Jenkins
Phone: (703) 907-7706
E-mail: standards@tiaonline.org


UAMA (ASC B7) (Unified Abrasives Manufacturers’ Association)
Office: 30200 Detroit Road
Cleveland, OH 44145-1967
Contact: Donna Haders
Phone: (440) 899-0010
E-mail: djh@wherryassoc.com

BSR B7.7-2003 (R2011), Safety Requirements for Abrading Materials with Coated Abrasive Systems (reaffirmation of ANSI B7.7-2003 (R2011))

UAMA (ASC B74) (Unified Abrasives Manufacturers’ Association)
Office: 30200 Detroit Road
Cleveland, OH 44145-1967
Contact: Donna Haders
Phone: (440) 899-0010
E-mail: djh@wherryassoc.com

BSR B74.4-201x, Procedure for Bulk Density of Abrasive Grains (reaffirmation of ANSI B74.4-1992 (R2013))
UL (Underwriters Laboratories, Inc.)
Office: 333 Pfingsten Road
        Northbrook, IL  60062
Contact: Megan Monsen
Phone: (847) 664-1292
E-mail: megan.monsen@ul.com

BSR/UL 2353-201x, Standard for Safety for Single- and Multi-Layer Insulated Winding Wire (revision of ANSI/UL 2353-2016)

VITA (VMEbus International Trade Association (VITA))
Office: 929 W. Portobello Avenue
        Mesa, AZ  85210
Contact: Jing Kwok
Phone: (602) 281-4497
E-mail: jing.kwok@vita.com

BSR/VITA 67.3-201x, Coaxial Interconnect on VPX, Spring-Loaded Contact on Backplane (revision of ANSI/VITA 67.3-2017)
Call for Members (ANS Consensus Bodies)

Call for Committee Members

ASC O1 – Safety Requirements for Woodworking Machinery

Are you interested in contributing to the development and maintenance of valuable industry safety standards? The ASC O1 is currently looking for members in the following categories:

- General Interest
- Government
- Producer
- User

If you are interested in joining the ASC O1, contact WMMA Associate Director Jennifer Miller at jennifer@wmma.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.

AAFS (American Academy of Forensic Sciences)

New Standard


ALI (ASC A14) (American Ladder Institute)

Reaffirmation

ANSI A14.3-2008 (R2018), Standard for Ladders - Fixed - Safety Requirements (reaffirmation of ANSI A14.3-2008): 10/5/2018

ASA (ASC S1) (Acoustical Society of America)

Reaffirmation


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

Addenda


AWWA (American Water Works Association)

Revision


BHMA (Builders Hardware Manufacturers Association)

Reaffirmation

ANSI/BHMA A156.16-2013 (R2018), Standard for Auxiliary Hardware (reaffirmation of ANSI/BHMA A156.16-2013): 10/5/2018
ANSI/BHMA A156.28-2013 (R2018), Recommended Practice for Mechanical Keying Systems (reaffirmation of ANSI/BHMA A156.28-2013): 10/5/2018

CSA (CSA Group)

Reaffirmation


CTA (Consumer Technology Association)

Revision


DMSC, Inc. (Dimensional Metrology Standards Consortium, Inc.)

Revision


NSF (NSF International)

Revision

ANSI/NSF 455-3-2018 (i2r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i3r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i4r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i5r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i6r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i7r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i8r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i9r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 9/30/2018
ANSI/NSF 455-4-2018 (i2r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 9/30/2018
ANSI/NSF 455-4-2018 (i3r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 9/30/2018
ANSI/NSF 455-4-2018 (i4r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 9/30/2018
ANSI/NSF 455-4-2018 (i5r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 9/30/2018
ANSI/NSF 455-4-2018 (i6r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 9/30/2018
ANSI/NSF 455-4-2018 (i7r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 9/30/2018
ANSI/NSF 455-3-2018 (i10r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 10/1/2018
ANSI/NSF 455-3-2018 (i11r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 10/1/2018
ANSI/NSF 455-3-2018 (i12r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 10/1/2018
ANSI/NSF 455-3-2018 (i14r1), Good Manufacturing Practices for Cosmetics (revision of ANSI/NSF 455-3-2018): 10/2/2018
ANSI/NSF 455-4-2018 (i10r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 10/2/2018
ANSI/NSF 455-4-2018 (i11r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 10/2/2018
ANSI/NSF 455-4-2018 (i12r1), Good Manufacturing Practices for Over-the-Counter Drugs (revision of ANSI/NSF 455-4-2018): 10/2/2018

RESNA (Rehabilitation Engineering and Assistive Technology Society of North America)

New Standard

UL (Underwriters Laboratories, Inc.)

New National Adoption

Reaffirmation

Revision
ANSI/UL 541-2018, Standard for Safety for Refrigerated Vending Machines (revision of ANSI/UL 541-2016): 10/2/2018
Project Initiation Notification System (PINS)

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

Following is a list of proposed actions and new ANS that have been received recently from ASDs. Please also review the section in Standards Action entitled "American National Standards Maintained Under Continuous Maintenance" for additional or comparable information with regard to standards maintained under the continuous maintenance option. Use the following Public Document Library url to access PDF & EXCEL reports of approved & proposed ANS: List of Approved and Proposed ANS

Directly and materially affected interests wishing to receive more information or to submit comments are requested to contact the standards developer directly within 30 days of the publication of this announcement.

ASA (ASC S12) (Acoustical Society of America)

Contact: Caryn Mennigke, (631) 390-0215, asastds@acousticalsociety.org
1305 Walt Whitman Road, Suite 300, Melville, NY 11747

Revision

BSR/ASA S12.67-201x, Pre-Installation Airborne Sound Measurements and Acceptance Criteria of Shipboard Equipment (revision of ANSI/ASA S12.67-2008 (R2013))
Stakeholders: US Navy, manufacturers supplying the Navy, shipyards, ship designers.
Project Need: Revision required mainly to update a prime reference and use new airborne noise acceptance criteria from that reference.
Describes instrumentation and procedures for the pre-installation measurement and analysis of airborne noise generated by shipboard equipment. Maximum noise level criteria are presented for several types of equipment. This standard may be used in the achievement of shipboard noise goals through the timely and affordable airborne noise testing of shipboard equipment before it is delivered and installed. This standard is based on MIL-STD-740-1 "Airborne Sound Measurements and Acceptance Criteria of Shipboard Equipment” and MIL-STD-1474D (Requirement 5, Shipboard Equipment Noise). New reference is MIL-STD-1474-E.

TAPPI (Technical Association of the Pulp and Paper Industry)

Contact: Priscila Briggs, (770) 209-7249, standards@tappi.org
15 Technology Parkway South, Suite 115, Peachtree Corners, GA 30092

Reaffirmation

BSR/TAPPI T S15 om-2014 (R201x), Visual grading and color matching of paper (reaffirmation of ANSI/TAPPI T S15 om-2014)
Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products and suppliers of equipment, supplies, or raw materials for the manufacture of such products.
Project Need: To conduct required five-year review of an existing TAPPI/ANSI Standard.
This method describes the spectral, photometric, and geometric characteristics of a light source; the illuminating and viewing conditions; and the procedures to be used for the visual evaluation of color differences of paper, including those containing fluorescent whitening agents. This method specifies light sources which are selected to accomplish three objectives: (a) simulation of the actual and illuminating conditions of ultimate use, (b) employment of two light sources which are spectrally very different in order to exaggerate observable differences between the sample and standard if any difference exists, and (c) employment of a UV radiator to detect the presence of fluorescent whitening agents (FWA) and assess their impact on final appearance. This method is applicable when the testers have normal color vision.

BSR/TAPPI T S24 om-2013 (R201x), Color of paper and paperboard (45/0, C/2) (reaffirmation of ANSI/TAPPI T S24 om-2013)
Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products and suppliers of equipment, supplies, or raw materials for the manufacture of such products.
Project Need: To conduct required five-year review of an existing TAPPI/ANSI Standard.
This method specifies a procedure for measuring the color of paper or paperboard with tristimulus filter colorimeters or spectrophotometers incorporating directional (45/0) geometry and CIE (International Commission on Illumination) illuminant C.

BSR/TAPPI T S27 om-2013 (R201x), Color of paper and paperboard (d/0, C/2) (reaffirmation of ANSI/TAPPI T S27 om-2013)
Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products and suppliers of equipment, supplies, or raw materials for the manufacture of such products.
Project Need: To conduct required five-year review of an existing TAPPI/ANSI Standard.
This method specifies a procedure for measuring the color of paper or paperboard with tristimulus filter colorimeters or spectrophotometers incorporating diffuse/0 geometry and CIE (International Commission on Illumination) illuminant C.
BSR/TAPPI T 1200 sp-2014 (R201x), Interlaboratory evaluation of test methods to determine TAPPI repeatability and reproducibility (reaffirmation of ANSI/TAPPI T 1200 sp-2014)

Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To conduct required five-year review of an existing TAPPI/ANSI Standard.

This practice describes techniques for conducting and analyzing the results of intralaboratory and interlaboratory studies. The steps described here will result in a good statistical design that provides sound data for formulating a broadly applicable precision statement regarding the performance of a TAPPI test method. Two values are considered: (a) repeatability, which is defined as comparison of test results within a laboratory (same material, operator, apparatus, environmental conditions, making tests in the shortest reasonable timeframe); and (b) reproducibility, which is defined as comparison of test results among laboratories (same material, but different operator, apparatus and perhaps environmental conditions). In the data chain leading to test results there are many possible sources of variation, and one can conduct studies to isolate these other sources, e.g., same laboratory and operator using different instruments or different laboratories using a shared calibration standard, etc. For the purposes of TAPPI test methods, all of these sources of variation are to be captured in a reproducibility value.

BSR/TAPPI T 1205 sp-2014 (R201x), Dealing with suspect (outlying) test determinations (reaffirmation of ANSI/TAPPI T 1205 sp -2014)

Stakeholders: Manufacturers of pulp, paper, packaging, or related products; consumers or converters of such products and suppliers of equipment, supplies, or raw materials for the manufacture of such products.

Project Need: To conduct required five-year review of an existing TAPPI/ANSI Standard.

This TAPPI Standard Practice provides a procedure for judging whether suspect test determinations should be investigated further for possible rejection. A suspect determination (apparent outlier) is one that appears to deviate markedly from other determinations on the same sample of material. An outlying determination (outlier) is a suspect determination for which the deviation has, in fact, been found to be significant using an appropriate statistical test.

TIA (Telecommunications Industry Association)

Contact: Teesha Jenkins, (703) 907-7706, standards@tiaonline.org
1320 North Courthouse Road, Suite 200, Arlington, VA 22201

New National Adoption


Stakeholders: Users of optical fiber such as optical fiber cable manufacturers and their customers, optical fiber transmission and test equipment manufacturers. Specifiers of optical fiber and cable such as telecommunications companies and standards bodies that define transmission protocols.

Project Need: Adopt ISO or IEC standard with modifications.

Adapt IEC 60793-2-50:2015 as ANSI/TIA 492CAAC. The modifications may include: (1) those described for ANSI/TIA 4920000-C. Because IEC standard 60793-2-50 contains detail and sectional specifications, ANSI/TIA 492CAAC cancels and replaces TIA -492C000, 492E000 sectional specifications; TIA-492CA00, 492EA00 blank detail specifications; TIA-492CAAA, 492CAAB detail specifications. Justification: Improve harmonization of ANSI specs with IEC specs.

UAMA (ASC B7) (Unified Abrasives Manufacturers’ Association)

Contact: Donna Haders, (440) 899-0010, djh@wherrysassoc.com
3020 Detroit Road, Cleveland, OH 44145-1967

Reaffirmation

BSR B7.7-2003 (R201x), Safety Requirements for Abrading Materials with Coated Abrasive Systems (reaffirmation of ANSI B7.7 -2003 (R2011))

Stakeholders: Manufacturers, consumers, governments, specialists, and insurance.

Project Need: This is an update to a PINS for a revision in 2016. The standard will now be reaffirmed.

This standard establishes the minimum safety requirements related to the usage of coated abrasive forms. The requirements apply to all hand-held and fixed mounted machine operations that use some form of coated abrasive product, and to safety-related maintenance precautions for the machines and machine parts.
UAMA (ASC B74) (Unified Abrasives Manufacturers' Association)

Contact: Donna Hadens, (440) 899-0010, djh@whernyassoc.com
30200 Detroit Road, Cleveland, OH 44145-1967

Revision

BSR B74.4-201x, Procedure for Bulk Density of Abrasive Grains (revision of ANSI B74.4-1992 (R2013))

Stakeholders: Producer, consumer, general interest.

Project Need: Review of current information and possibly alternate test methods.

In this method, the bulk density of abrasive grains is determined by the weight of grain required to fill a cylinder of known volume when the abrasive is allowed to flow through a funnel and fall from a fixed height. Two test units are specified to cover the range of abrasive grain sizes, 6 grit through 8 grit and 1 grit through 240 grit. Test unit A shall be used for grits 10 through 240 and test unit B shall be used for grits 6 through 8.

UL (Underwriters Laboratories, Inc.)

Contact: Elizabeth Northcott, (847) 664-3198, Elizabeth.Northcott@ul.com
333 Pfingsten Road, Northbrook, IL 60062

New National Adoption

BSR/UL 62841-3-14-201x, Standard for Safety for Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 3-14: Particular Requirements for Transportable Drain Cleaners (identical national adoption of IEC 62841-3-14)

Stakeholders: Consumers, manufacturers of hand-held, transportable, and garden tools - drain cleaners.

Project Need: To obtain national recognition of a standard covering electric motor-operated hand-held, transportable, and garden tools - transportable drain cleaners. The intent is to adopt IEC 62841-3-14, first edition as the first edition of UL 62841-3-14.

This clause of Part 1 is applicable, except as follows: Addition: This part of IEC 62841 applies to transportable drain cleaners. NOTE 101: Drain cleaners are also known as pipe cleaners. This standard does not apply to hand-held drain cleaners. NOTE 102: Hand-held drain cleaners are covered by IEC 62841-2-21. This standard does not apply to high-pressure cleaners to clean drains. NOTE 103: High-pressure cleaners are covered by IEC 60335-2-79. This standard does not apply to machines that use a solid rod to clean drains.

VITA (VMEbus International Trade Association (VITA))

Contact: Jing Kwok, (602) 281-4497, jing.kwok@vita.com
929 W. Portobello Avenue, Mesa, AZ 85210

Revision

BSR/VITA 67.3-201xx, Coaxial Interconnect on VPX, Spring-Loaded Contact on Backplane (revision of ANSI/VITA 67.3-2017)

Stakeholders: Manufacturers, suppliers, and users of modular embedded computers.

Project Need: Create a spring-loaded contact coaxial connector for VPX modules.

This document describes an open standard for configuration and interconnect within the structure of VITA 67.0 enabling an interface compatible with VITA 46 containing multi-position blind mate analog connectors with SMPM style contacts having fixed contacts on the Plug-In Module and spring action on the backplane. This revision adds higher density and alternate interfaces while maintaining the VITA 67.3 standard backplane cutouts and positions.
American National Standards Maintained Under Continuous Maintenance

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

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

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

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

To obtain additional information with regard to these standards, including contact information at the ANSI Accredited Standards Developer, please visit ANSI Online at wwwansiorg/standards, select “Standards Activities,” click on “Public Review and Comment” and “American National Standards Maintained Under Continuous Maintenance.” This information is also available directly at wwwansiorg/publicreview

Alternatively, you may contact the Procedures & Standards Administration department (PSA) at psaansiorg or via fax at 212-840-2298. If you request that information be provided via E-mail, please include your E-mail address; if you request that information be provided via fax, please include your fax number. Thank you.
ANSI-Accredited Standards Developers Contact Information

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

AAFS
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ALI (ASC A14)
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Phone: (312) 321-6806
Web: www.americanladderinstitute.org

API
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Web: www.acousticalsociety.org

ASA (ASC S12)
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ASABE
American Society of Agricultural and Biological Engineers
2920 Niles Rd.
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Phone: (269) 932-7009
Web: www.asabe.org

ASHRAE
American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
1791 Tullie Circle, NE
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Web: www.ashrae.org

ASME
American Society of Mechanical Engineers
Two Park Avenue
New York, NY 10016-5990
Phone: (212) 591-8521
Web: www.asme.org

ASSP (Safety)
American Society of Safety Professionals
520 N. Northwest Highway
Park Ridge, IL 60068
Phone: (847) 232-2012
Web: www.assp.org

AWS
American Welding Society
8669 Doral Blvd
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Doral, FL 33166
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Web: www.aws.org

AWWA
American Water Works Association
6666 W. Quincy Ave.
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355 Lexington Avenue, 15th Floor
15th Floor
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Phone: (860) 944-4264
Web: www.buildershardware.com

BOMA
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CTA
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Web: www.dmis.org

HI
Hydraulic Institute
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Parisippany, NJ 07054
Phone: (973) 267-9700
Web: www.pumps.org

ICE
Institute for Credentialing Excellence
2025 M Street NW, Suite 800
Washington, DC 20036
Phone: (202) 367-1165
Web: www.credentialingexcellence.org

IEEE
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Web: www.ieee.org

NSF
NSF International
789 N. Dixboro Road
Ann Arbor, MI 48105-9723
Phone: (734) 418-6660
Web: www.nsf.org

PLASTICS
Plastics Industry Association
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RESNA
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TAPPI
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TIA
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UAMA (ASC B7)
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Web: www.uama.org

UAMA (ASC B74)
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VITA
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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

### AGRICULTURAL FOOD PRODUCTS (TC 34)

ISO/DIS 20588, Animal feeding stuffs - Terminology - 10/29/2018, $67.00

### AIRCRAFT AND SPACE VEHICLES (TC 20)

ISO/DIS 22137, Space systems - Program management - Test reviews - 10/29/2018, $77.00

ISO/DIS 226872, Space systems - Disposal of satellites operating at geosynchronous altitude - 10/26/2018, $146.00

ISO/DIS 14620-2, Space systems - Safety requirements - Part 2: Launch site operations - 10/29/2018, $67.00

### FERTILIZERS AND SOIL CONDITIONERS (TC 134)


### GAS CYLINDERS (TC 58)

ISO 10462/DAm1, Gas cylinders - Acetylene cylinders - Periodic inspection and maintenance - Amendment 1 - 10/26/2018, $29.00

### GEOGRAPHIC INFORMATION/GEOMATICS (TC 211)

ISO/DIS 19162, Geographic information - Well-known text representation of coordinate reference systems - 12/27/2018, $175.00

ISO/DIS 19150-4, Geographic information - Ontology - Part 4: Service ontology - 10/28/2018, $125.00

### MICROBEAM ANALYSIS (TC 202)

ISO/DIS 21466, Microbeam analysis - Scanning electron microscopy - Method for evaluating critical dimensions by CD-SEM - 12/24/2018, $102.00

### PETROLEUM PRODUCTS AND LUBRICANTS (TC 28)

ISO/DIS 20884, Petroleum products - Determination of sulfur content of automotive fuels - Wavelength-dispersive X-ray fluorescence spectrometry - 10/29/2018, $46.00

ISO/DIS 21493, Petroleum products - Determination of turbidity point and aniline point equivalent - 12/27/2018, $58.00

ISO/DIS 4259-3, Petroleum and related products - Precision of measurement methods and results - Part 3: Monitoring and verification of published precision data in relation to methods of test - 12/27/2018, $53.00

### PLASTICS (TC 61)

ISO/DIS 20028-1, Plastics - Thermoplastic polyester (TP) moulding and extrusion materials - Part 1: Designation system and basis for specifications - 12/20/2018, $58.00

### ROAD VEHICLES (TC 22)

ISO/DIS 19072-1, Road vehicles - Connection interface for pyrotechnic devices, two-way and three-way connections - Part 1: Pocket interface definition - 10/25/2018, $46.00

### SAFETY OF MACHINERY (TC 199)

ISO/DIS 21260, Safety of machinery - Mechanical safety data for physical contacts between moving machinery or moving parts of machinery and persons - 10/28/2018, $107.00

### SHIPS AND MARINE TECHNOLOGY (TC 8)

ISO/DIS 22152, Ships and marine technology - Performance requirements for low bio-persistence mineral wool products - Alkaline earth silicate wool - 10/25/2018, $33.00

### SMALL CRAFT (TC 188)

ISO/DIS 11105, Small craft - Ventilation of petrol engine and/or petrol tank compartments - 10/25/2018, $40.00

### SMALL TOOLS (TC 29)

ISO 1711-1/DAm1, Assembly tools for screws and nuts - Technical specifications - Part 1: Hand-operated wrenches and sockets - Amendment 1 - 10/28/2018, $29.00
65E/622/CDV, IEC 62769-103-1 ED2: Field Device Integration (FDI) - Part 103-1: Profiles - PROFIBUS, /2018/12/2
81/603/FDIS, IEC 62305-3 ED3: Protection against lightning - Part 3: Physical damage to structures and life hazard, /2018/11/1
86B/4147/FDIS, IEC 61300-2-4 ED2: Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-4: Tests - Fibre or cable retention, /2018/11/1
87/699(F)/CDV, IEC 61828 ED2: Ultrasonics - Focusing transducers - Definitions and measurement methods for the transmitted fields, 2018/12/7
91/1534/CD, IEC 61760-1 ED3: Surface mounting technology - Part 1: Standard method for the specification of surface mounting components (SMDs), /2018/12/2
CIS/D/449/FDIS, CISPR 12 ED7: Vehicles, boats and devices with internal combustion engines or traction batteries - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers, /2018/11/1
Newly Published ISO & IEC Standards

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

ISO Standards

ACOUSTICS (TC 43)
ISO 4869-1:2018, Acoustics - Hearing protectors - Part 1: Subjective method for the measurement of sound attenuation, $103.00
ISO 4869-2:2018, Acoustics - Hearing protectors - Part 2: Estimation of effective A-weighted sound pressure levels when hearing protectors are worn, $103.00

AIR QUALITY (TC 146)
ISO 16000-36:2018, Indoor air - Part 36: Standard method for assessing the reduction rate of culturable airborne bacteria by air purifiers using a test chamber, $103.00

FIRE SAFETY (TC 92)
ISO 21843:2018, Determination of the resistance to hydrocarbon pool fires of fire protection materials and systems for pressure vessels, $185.00

FLUID POWER SYSTEMS (TC 131)
ISO 6099:2018, Fluid power systems and components - Cylinders - Identification code for mounting dimensions and mounting types, $209.00

INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)

MATERIALS, EQUIPMENT AND OFFSHORE STRUCTURES FOR PETROLEUM AND NATURAL GAS INDUSTRIES (TC 67)
ISO 15590-1:2018, Petroleum and natural gas industries - Induction bends, fittings and flanges for pipeline transportation systems - Part 1: Induction bends, $162.00
ISO 21809-1:2018, Petroleum and natural gas industries - External coatings for buried or submerged pipelines used in pipeline transportation systems - Part 1: Polyolefin coatings (3-layer PE and 3-layer PP), $209.00

OPTICS AND OPTICAL INSTRUMENTS (TC 172)
ISO 9211-6:2018, Optics and photonics - Optical coatings - Part 6: Minimum requirements for reflecting coatings, $45.00

PAINTS AND VARNISHES (TC 35)
ISO 4623-1:2018, Paints and varnishes - Determination of resistance to filiform corrosion - Part 1: Steel substrates, $68.00

PERSONAL SAFETY - PROTECTIVE CLOTHING AND EQUIPMENT (TC 94)
ISO 16900-5/Amd1:2018, Respiratory protective devices - Methods of test and test equipment - Part 5: Breathing machine, metabolic simulator, RPD headforms and torso, tools and verification tools - Amendment 1: RPD head forms front and side view, $19.00
ISO 11393-2:2018, Protective clothing for users of hand-held chainsaws - Part 2: Performance requirements and test methods for leg protectors, $138.00
ISO 11393-4:2018, Protective clothing for users of hand-held chainsaws - Part 4: Performance requirements and test methods for protective gloves, $138.00
ISO 11393-5:2018, Protective clothing for users of hand-held chainsaws - Part 5: Performance requirements and test methods for protective gaiters, $68.00
ISO 11393-6:2018, Protective clothing for users of hand-held chainsaws - Part 6: Performance requirements and test methods for upper body protectors, $138.00

PLASTICS (TC 61)
ISO 21257:2018, Plastics - Polymer polyols for use in the production of polyurethane - Determination of the residual acrylonitrile and styrene monomer content by gas chromatography, $103.00

ROAD VEHICLES (TC 22)
ISO 21308-6:2018, Road vehicles - Product data exchange between chassis and bodywork manufacturers (BEP) - Part 6: Coding of hook loader bodywork, $162.00
ISO 21308-7:2018, Road vehicles - Product data exchange between chassis and bodywork manufacturers (BEP) - Part 7: Coding of skip loader bodywork, $162.00

ROLLING BEARINGS (TC 4)
ISO 19843:2018, Rolling bearings - Ceramic bearing balls - Determination of strength by notched ball test, $162.00

RUBBER AND RUBBER PRODUCTS (TC 45)
ISO 2782-2:2018, Rubber, vulcanized or thermoplastic - Determination of permeability to gases - Part 2: Equal-pressure method, $68.00
ISO 24698-2:2018, Rubber, raw - Determination of bound acrylonitrile content in acrylonitrile-butadiene rubber (NBR) - Part 2: Kjeldahl method, $68.00

SECURITY (TC 292)
ISO 22326:2018, Security and resilience - Emergency management - Guidelines for monitoring facilities with identified hazards, $68.00
SHIPS AND MARINE TECHNOLOGY (TC 8)
ISO 19847:2018, Ships and marine technology - Shipboard data servers to share field data at sea, $209.00
ISO 19848:2018, Ships and marine technology - Standard data for shipboard machinery and equipment, $209.00

SMALL TOOLS (TC 29)
ISO 20928:2018, Tools for pressing - Spring plungers with helicoidal compression steel spring or gas spring, $68.00

TOBACCO AND TOBACCO PRODUCTS (TC 126)
ISO 7210:2018, Routine analytical cigarette-smoking machine - Additional test methods for machine verification, $68.00
ISO 20778:2018, Cigarettes - Routine analytical cigarette smoking machine - Definitions and standard conditions with an intense smoking regime, $138.00
ISO 20779:2018, Cigarettes - Generation and collection of total particulate matter using a routine analytical smoking machine with an intense smoking regime, $103.00

WATER QUALITY (TC 147)
ISO 8199:2018, Water quality - General requirements and guidance for microbiological examinations by culture, $209.00
ISO 20236:2018, Water quality - Determination of total organic carbon (TOC), dissolved organic carbon (DOC), total bound nitrogen (TNb) and dissolved bound nitrogen (DNb) after high temperature catalytic oxidative combustion, $103.00

WELDING AND ALLIED PROCESSES (TC 44)
ISO 17279-1:2018, Welding - Micro joining of 2nd generation high temperature superconductors - Part 1: General requirements for the procedure, $185.00

ISO Technical Reports

INDUSTRIAL AUTOMATION SYSTEMS AND INTEGRATION (TC 184)
ISO/TR 22400-10:2018, Automation systems and integration - Key performance indicators (KPIs) for manufacturing operations management - Part 10: Operational sequence description of data acquisition, $162.00

ISO/IEC JTC 1, Information Technology


IEC Standards

SAFETY OF ELECTRONIC EQUIPMENT WITHIN THE FIELD OF AUDIO/VIDEO, INFORMATION TECHNOLOGY AND COMMUNICATION TECHNOLOGY (TC 108)
IEC 62368-1 Ed. 3.0 b:2018, Audio/video, information and communication technology equipment - Part 1: Safety requirements, $410.00
S+ IEC 62368-1 Ed. 3.0 en:2018 (Redline version), Audio/video, information and communication technology equipment - Part 1: Safety requirements, $534.00
Proposed Foreign Government Regulations

Call for Comment

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

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

To register for Notify U.S., please visit http://www.nist.gov/notifyus/

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

For further information about the USA TBT Inquiry Point, please visit: https://www.nist.gov/standardsgov/what-we-do/trade-regulatory-programs/usa-wto-tbt-inquiry-point

Contact the USA TBT Inquiry Point at: (301) 975-2918; Fax: (301) 926-1559; E-mail: usatbtep@nist.gov or notifyus@nist.gov.
Information Concerning

American National Standards

Call for Members

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 affected 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 categories:

- Service Providers
- Users
- Standards Development Organizations and Consortia
- Academic Institutions

Society of Cable Telecommunications

ANSI Accredited Standards Developer

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 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 a 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.

ANSI Accredited Standards Developers

Reaccreditation

Illuminating Engineering Society (IES)

Comment Deadline: November 12, 2018

The Illuminating Engineering Society (IES), an ANSI member and Accredited Standards Developer, has submitted revisions to its currently accredited operating procedures for documenting consensus on IES-sponsored American National Standards, under which it was last reaccredited in 2017. As the current revisions appear to be substantive in nature, the reaccreditation process is initiated.

To obtain a copy of the revised procedures or to offer comments, please contact: Ms. Pat McGillicuddy, Manager of Standards Development, Illuminating Engineering Society, 120 Wall Street, 17th Floor, New York, NY 10005; phone: 212.248.5000, ext. 7002; e-mail: pmcgillicuddy@ies.org . You may view/download a copy of the revisions during the public review period at the following URL: www.ansi.org/accredPR. Please submit any public comments on the revised procedures to IES by November 12, 2018, with a copy to the ExSC Recording Secretary in ANSI’s New York Office (jthomspso@ANSI.org).

International Organization for Standardization

ISO Proposal for a New Field of ISO Technical Activity

Sharing Economy

Comment Deadline: October 19, 2018

JISC, the ISO member body for Japan, has submitted to ISO a proposal for a new field of ISO technical activity on Sharing Economy, with the following scope statement:

Standardization in the field of sharing economy.

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

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, October 19.
Information Concerning

ANSI Accreditation Program for Greenhouse Gas Validation/Verification Bodies

Reaccreditation

Ruby Canyon Engineering, Inc.

Comment Deadline: November 12, 2018

In accordance with the following ISO standards:

ISO 14065:2013, *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition*

Ruby Canyon Engineering, Inc.
Michael Cote
743 Horizon Court, Suite 385
Grand Junction, CO 85106, USA
Phone: 970-241-9298
Email: mcote@rubycanyoneng.com

On October 5, 2018, ANSI’s Greenhouse Gas Validation/Verification Body Accreditation Committee approved reaccreditation for Ruby Canyon Engineering, Inc. for the following:

**Scopes:**

*Verification of assertions related to GHG emissions and removals at the organizational level*

- 01. General
- 02. Manufacturing
- 03. Power generation
- 04. Electric Power Transactions
- 05. Mining and mineral production
- 06. Metals Production
- 07. Chemical Production
- 08. Oil and gas extraction, production and refining including petrochemicals
- 09. Waste
- 10. Agriculture, Forestry and Other Land Use (AFOLU)
Validation of assertions related to GHG emissions reductions and removals at the project level

01. GHG emission reductions from fuel combustion
02. GHG emission reductions from industrial processes (non-combustion, chemical reaction, fugitive and other)
05. Livestock
06. Waste Handling and Disposal

Verification of assertions related to GHG emissions reductions and removals at the project level

01. GHG emission reductions from fuel combustion
02. GHG emission reductions from industrial processes (non-combustion, chemical reaction, fugitive and other)
03. Land Use and Forestry
05. Livestock
06. Waste Handling and Disposal

Please send your comments by November 12, 2018 to Ann Howard, Director, Environmental Accreditation Programs, American National Standards Institute, 1899 L Street, NW, 11th Floor, Washington, DC 20036, Fax: 202-293-9287 or e-mail: ahoward@ansi.org.
7.10 Marking

Subs manufactured in conformance with this part of ISO 10424 shall be marked with the following information:

a) the manufacturer’s name or identification mark;

b) “ISO 10424-1”;

c) the inside diameter;

d) the size and style of the connection at each end.

For subs of type A, B and C, the marking shall be die-stamped on a marking recess located on the outside diameter of the sub. The marking identifying the size and style of the connection shall be placed on that end of the recess closest to the connection to which it applies. The marking recess location is shown in Figure 5.

EXAMPLE 1 A sub with 4 1/2 Reg LH box connection on each end and with a 57,2 mm (2 1/4 in) inside diameter, manufactured by A B Company, shall be marked in the recess as follows:

A B Co. (or mark) ISO 10424-1
4 1/2 REG LH 57,2 (2 1/4) 4 1/2 REG LH

EXAMPLE 2 A sub with NC 31 pin connection on one end and NC 46 box connection on the other end and with a 50,8 mm (2 in) inside diameter, manufactured by A B Company, shall be marked in the recess as follows:

A B Co (or mark) ISO 10424-1
NC 31 50,8 (2) NC 46

For subs of type D, the marking shall be on the top surface. The type D sub shall also be marked with the size of the recess diameter in characters at least 9.5 mm (3/8 in.) high.

EXAMPLE 3 A lift sub with NC 38 pin connection, a 3 1/2 inch elevator recess and with a 50,8 mm (2 in) inside diameter, manufactured by A B Company, shall be marked on the top face as follows:

A B Co (or mark) ISO 10424-1
NC 38 50,8 (2) 3 1/2
Figure 6 – Lift subs (type D)

**a)** Square shoulder

**b)** Tapered shoulder

Note: See Table 12 for dimensions.
**Table 12 — Dimensions for lift-sub upper lift diameters**

Dimensions in millimetres

<table>
<thead>
<tr>
<th>Elevator recess diameter</th>
<th>Diameter of lift shoulder (tapered or square)</th>
<th>Overall length</th>
<th>Top length</th>
<th>Elevator recess length</th>
<th>Bottom length</th>
<th>Largest elevator a</th>
</tr>
</thead>
<tbody>
<tr>
<td>( D_p )</td>
<td>( D_L )</td>
<td>( L_1 )</td>
<td>( L_2 )</td>
<td>( L_3 ) Ref.</td>
<td>( L_4 ) ±12</td>
<td></td>
</tr>
<tr>
<td>±0,8</td>
<td>+3,2</td>
<td>+76</td>
<td>±3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60,3</td>
<td>88,9</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>2 7/8</td>
</tr>
<tr>
<td>73,0</td>
<td>114,3</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>3 1/2 or 4IU</td>
</tr>
<tr>
<td>88,9</td>
<td>127,0</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>4 1/2</td>
</tr>
<tr>
<td>101,6</td>
<td>152,4</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>5 1/2</td>
</tr>
<tr>
<td>114,3</td>
<td>158,8</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>5 1/2</td>
</tr>
<tr>
<td>127,0</td>
<td>165,1</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>6 5/8</td>
</tr>
<tr>
<td>139,7</td>
<td>184,2</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>6 5/8</td>
</tr>
<tr>
<td>168,3</td>
<td>203,2</td>
<td>915</td>
<td>102</td>
<td>457</td>
<td>356</td>
<td>6 5/8</td>
</tr>
</tbody>
</table>

\( a \) For the lift sub and elevator best fit, it is recommended to use the appropriate elevator size for the lift sub \( D_p \) value in accordance with Table 7 in API 8C (5th Edition).

---

**Table A.12 — Dimensional data for lift sub upper lift diameters**

Dimensions in inches

<table>
<thead>
<tr>
<th>Elevator recess diameter</th>
<th>Diameter of lift shoulder (tapered or square)</th>
<th>Overall length</th>
<th>Top length</th>
<th>Elevator recess length</th>
<th>Bottom length</th>
<th>Largest elevator a</th>
</tr>
</thead>
<tbody>
<tr>
<td>( D_p )</td>
<td>( D_L )</td>
<td>( L_1 )</td>
<td>( L_2 )</td>
<td>( L_3 ) Ref.</td>
<td>( L_4 ) ±1/2</td>
<td></td>
</tr>
<tr>
<td>±1/32</td>
<td>+1/8</td>
<td>+3</td>
<td>±1/8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 3/8</td>
<td>3 1/2</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>2 7/8</td>
</tr>
<tr>
<td>2 7/8</td>
<td>4 1/2</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>3 1/2 or 4IU</td>
</tr>
<tr>
<td>3 1/2</td>
<td>5</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>4 1/2</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>5 1/2</td>
</tr>
<tr>
<td>4 1/2</td>
<td>6 1/4</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>5 1/2</td>
</tr>
<tr>
<td>5</td>
<td>6 1/2</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>6 5/8</td>
</tr>
<tr>
<td>5 1/2</td>
<td>7 1/4</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>6 5/8</td>
</tr>
<tr>
<td>6 5/8</td>
<td>8</td>
<td>36</td>
<td>4</td>
<td>18</td>
<td>14</td>
<td>6 5/8</td>
</tr>
</tbody>
</table>

\( a \) For the lift sub and elevator best fit, it is recommended to use the appropriate elevator size for the lift sub \( D_p \) value in accordance with Table 7 in API 8C (5th Edition).
BSR/ASHRAE Addendum i
to ANSI/ASHRAE Standard 62.1-2016

Public Review Draft

Proposed Addendum i to
Standard 62.1-2016, Ventilation for
Acceptable Indoor Air Quality

Second Public Review (August 2018)
(Draft shows Proposed Changes to Current Standard)

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

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

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

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ASHRAE, 1791 Tullie Circle, NE, Atlanta GA  30329-2305
BSR/ASHRAE Addendum i to ANSI/ASHRAE Standard 62.1-2016, Ventilation and Acceptable Indoor Air Quality
Second Public Review Draft

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

FOREWORD

The current scope of Standard 62.1 contains informative text and is also unclear in the current Section 2.3 regarding when or where additional ventilation requirements apply. This proposed addendum removes informative text that is not scope definition and clarifies when the standard does not provide ventilation rates. A companion Addendum h adds informative text to Informative Appendix G – Application.

[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 i to 62.1-2016

Revise Section 2 as shown below.

2. SCOPE

2.1 This standard applies to spaces intended for human occupancy within buildings except those within dwelling units in residential occupancies in which occupants are nontransient.

2.2 This standard defines requirements for ventilation and air-cleaning-system design, installation, commissioning, and operation and maintenance.

2.3 Additional requirements for laboratory, industrial, health care, and other spaces may be dictated by workplace and other standards, as well as by the processes occurring within the space.

2.4 Although the standard may be applied to both new and existing buildings, the provisions of this standard are not intended to be applied retroactively when the standard is used as a mandatory regulation or code.

2.54 This standard does not prescribe specific ventilation rate requirements for:
- Spaces that contain smoking or that do not meet the requirements in the standard for separation from spaces that contain smoking
- Patient care areas not listed in this standard
- Laboratories with hazardous materials

2.6 Ventilation requirements of this standard are based on chemical, physical, and biological contaminants that can affect air quality.

2.7 Consideration or control of thermal comfort is not included.
2.9 Acceptable indoor air quality may not be achieved in all buildings meeting the requirements of this standard for one or more of the following reasons:

a. Because of the diversity of sources and contaminants in indoor air

b. Because of the many other factors that may affect occupant perception and acceptance of indoor air quality, such as air temperature, humidity, noise, lighting, and psychological stress

c. Because of the range of susceptibility in the population

d. Because outdoor air brought into the building may be unacceptable or may not be adequately cleaned

Add the following new definitions to Section 3. The remainder of Section 3 is unchanged.

3. DEFINITIONS

hazardous materials: Any biological, chemical, radiological or physical item or agent that has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors. Hazardous chemicals are any chemicals that are classified as a health hazard or simple asphyxiant in accordance with the Hazard Communication Standard (§1910.1200) and any other particularly hazardous substances including select carcinogens, reproductive toxins and substances which have a high degree of acute toxicity. Hazardous biological agents are any pathogenic, allergenic, or toxigenic microorganisms including BSL2-4 agents as defined in the NIH BMBL.

patient care area: an area used primarily for the provision of clinical care to patients. Such care includes monitoring, evaluation, and treatment services.
### Proposal: D17.1-E3-AMD2-BT

<table>
<thead>
<tr>
<th>Date</th>
<th>September 28, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>To</td>
<td>AWS Technical Activities Committee</td>
</tr>
<tr>
<td>From</td>
<td>Mario Diaz, Secretary to the D17 Committee on Welding for Aircraft and Aerospace</td>
</tr>
</tbody>
</table>

**Message:**

An amendment is hereby proposed to modify the AWS D17.1/D17.1M:2017-AMD1, Specification for Fusion Welding for Aerospace Applications, as several errors have been identified. These errors were included in the D17.1-E3-DS2-BT ballot issued to TAC and the D17.1-E3-DS1-BT/BM ballots passed at subcommittee and main committee in May 2016; hence, they were approved in error and we are processing this as an amendment rather than an errata.

5.3.3.1 and 5.4.3, Table 5.5 and its relevant clauses as well as Table 7.1 have been revised. Items on the next edition's Revision Log or editorial changes will not be considered in this amendment.

Revisions are noted with track changes.

**Affected Clauses:** 5.3.3.1, 5.4.3, Table 5.5, 5.4.4.1, 5.4.5.1, Table 7.1

---

**D17.1/D17.1M:2017-AMD1 Current Code**

| Specification Variables | | | |
|-------------------------|-------------------------------------------------|
| 5.3.3.1 Welder Qualification Variables. The qualification variables for performance qualification are as follows: | 5.3.3.1 Welder Qualification Variables. The qualification variables for performance qualification are as follows: |
| (1) welding process (see 5.4.1) | (1) welding process (see 5.4.1) |
| (2) base metal composition group (see 5.4.2) | (2) base metal composition group (see 5.4.2) |
| (3) welding position (see 5.4.4) | (3) base metal thickness (see 5.4.3) |
| (4) base metal form, sheet or tube (see 5.4.5) | (4) welding position (see 5.4.4) |
| (5) type of weld, groove or fillet | (5) base metal form, sheet or tube (see 5.4.5) |
| (6) other welding conditions (see 5.4.6) | (6) type of weld, groove or fillet |

**D17.1/D17.1M:2017-AMD2 Proposed Revision**

| Specification Variables | | | |
|-------------------------|-------------------------------------------------|
| 5.3.3.1 Welder Qualification Variables. The qualification variables for performance qualification are as follows: | 5.3.3.1 Welder Qualification Variables. The qualification variables for performance qualification are as follows: |
| (1) welding process (see 5.4.1) | (1) welding process (see 5.4.1) |
| (2) base metal composition group (see 5.4.2) | (2) base metal composition group (see 5.4.2) |
| (3) welding position (see 5.4.4) | (3) base metal thickness (see 5.4.3) |
| (4) base metal form, sheet or tube (see 5.4.5) | (4) welding position (see 5.4.4) |
| (5) type of weld, groove or fillet | (5) base metal form, sheet or tube (see 5.4.5) |
| (6) other welding conditions (see 5.4.6) | (6) type of weld, groove or fillet |

**NOTE:** Filler metal alloy type used for test welds shall be the same as those used in production welding of the base metal.

---

**D17.1/D17.1M:2017-AMD1 Current Code**

| Specification Variables | | | |
|-------------------------|-------------------------------------------------|
| 5.4.3 Base Metal Thickness. The qualification limits, with regard to base metal thickness (sheet thickness or tube wall thickness), are given below for welders, tack welders, and welding operators. These limits apply to both groove welds and fillet welds. | 5.4.3 Base Metal Thickness. The qualification limits, with regard to base metal thickness (sheet thickness or tube wall thickness), are given below for welders, tack welders, and welding operators. These limits apply to both groove welds and fillet welds. |

**D17.1/D17.1M:2017-AMD2 Proposed Revision**

| Specification Variables | | | |
|-------------------------|-------------------------------------------------|
| 5.4.3 Base Metal Thickness. The qualification limits, with regard to base metal thickness (sheet thickness or tube wall thickness), are given below for welders, tack welders, and welding operators. These limits apply to both groove welds and fillet welds. | 5.4.3 Base Metal Thickness. The qualification limits, with regard to base metal thickness (sheet thickness or tube wall thickness), are given below for welders, tack welders, and welding operators. These limits apply to both groove welds and fillet welds. |
## Table 5.5

**Welding Position and Base Metal Form Qualified by Test Weld for Qualification of Welders, Taek-Welders, and Welding Operators**

<table>
<thead>
<tr>
<th>Form</th>
<th>Weld Type</th>
<th>Weld Position</th>
<th>Groove Positions</th>
<th>Fillet Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheet</td>
<td>Groove</td>
<td>1G</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2G</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3G</td>
<td>X, X</td>
<td>X, X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4G</td>
<td>X, X, X</td>
<td>X, X, X</td>
</tr>
<tr>
<td></td>
<td>Fillet</td>
<td>1F</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2F</td>
<td>X, X</td>
<td>X, X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3F</td>
<td>X, X, X</td>
<td>X, X, X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4F</td>
<td>X, X, X</td>
<td>X, X, X</td>
</tr>
<tr>
<td>Tube</td>
<td>Groove</td>
<td>1G</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2G</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3G</td>
<td>X, X</td>
<td>X, X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4G</td>
<td>X, X, X</td>
<td>X, X, X</td>
</tr>
<tr>
<td></td>
<td>Fillet</td>
<td>1F</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2F</td>
<td>X, X</td>
<td>X, X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4F</td>
<td>X, X, X</td>
<td>X, X, X</td>
</tr>
</tbody>
</table>

**Table 5.5**

**Welder Qualification - Positions and Base Metal Forms Qualified by Sheet or Tube Tests**

<table>
<thead>
<tr>
<th>Qualification Test</th>
<th>Positions Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Metal Form</td>
<td>Sheet</td>
</tr>
<tr>
<td>Weld Type</td>
<td>Groove</td>
</tr>
<tr>
<td>Groove</td>
<td>1G</td>
</tr>
<tr>
<td></td>
<td>2G</td>
</tr>
<tr>
<td></td>
<td>3G</td>
</tr>
<tr>
<td></td>
<td>4G</td>
</tr>
<tr>
<td>Fillet</td>
<td>1F</td>
</tr>
<tr>
<td></td>
<td>2F</td>
</tr>
<tr>
<td></td>
<td>3F</td>
</tr>
<tr>
<td></td>
<td>4F</td>
</tr>
<tr>
<td>Groove</td>
<td>1G</td>
</tr>
<tr>
<td></td>
<td>2G</td>
</tr>
<tr>
<td></td>
<td>5G</td>
</tr>
<tr>
<td></td>
<td>6G</td>
</tr>
<tr>
<td>Fillet</td>
<td>1F</td>
</tr>
<tr>
<td></td>
<td>2F</td>
</tr>
<tr>
<td></td>
<td>4F</td>
</tr>
<tr>
<td></td>
<td>5F</td>
</tr>
</tbody>
</table>
Note: In the previous edition of AWS D17.1/D17.1M:2010 the qualified positions were shown as 1G, 2G, 3G, and 4G rather than F, H, V, and O, respectively.

\[ \text{Use of heat sinks is optional.} \]

\[ \text{Qualified positions for production welding are defined in AWS A3.0. } F = \text{ Flat, } H = \text{ Horizontal, } V = \text{ Vertical, } O = \text{ Overhead.} \]

\[ \text{All = Flat, Horizontal, Vertical and Overhead.} \]

\[ \text{Qualification for sheet or tube fillet welds in material 0.063 in [1.6 mm] in thickness (sheet of tube wall) or less requires a fillet weld test. A groove weld test cannot be used to qualify fillet welds 0.063 in [1.6 mm] or less in material thickness. A fillet weld test is required to qualify fillet welds in material thickness equal to or less than 0.063 in [1.6 mm].} \]

\[ \text{A sheet test weld qualifies for tube welds 1 in [25 mm] in O.D. or greater. For Qualified thickness and tube diameter range see clause 5.4.3.1 (3).} \]

**5.4.1 Welders and Tack Welders.** The welding positions qualified by a given test weld position, to be found at the left of Table 5.5, are denoted by an “X” in the Table 5.5. The welding position designations are identified and illustrated in Figures 5.1, 5.2, 5.3, and 5.4.

**5.4.5.1 Welders and Tack Welders.** The base metal forms and weld types qualified by a given test weld, to be found at the left of Table 5.5, are denoted by an “X” in the Table 5.5. Operators Welders qualified to perform groove welds are also qualified to perform plug and slot welding in the qualified position.
<table>
<thead>
<tr>
<th>Discontinuity</th>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cracks</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Overlap (Cold Lap)</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Incomplete Fusion</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Incomplete Penetration</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Porosity—Surface</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual size maximum</td>
<td>0.25 T or 0.030 [0.76], whichever is less</td>
<td>0.33 T or 0.060 [1.5], whichever is less</td>
<td>0.50 T or 0.090 [2.3], whichever is less</td>
</tr>
<tr>
<td>Spacing minimum</td>
<td>8 times the size of the larger adjacent imperfection</td>
<td>4 times the size of the larger adjacent imperfection</td>
<td>2 times the size of the larger adjacent imperfection</td>
</tr>
<tr>
<td>Accumulated length in any 3 in [75 mm] of weld maximum</td>
<td>1 T or 0.12 [3.1], whichever is less</td>
<td>1.33 T or 0.24 [6.1], whichever is less</td>
<td>2 T or 0.36 [9.1], whichever is less</td>
</tr>
<tr>
<td><strong>Porosity—Subsurface</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual size maximum</td>
<td>0.33 T or 0.060 [1.5], whichever is less</td>
<td>0.50 T or 0.090 [2.3], whichever is less</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Spacing minimum</td>
<td>4 times the size of the larger adjacent imperfection</td>
<td>2 times the size of the larger adjacent imperfection</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Accumulated length in any 3 in [75 mm] of weld maximum</td>
<td>1.33 T or 0.24 [6.1], whichever is less</td>
<td>2 T or 0.36 [9.1], whichever is less</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Inclusions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual size maximum</td>
<td>0.33 T or 0.060 [1.5], whichever is less</td>
<td>0.50 T or 0.090 [2.3], whichever is less</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Spacing minimum</td>
<td>4 times the size of the larger adjacent imperfection</td>
<td>2 times the size of the larger adjacent imperfection</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Accumulated length in any 3 in [75 mm] of weld.—maximum</td>
<td>1.33 T or 0.24 [6.1], whichever is less</td>
<td>2 T or 0.36 [9.1], whichever is less</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Undercut</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For the full length of weld maximum depth</td>
<td>0.002 [0.05]</td>
<td>0.015 T or 0.002 [0.05], whichever is greater</td>
<td>0.025 T or 0.002 [0.05], whichever is greater</td>
</tr>
<tr>
<td>Individual defect, maximum depth</td>
<td>0.07 T or 0.030 [0.76], whichever is less</td>
<td>0.10 T or 0.050 [1.3], whichever is less</td>
<td>0.20 T or 0.070 [1.8], whichever is less</td>
</tr>
<tr>
<td>Accumulated length in any 3 in [75 mm] of weld.—maximum</td>
<td>0.20 [5.1]</td>
<td>0.60 [15]</td>
<td>1.00 [25]</td>
</tr>
<tr>
<td><strong>Face or Root Underfill (Groove Welds)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For the full length of weld maximum depth</td>
<td>0.005 [0.13]</td>
<td>0.015 T or 0.005 [0.13], whichever is greater</td>
<td>0.025 T or 0.005 [0.13], whichever is greater</td>
</tr>
<tr>
<td>Individual defect – maximum depth</td>
<td>0.07 T or 0.030 [0.76], whichever is less</td>
<td>0.10 T or 0.050 [1.3], whichever is less</td>
<td>0.20 T or 0.070 [1.8], whichever is less</td>
</tr>
<tr>
<td>Accumulated length in any 3 in [75 mm] of weld.—maximum</td>
<td>0.20 [5.1]</td>
<td>0.60 [15]</td>
<td>1.00 [25]</td>
</tr>
<tr>
<td><strong>Craters</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum depth</td>
<td>0.20 T or 0.03 [0.8], whichever is less</td>
<td>0.20 T or 0.05 [1.3], whichever is less</td>
<td>0.20 T or 0.05 [1.3], whichever is less</td>
</tr>
<tr>
<td>Maximum length</td>
<td>1 T</td>
<td>1 T</td>
<td>2 T</td>
</tr>
<tr>
<td><strong>Arc Strikes / Gouge Marks</strong></td>
<td>Unacceptable</td>
<td>Unacceptable</td>
<td>No stated requirement</td>
</tr>
</tbody>
</table>

(Continued)
### Table 7.1 (Continued)

**Acceptance Criteria (in [mm])**

<table>
<thead>
<tr>
<th>Discontinuity</th>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum Weld Reinforcement – machine welds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material to 0.375 [9.5] and under</td>
<td>1/3 T or 0.030 [0.76] whichever is greater</td>
<td>No stated requirement</td>
<td>No stated requirement</td>
</tr>
<tr>
<td>Material greater than 0.375 [9.5]</td>
<td>0.125 [3.2]</td>
<td>No stated requirement</td>
<td>No stated requirement</td>
</tr>
<tr>
<td><strong>Melt-Through Welds</strong></td>
<td>See Annex A</td>
<td>See Annex A</td>
<td>See Annex A</td>
</tr>
<tr>
<td><strong>Maximum Weld Reinforcement—manual welds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material up to 0.125 [2]</td>
<td>1 T</td>
<td>No stated requirement</td>
<td>No stated requirement</td>
</tr>
<tr>
<td>Material over 0.125 to 0.510 [3 to 13]</td>
<td>1/3 T or 0.100 [2.5], whichever is greater</td>
<td>No stated requirement</td>
<td>No stated requirement</td>
</tr>
<tr>
<td>Material greater than 0.510 [13]</td>
<td>0.170 [4.3]</td>
<td>No stated requirement</td>
<td>No stated requirement</td>
</tr>
<tr>
<td><strong>Mismatch between Members after welding</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refer to Paragraph 7.4.2.1 &amp; Figure 7.2. Includes A, B, &amp; C Class of Welds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Weld Profiles</strong></td>
<td>Requirements of Figure 7.1</td>
<td>Requirements of Figure 7.1</td>
<td>Requirements of Figure 7.1</td>
</tr>
<tr>
<td><strong>Angular Peaking</strong></td>
<td>Requirements of 7.3.2.2</td>
<td>Requirements of 7.3.2.2</td>
<td>Requirements of 7.3.2.2</td>
</tr>
<tr>
<td><strong>Fillet Weld Size – when fillet weld size is stated on the drawing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum size</td>
<td>As shown by the welding symbol</td>
<td>As shown by the welding symbol</td>
<td>As shown by the welding symbol</td>
</tr>
<tr>
<td><strong>Fillet Weld Size – minimum size when fillet weld size is not stated on the drawing</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum size – single side fillet</td>
<td>1.5 T</td>
<td>1.5 T</td>
<td>1.5 T</td>
</tr>
<tr>
<td>Minimum size – double side fillet</td>
<td>1 T</td>
<td>1 T</td>
<td>1 T</td>
</tr>
<tr>
<td><strong>Fillet Weld Size – maximum</strong></td>
<td>2 times the minimum fillet weld size</td>
<td>2 times the minimum fillet weld size</td>
<td>2 times the minimum fillet weld size</td>
</tr>
<tr>
<td>Material up to 0.090 [2.2]</td>
<td>1.5 times the minimum fillet weld size</td>
<td>1.5 times the minimum fillet weld size</td>
<td>1.5 times the minimum fillet weld size</td>
</tr>
<tr>
<td>Material 0.091 to 0.156 [2.31 to 4.0]</td>
<td>1.25 times the minimum fillet weld size</td>
<td>1.25 times the minimum fillet weld size</td>
<td>1.25 times the minimum fillet weld size</td>
</tr>
<tr>
<td>Material 0.157 to 0.750 [4.01 to 19]</td>
<td>1.1 times the minimum fillet weld size</td>
<td>1.1 times the minimum fillet weld size</td>
<td>1.1 times the minimum fillet weld size</td>
</tr>
<tr>
<td><strong>Discoloration</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bright Silver</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Silver</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Light Straw</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Dark Straw</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Bronze</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Brown</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Violet</td>
<td>Reject</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Blue</td>
<td>Reject</td>
<td>Reject</td>
<td>Reject</td>
</tr>
<tr>
<td>Green</td>
<td>Reject</td>
<td>Reject</td>
<td>Reject</td>
</tr>
<tr>
<td>Gray</td>
<td>Reject</td>
<td>Reject</td>
<td>Reject</td>
</tr>
<tr>
<td>White</td>
<td>Reject</td>
<td>Reject</td>
<td>Reject</td>
</tr>
</tbody>
</table>

(Continued)
Table 7.1 (Continued)
Acceptance Criteria (in [mm])

<table>
<thead>
<tr>
<th>Discontinuity</th>
<th>Class A</th>
<th>Class B</th>
<th>Class C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discoloration—Stainless Steel, Nickel, and Cobalt Alloys</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All oxidation colors, except for</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black discoloration or the</td>
<td>Reject</td>
<td>Reject</td>
<td>Reject</td>
</tr>
<tr>
<td>presence of scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Discoloration—Steel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All oxidation colors, except for</td>
<td>Acceptable</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>Reject</td>
<td>Reject</td>
<td>Reject</td>
</tr>
</tbody>
</table>

*a For groove weld only.

*b Discontinuity of size 0.005 in [0.13 mm] or less shall not be considered when determining compliance to the spacing requirements used in the determining compliance to the spacing requirements.

*c Discoloration determined to be acceptable shall be removed prior to additional welding comes in various shades, tones, and hues.

*d This discoloration is acceptable on the base metal outside of 0.030" from the toe of the weld. Discoloration must be removed prior to additional welding.

*e This discoloration is acceptable on finished welds but must be removed prior to additional processing On the weld and in the HAZ up to 0.030 in [0.76 mm] beyond the weld. This color is acceptable on base metal outside of 0.030 in [0.76 mm] from the toe of the weld.

*f Discoloration that is not acceptable per the table may be determined acceptable through testing. Test methods, acceptance criteria and approval requirements shall be as agreed upon by the engineering authority. Blue and Green discoloration is rejectable if additional welding is to be performed. Blue and green discoloration is acceptable on finish welds but must be removed prior to subsequent processing per 6.15.4.

*g Rejectable discoloration may be accepted if it can be proven that embrittlement has not occurred. This proof must be provided through direct testing, such as microhardness. Test method and acceptance criteria used for acceptance must be approved by the engineering authority.
BSR/UL 913, Standard for Safety for Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations

1. Revisions to Clarify the Inclusion of the Use of Electronic Medium for Required Documentation based on the responses to comments received on Proposal dated August 24, 2018

PROPOSAL

1.7 Where a requirement of this standard conflicts with a requirement of the applicable requirements for unclassified (ordinary) locations, the requirements of this standard shall take precedence.

12 Documentation

12.1 Intrinsically safe apparatus and associated apparatus shall be provided with documentation that includes all the instructional material required by this standard.

12.2 This required instructional material may be provided by electronic media under the following conditions:

1) Where all required instructional material is provided by electronic media, there shall be marking on the apparatus that contains the international symbol ▶ (Reference No. 0434B of ISO 7000), along with the location of the electronic documentation (e.g. URL, QRcode).

2) Where only some of the required instructional material is provided by electronic media and some is printed:

a. there shall be marking on the apparatus that contains the international symbol ▶ (Reference No. 0434B of ISO 7000), along with the location of the electronic documentation (e.g. URL, QRcode); and

b. the printed instructions provided with the apparatus shall clearly identify that additional information is available electronically, along with the location of this electronic documentation (e.g. URL, QRcode).

Exception: For small electrical apparatus where some or all of the instructional material is to be provided by electronic media, and where there is limited space for both the international symbol ▶ (Reference No. 0434B of ISO 7000) and the location of the electronic documentation (e.g. URL, QRcode):

1) the international symbol ▶ (Reference No. 0434B of ISO 7000) shall be marked on the apparatus; and
2) Printed instructions shall be provided with the apparatus that, as a minimum, indicates the location of the electronic documentation (e.g. URL, QRcode).
BSR/UL 2353, Standard for Safety for Single- and Multi-Layer Insulated Winding Wire

1. Revision to insulation thickness

6.11 For single and multi-layer wires, one thickness measurement is to be made in each of the 4 quadrants of the circular sample, for each layer total insulation thickness as shown in Figure 6.1. The measurements shall be made at thinnest point for each layer in a given quadrant. For example, a reinforced insulation wire consisting of 3 layers should have three measurements made in each quadrant, one for the inner most layer, one for the middle layer and one for the outer layer. The diameter of the conductor and the overall conductor diameter (conductor and all layers of insulation) shall also be measured in the same fashion as the individual layers. The same logic applies for basic and supplementary insulation. The thickness of an enameled, bond coat or other non-insulating layer is not required to be measured.

6.14 The minimum wall thickness for the insulation layers should be determined as shown in Table 6.1:

<table>
<thead>
<tr>
<th></th>
<th>18 AWG: Quadrant (mm)</th>
<th>32 AWG: Quadrant (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Inner</td>
<td>0.025</td>
<td>0.030</td>
</tr>
<tr>
<td>Middle</td>
<td>0.040</td>
<td>0.039</td>
</tr>
<tr>
<td>Outer</td>
<td>0.019</td>
<td>0.020</td>
</tr>
</tbody>
</table>

*a* For the inner layer, 0.028 mm would be the minimum wall thickness since each wire size measured at least 0.028 mm in at least one quadrant.

*b* For the middle layer, 0.038 mm would be the minimum wall thickness since each wire size measured at least 0.038 mm in at least one quadrant.

*c* For the outer layer, 0.018 mm would be the minimum wall thickness since each wire size measured at least 0.018 mm in at least one quadrant.